

A Message from Safety and Environmental Affairs

Our commitment to environmental stewardship goes beyond regulatory compliance. Our team in Safety and Environmental Affairs takes a proactive approach to advancing the culture and continual improvement of environmental, safety and sustainability practices throughout our organization. Safety and sustainability are top priorities at MGE. This report highlights how we focus on our sustainability goals and our performance.

Jeff Jaeckels
Director of Safety and Environmental Affairs
Madison Gas and Electric



Our Environmental and Sustainability Policy

As your community energy company, MGE recognizes its responsibility to preserve and protect the environment while serving our communities with safe, reliable, affordable and sustainable energy.

We are proactive and forward-thinking in our stewardship and promote sustainability with our partners, suppliers and employees as we work together to build a cleaner, smarter future.

In pursuit of our mission and in support of our commitment to those we serve, MGE:

Complies with all environmental laws, regulations, permit requirements and other corporate environmental commitments and exceeds compliance as demonstrated by the commitments in this policy.

Seeks environment-friendly options and waste minimization when considering sources of supply, material and contractors.

Considers the environmental impacts of applicable company activities and seeks sustainable, cost-effective ways to reduce adverse environmental impacts and risk.

Sets corporate goals and objectives and fosters a culture of continuous improvement in environmental and employee safety performance.

Educates employees about MGE's environmental responsibilities and policy and communicates and reinforces environmental values throughout the company.

Provides regular updates on environmental and sustainability initiatives and performance to MGE's Board of Directors to advance oversight and transparency of company operations.

Explores opportunities to advance new, cost-effective technologies for the benefit of all and to reduce the community's collective environmental footprint.

Partners with community stakeholders to promote environmental education, energy efficiency and conservation.

Communicates openly and honestly with the public regarding MGE's environmental policy and performance.

Contributes to the well-being of its communities through charitable and corporate giving and the service and volunteerism of employees.

About MGE

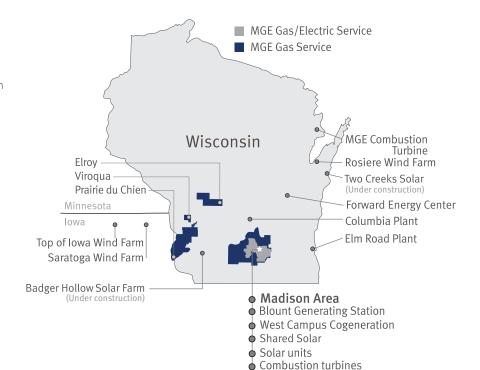
MGE generates and distributes electricity to 153,000 customers in Dane County, Wisconsin, and purchases and distributes natural gas to 161,000 customers in seven south-central and western Wisconsin counties. MGE is a regulated utility subsidiary of the investor-owned public utility holding company MGE Energy, Inc. MGE's roots in the Madison area date back more than 150 years.

As your community energy company, we are committed to this area and its people.

We take responsibility to:

- Plan and provide a reliable energy supply that balances the needs and values of those we serve.
- Provide information and education to serve our customers and stakeholders and help inform their energy decisions.
- Preserve and protect our environment while providing affordable, reliable energy.
- Encourage and support economic and business development to keep our economy strong and vibrant.
- Engage in open and honest dialogue, partnership and collaboration to best serve our customers and the broader community.

This report includes forward-looking statements and estimates of future performance that may differ from actual results because of uncertainties and risks encountered in day-to-day business.



- Location
 623 Railroad St., Madison, WI
- Mailing address
 P.O. Box 1231, Madison, WI 53701-1231
- General Contact mge@mge.com or 608-252-7000
- MGE Environmental Affairs environment@mge.com
- MGE Energy Shareholder Services mgeenergy.com investor@mgeenergy.com

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✓ Highlights from our Edison Electric Institute (EEI) ESG/sustainability reporting qualitative template.



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Safety and Operations

7 An overview of how MGE advances safety both internally and externally and of our efforts to protect the environment in day-to-day operations.



Employees, Customers and Communities

✓ How MGE works to embody our mission as your community energy company by engaging our communities, customers and employees in many different ways.



Strategy and Climate

A look at our deep decarbonization strategies, stakeholder collaborations, customer programs and clean energy projects for achieving our Energy 2030 and net-zero carbon electricity by 2050 goals.



Governance and Oversight

Our Wisconsin-based board's commitment to environmental stewardship and sustainable practices, effective oversight and risk management.

Strategy and Sustainability Snapshot

MGE is targeting net-zero carbon electricity by 2050.

Our strategies

- · Decarbonize electric generation
- · Help our customers use energy efficiently
- · Electrify other energy uses, including transportation

Our philosophy

Our goals signal our direction but do not determine our pace. We are working as aggressively as we can to achieve our goals as quickly and cost-effectively as we can. We also have committed to achieving at least 30% renewable energy by 2030 and to reducing carbon at least 40% by 2030 (from 2005 levels). If we can go further faster by working together with our customers, we will.

Our transition to net-zero carbon

MGE has no controlling interest in coal-fired power plants. In 2016, MGE reduced its minority ownership in the Columbia Energy Center, a coal-fired power plant, dropping our megawatt (MW) capacity share by about 14%.

Our recent projects Shared Solar Middleton Operations Center Forward Energy Center Wind Farm Dodge and Fond du Lac counties Saratoga Wind Farm Howard County, Iowa Morey Field Solar Middleton Municipal Airport Two Creeks Solar Manitowoc County Badger Hollow Solar Farm I Iowa County Dane County Airport Solar Madison *Badger Hollow Solar Farm II 164.5 MW Solar 82.5 MW Wind 600%

*Proposal for 50 MW is pending with state regulators.

Since introducing our Energy 2030 framework in November 2015, we have moved forward nearly 250 MW in clean energy projects, resulting in renewable capacity growth of about 600%.

Our commitment to effective oversight and continuous improvement

Strong oversight by our community-focused Board of Directors, our board's engagement with management and our participation in third-party benchmarking and evaluation programs help us assess our performance and promote continuous improvement in our proactive approach to companywide sustainability, risk assessment and mitigation, and long-term strategy.

Our commitment to transparency and disclosure

We have reviewed the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), performed an analysis of its disclosures relative to the TCFD recommendations and determined that our companywide disclosures are consistent with and responsive to the TCFD guidance and recommendations.

We are committed to helping customers, investors and other stakeholders better understand our strategies, risks, challenges and opportunities as we transition to a more sustainable, net-zero carbon future.

For our EEI ESG/sustainability reporting templates and for an online version of our Environmental and Sustainability Report, visit mgeenergy.com/environment.





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Jeff Keebler
Chairman, President and CEO
MGE Energy and Madison Gas and Electric

Our Vision

Thank you for your interest in our 2019
Environmental and Sustainability Report.
This annual report captures some of the ways in which your community energy company is partnering with our customers and communities and working with our employees and other stakeholders to power a more sustainable future.

MGE is targeting net-zero carbon electricity by 2050. Our goal is based on the latest climate science from the Intergovernmental Panel on Climate Change (IPCC), which has outlined "pathways" and necessary actions to limit global warming to 1.5 degrees Celsius. Our 2050 goal reflects our vision and signals our direction, but it doesn't determine our pace. We're making decisions every day to achieve deep decarbonization as quickly as we can while fulfilling our obligation as a critical services provider.

To achieve net-zero, we are working aggressively to decarbonize our electric generation while building a reliable, resilient electric grid. Within the last five years, we have announced cost-effective projects that will grow our wind and solar capacity by roughly 600%, with investments in renewable generation totaling more than \$350 million.

Net-zero will require the use of emerging technologies not yet commercially available or cost-effective, but as technology continues to evolve, we will evolve to ensure we continue to meet our customers' needs safely, reliably, affordably and sustainably.

Our strategies for achieving net-zero are the same as those identified by the IPCC. Energy efficiency is key. MGE employees work directly with many of our residential and business customers to manage their energy use, either through educational workshops in neighborhoods, new technologies such as smart thermostats or one-on-one energy assessments of commercial buildings. Customer engagement remains at the core of our mission.

New technologies continue to offer new opportunities. MGE has been an industry leader in the electrification of transportation since first establishing our electric vehicle public charging network 10 years ago. Today, we're advancing electric buses in our community and growing home charging with our Charge@Home program.

As your community energy company, MGE is locally based in Madison, Wis., operating where we serve. The MGE Foundation is part of the fabric of our community, averaging more than a million dollars in annual charitable contributions to local organizations.

Our executive management and Board of Directors understand sustainability and corporate responsibility are important to our customers, our investors and our company's long-term success. From business strategy to risk assessment, our board brings a diversity of experience and expertise to their oversight responsibilities.

On behalf of our board and the employees of MGE, I invite you on this journey with us as we continue to build your community energy company for the future, embracing new opportunities and innovative technologies to better serve our customers, employees and broader community.



MGE is committed to transparency and accountability. Our report is organized to be responsive to the disclosure recommendations identified by the Task Force on Climate-related Financial Disclosures to help stakeholders better understand our strategies and risks related to the threat of climate change.

Cari Anne Renlund
Vice President and General Counsel
Madison Gas and Electric

Our Commitment

Like the energy industry itself, our path toward greater sustainability is ever changing as we harness the power of new solutions and explore new ways to engage those we serve.

As Vice President and General Counsel, I oversee safety and environmental initiatives, working directly with our employees to impart a philosophy of continuous improvement companywide in both sustainability and safety. MGE continues to be an industry leader in these critical areas.

We power safety

Our annual safety initiatives are employee-led. In 2018, the company achieved a historic safety milestone—the year ended with MGE employees having worked more than a million hours without a lost-time incident. For all of 2018, MGE recorded the lowest lost-time incident rate since the company began keeping records in 1971. Safety of our employees, customers and communities is a top priority.

Environmental benchmarking and oversight

MGE was the first utility statewide to be recognized as a Green Master by the Wisconsin Sustainable Business Council. The voluntary, statewide benchmarking program recognizes companies for their leadership in environmental performance. Five years later, our commitment to environmental stewardship and accountability continues to grow.

MGE is working with an independent third party to oversee the expansion of our Environmental Management System (EMS). Our EMS now evaluates, prioritizes and manages environmental risks across the company.

Climate science partnership

Our goal of net-zero carbon electricity by 2050 is based on the latest climate science. Our strategies are consistent with those identified by the Intergovernmental Panel on Climate Change (IPCC).

MGE is working with scientists from the University of Wisconsin-Madison's Nelson Institute for Environmental Studies to evaluate our ongoing efforts for achieving deep decarbonization by midcentury. This collaboration will provide us with expert input and analysis as we work toward one of the most aggressive sustainability goals in the industry.

MGE is committed to transparency and accountability. Our report is organized to be responsive to the disclosure recommendations identified by the Task Force on Climate-related Financial Disclosures (TCFD) to help investors, customers and other stakeholders better understand our strategies, challenges and opportunities.

MGE also participates in the Edison Electric Institute (EEI) ESG/sustainability reporting templates. Our templates are online at mgeenergy.com/environment. I invite you to visit us online regularly and join us in working toward a better, stronger, more sustainable future.

STRATEGY AND CLIMATE

MGE is building a utility of the future, advancing clean energy and new technologies for the benefit of all—our customers, investors and broader community. Through our partnerships and the application of science and technology, we are working toward ambitious carbon reduction goals while fulfilling our mission to provide safe, reliable, affordable and sustainable energy to our communities.

Powering a more sustainable future

In May 2019, we announced a goal of netzero carbon electricity by the year 2050. This target is based on the latest climate science. It is consistent with the work of the Intergovernmental Panel on Climate Change (IPCC) and its assessment of limiting global temperature increases to 1.5 degrees Celsius. Our 2050 goal reflects our vision and signals our direction, but it doesn't determine our pace. Every decision we make is in the context of achieving deep decarbonization as quickly as we can while fulfilling our obligation as a provider of safe, reliable, affordable and sustainable energy.

Achieving net-zero by 2050 will require the use of technologies not yet commercially available or cost-effective, but we are well on our way toward realizing our commitment to sustainability, to industry leadership and to those we serve.

Energy 2030

MGE already has reduced carbon emissions 19% since 2005, our baseline. Under our Energy 2030 framework for a more sustainable future, introduced in November 2015, we committed to reducing carbon emissions at least 40% by 2030. This target is consistent with U.S. emissions targets for the 2030 timeframe established as part of the landmark Paris Agreement on climate change.

Energy 2030 also has a goal of 30% renewable energy by 2030 and an interim goal of 25% by 2025, which we expect to exceed by year-end 2021. We have said since establishing our goals that if we can go further faster by working with our customers, we will.

Energy 2030 set our foundational objectives for building your community energy company for the future. It guides our strategy and our work to:

- Provide customers with options they want today and in the future,
- Help customers use energy efficiently and control future costs for all customers,
- Transition MGE to a more environmentally sustainable energy supply,
- Provide a dynamic electric grid that can integrate all energy technologies to serve customers, and
- Ensure that new and changing technology serves all customers equitably.

Climate science partnership with the University of Wisconsin

To inform our work for achieving deep decarbonization and net-zero by 2050, MGE is working with scientists and experts at the University of Wisconsin-Madison's Nelson Institute for Environmental Studies and the Department of Atmospheric and Oceanic Sciences. The university is providing expert input and perspective to help evaluate our net-zero carbon goal in the context of the analyses done by the IPCC and helping to ensure our goal is consistent with the IPCC assessment.

Net-Zero

CARBON ELECTRICITY BY 2050

MGE is committed to achieving net-zero carbon electricity by 2050 for all those we serve.

Our strategies for deep decarbonization

The U.S. Mid-Century Strategy (MCS) for Deep Decarbonization is the United States' strategy for meeting the goals of the Paris Agreement on climate change to limit global warming. Both the MCS and the IPCC rely on decarbonizing electric generation, using energy efficiently and electrifying other energy uses, including transportation. These are the strategies MGE is pursuing and will continue to pursue to achieve deep decarbonization and net-zero carbon electricity.

Growing our use of clean energy

Since announcing our increase in owned renewable capacity

in November 2015, we have developed projects that will increase our owned renewable capacity by roughly 600%.

Growing our use of renewable resources is a part of our strategy for achieving net-zero carbon electricity by 2050.

Right: MGE's Jeff Keebler (center) joined WEC Energy Group and its subsidiary, Wisconsin Public Service, in August 2019 for a groundbreaking of the Two Creeks Solar project.

Our recent clean energy projects include:

- Building our 66-megawatt (MW)
 Saratoga Wind Farm in Iowa. Our
 largest and most efficient wind farm,
 Saratoga came online in early 2019
 to serve 47,000 households.
- Purchasing a 16-MW share of the Forward Energy Center wind farm in Wisconsin in 2018.
- Expanding our highly successful community solar program, Shared Solar, with a 5-MW solar array in our service territory, expected online in 2020.
- Purchasing 100 MW of solar capacity from the Badger Hollow Solar Farm in Iowa County, Wis. Badger Hollow is expected to provide 50 MW by the end of 2020; another 50 MW, if approved, is expected online by the end of 2021.
- Purchasing 50 MW of solar capacity from the Two Creeks Solar project, expected online by the end of 2020.



Our mix of resources includes:

Badger Hollow Solar Farm, Iowa County (Expected online in 2020, 2021).

Blount Generating Station, Madison.

Columbia Energy Center, Portage.

Combustion turbines, Madison and Marinette.

Dane County Airport Solar, Madison (Proposed).

Elm Road Generating Station, Oak Creek.

Forward Energy Center wind farm, Dodge and Fond du Lac counties.

Rosiere Wind Farm, Kewaunee County.

Saratoga Wind Farm, Howard County, lowa.

Morey Field Solar, Middleton Municipal Airport (Expected online in 2020).

Shared Solar, Middleton Operations Center.

Solar photovoltaic units, Dane County.

Top of Iowa Wind Farm, Worth County, Iowa.

Two Creeks Solar, Manitowoc County (Expected online in 2020).

West Campus Cogeneration Facility, Madison.

Ongoing transition from fossil fuels

MGE has no controlling interest in coal-fired resources and announced several years ago that we would not be investing further in coal-fired plants. In 2011, MGE discontinued the use of coal at the only generating facility in which we have sole ownership, our Blount Generating Station.

In 2016, we reduced our minority ownership in the Columbia Energy Center. MGE reached an agreement with the plant's co-owners to reduce our MW capacity share by about 14%.

Additionally, as part of a rate case settlement agreement in 2018, MGE accelerated the depreciation of certain assets, including our combustion turbines, Blount Generating Station and Columbia Energy Center Unit 1. The accelerated depreciation schedule will help the company move forward with investments in cleaner sources of energy.



Resource planning and carbon regulation

When making generation decisions, MGE engages in extensive resource planning analysis and modeling, which consider many factors including forecasted energy use projections; long-term impacts on customers, investors and the environment; potential future environmental regulations; assumptions related to the anticipated costs of fuel and many other factors related to energy production. Our economic analysis explicitly includes a possible projected carbon surcharge to help ensure our decisions are financially sound—regardless of whether or how carbon is regulated in the future.

In addition, large new generating facilities are reviewed by the Public Service

Commission of Wisconsin to ensure the project is in the public interest. For larger projects, different generating scenarios are modeled in our regulatory application to demonstrate the need and to justify the cost. All proposals and decisions by the state regulatory body are part of the public record.



Reducing emissions, improving air quality

For the past 15 years, we have made strides to reduce air emissions by installing new emission reduction equipment and improving equipment efficiencies with our current generation fleet. As we work toward our ambitious goal of net-zero carbon electricity by 2050, we have continued to make significant investments in local and regional renewable generation.

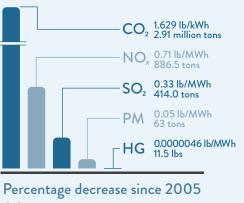
We also purchase power through contracts and from the Midcontinent Independent System Operator market.

We continue to transition to cost-effective. clean energy while also working with customers on energy efficiency and conservation efforts to reach our carbon reduction goals.

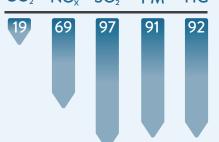
Ensuring that new and changing technology serves all customers equitably is one of our key objectives under our Energy 2030 framework. We are working to build a smarter, cleaner community grid that serves to benefit all customers.

The graphic at right shows emission rate decreases since 2005 for carbon dioxide and regulated air emissions.

EMISSIONS REDUCTIONS 2018 emissions



CO₂ NO_x SO₂ PM HG



Carbon dioxide (CO₂) emissions are calculated from generating units owned by MGE, power purchase agreements and power purchased by MGE on the regional Midcontinent Independent System Operator market. The market purchase emission rate is based on a seven-state regional average CO₂ emission profile from all power produced in Wisconsin and the surrounding Midwest states.

Nitrogen oxide (NOx), particulate matter (PM), mercury (Hg) and sulfur dioxide (SO₂) emission rates are calculated from MGE-owned generation assets, including MGE's share of jointly owned units. MGE is part owner of the Columbia Energy Center, Elm Road Generating Station, West Campus Cogeneration Facility and the Forward Energy Center.

Harnessing methane

MGE continues to reduce greenhouse gas (GHG) impacts with an initiative that generates electricity from the combustion of methane, which is produced locally by cow manure. As a GHG, methane is at least 25 times more potent than carbon; however, methane as a fuel burns much cleaner and produces 50% less GHGs than coal.

MGE receives energy from a manure digester. The digester converts cow manure from local farms into electricity. For 2018, the manure digester generated more than 11.5 million kilowatt-hours of electricity, which is enough to power nearly 2,000 households.

Under an Environmental Protection Agency requirement, MGE monitors, measures and reports several GHG emissions annually. MGE tracking covers power plant emissions, natural gas distribution and smaller combustion sources.

Right: Renewable biomass energy from a manure digester is added to MGE's community grid as part of our overall energy mix. The biodigester, which came online at the end of 2013, helps to reduce phosphorus runoff into local waterways and improve water quality.



Partnering with our customers to grow clean energy

Shared Solar

We are expanding our popular community solar program, Shared Solar, with a 5-MW array to be built in 2020 at the Middleton Municipal Airport. Seventy percent of the project will serve our Shared Solar program, which offers customers locally generated solar energy.





The voluntary program began in early 2017 with a 500-kilowatt (kW) array in the city of Middleton. When complete, the expansion will lower the price per kilowatt-hour (kWh) for new and existing participating customers.

Renewable Energy Rider

Our Renewable Energy Rider gives MGE the ability to partner with larger business customers who seek customized renewable energy solutions. It is designed to meet the needs and goals of companies that support or have signed on to the Corporate Renewable Energy Buyers' Principles, a collaboration facilitated by the World Resources Institute and the World Wildlife Fund.

State regulators approved in 2019 our first Renewable Energy Riders with the City of Middleton and the Middleton-Cross Plains Area School District. The City and school district will purchase a 1.5-MW share of solar power from a 5-MW array that will be built at the Middleton Municipal Airport.

Groundbreaking ceremony at Middleton Municipal Airport for Morey Field Solar. (L-R) Jeff Keebler, MGE Chairman, President and CEO; Gurdip Brar, Middleton Mayor; Dr. Dana Monogue, Superintendent MCPASD; and Don Peterson, MGE VP Energy Technology. MGE and Dane County are partnering on a solar installation of up to 9 MW at the Dane County Regional Airport under our Renewable Energy Rider. The project, if approved by regulators, will cover about 58 acres.



MGE also is proposing a solar array, the O'Brien Solar Fields, of up to 20 MW in Fitchburg, Wis. Part of the array would serve larger customers under Renewable Energy Rider agreements.

Green Power Tomorrow

Green Power Tomorrow (GPT) is our green pricing program. At a penny more per kWh,



GPT is a convenient and effective way for customers to support renewable energy and offset their greenhouse gas emissions. Today, more than 9,600 customers buy green power through this program. Our GPT program is largely served by our wind resources in the region.

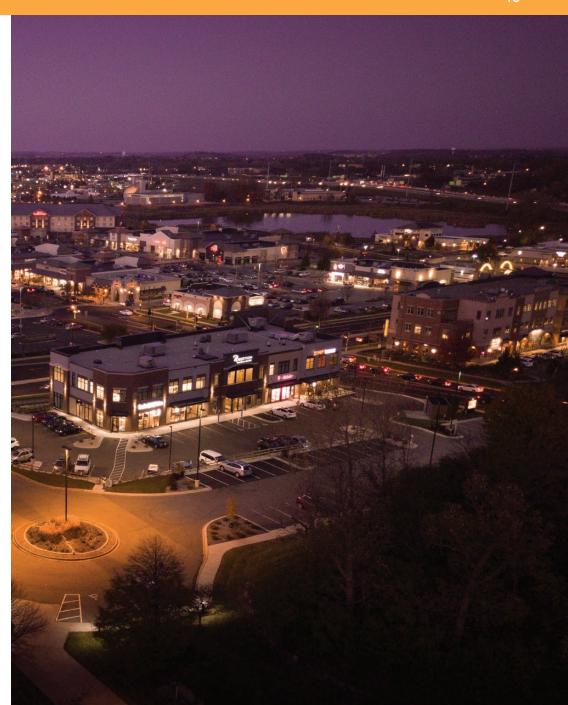
Customer-owned solar

We also work with customers who want to install solar to help power their homes or businesses. These customers connect to our community grid and sell their excess electricity to MGE. We have partnered with more than 675 customers to connect their solar installations to our grid.

Collaborations with our communities

MGE has an ongoing collaboration with the City of Madison around renewable energy, electric vehicles, energy efficiency and conservation. See page 21 for more information about our partnership to grow the use of all-electric mass transit.

MGE also serves as a member of the Dane County Council on Climate Change.
The council includes local government, businesses, utilities and environmental organizations. MGE's partnership with local stakeholders through the council offers another opportunity to work toward common goals, including deep decarbonization.



Advancing energy efficiency and conservation

Energy efficiency is a key strategy for reducing carbon emissions and for reaching our energy goals. MGE is committed to providing customers with the tools and resources they need to make wise energy choices that help reduce their individual carbon footprints.

We strive to "meet customers where they are" to engage them in energy efficiency. Through the use of new technologies, hands-on workshops, energy education, conservation kits and rate options like Time-of-Use, MGE is helping to empower customers to take control of their energy use to better manage long-term costs and to achieve deep decarbonization.

New smart thermostat program launched

Electric use peaks during stretches of hot, humid days when air conditioners are running in a majority of homes and businesses. These periods of high electric use put pressure on utilities to generate and distribute enough electricity to everyone who needs it.

Building on the success of our Nest thermostat pilot with 500 customers, we launched in 2019 a new program, MGE ConnectTM. With customers' permission, minor temperature adjustments are made to participating customers' smart thermostats to reduce energy use during periods of high demand.

MGE Connect is now double the size of our original smart thermostat demand response program and includes a number of smart thermostat brands. The program will help MGE better understand the role and impact of smart devices in managing our community grid while helping customers reduce their energy use with minimal possible impact on comfort.

MGE also is exploring opportunities to work with community partners to make

smart thermostats available to low-income households. MGE is committed to working with customers and others to help ensure all customers have the opportunity to share in the benefits of new technologies.

Business customers conserve with On Demand Savings

MGE's On Demand Savings (ODS) program offers large customers, such as plastics manufacturer Placon (pictured below), tools and strategies to reduce their energy use, especially during periods when demand for electricity is at its peak.

ODS uses an online dashboard to give customers near real-time energy usage information, enabling them to act to cut costs and to reduce their environmental footprint. The program was recognized in 2018 with an Inspiring Efficiency Award



for Innovation by the Midwest Energy Efficiency Alliance, a regional organization dedicated to advancing energy-efficient technologies, products and best practices.

Ten years of Mpowering Madison

MGE is a founding member, with the City of Madison, of Sustain Dane's MPower Madison Business Champion Program. The sustainability program for local businesses recently celebrated 10 years, tallying more than 500 sustainability projects in its history. The projects include energy efficiency, waste reduction, renewable energy purchases and production, and alternative transportation, among others. Sustain Dane estimates that these projects have resulted in 19.2 million kWh conserved, 60.3 million pounds of CO₂ avoided and \$2.1 million saved each year.

Klein's Floral and Greenhouses was recognized by our partner Focus on Energy for implementing energy efficiency measures at their facility in Madison.

Working with Focus on Energy®

Focus on Energy, Wisconsin's statewide energy efficiency and renewable resource program, is MGE's partner in educating customers about the value of energy efficiency and conservation. MGE works with residential and commercial customers seeking incentives and rebates through Focus on Energy to make energy-saving improvements. For example, Klein's Floral and Greenhouses in Madison used Focus on Energy incentives to implement a number of energy efficiency measures, including new high-efficiency heaters and boilers, ceiling insulation and double-pane windows.

The partnership later earned Focus on Energy a dotComm Award, which recognizes excellence in web creativity and digital communications. The Industry Influencer Award was for MGE's "takeover" of Focus on Energy's Instagram page in June 2019. During the daylong "takeover," members of MGE's marketing team on Instagram shared their day-to-day encounters with energy efficiency, including their attendance at Focus on Energy's award presentation for Klein's own excellence in energy efficiency.



Meeting customers where they are

Our residential and community services team continues to develop new ways to connect with customers around energy efficiency, new technologies and other energy-related needs. Deepening our engagement with customers is one of our objectives under our Energy 2030 framework.

With conservation kits from Focus on Energy and MGE tablets to introduce customers to our online tools, our energy experts host workshops throughout the area to answer questions about customer bills, help customers understand their energy usage, identify resources for assistance and more.



MGE partnered with Energy Services, Inc., to bring workshops to neighborhoods throughout the community to engage customers directly.

Online resources

Simple, cost-effective energy-saving tips for homeowners, renters and businesses are available online from MGE. Customers also can compare their energy use and learn what has helped other customers save. For example, using My Account at mge.com, customers can review their bill, payment history and past energy use and sign up for MGE services. We share energy-saving tips, tools and information on our social media channels and online:

- mge.com
- mge2050.com
- · genre2030.com
- · livinginbalancemadison.com

Energy meters

MGE has donated a number of portable energy meters to area libraries for customers to use. The meters measure voltage, electricity cost and electric consumption. They help customers identify the potential causes of high energy use and better understand the exact operating costs of various items in their homes.

Energy expert line

MGE's Home Energy Line to "ask the experts" is an efficient way for customers to get energy tips and answers to their energy-

related questions. MGE also maintains a separate line for commercial and industrial customers who need assistance. Our local energy experts also are available by email.

Energy education for our youth

We partner with local teachers, schools and summer programs from elementary school through college to help educate thousands of students about energy, safety, new technologies and career opportunities in the industry.



Leading the charge for transportation electrification

Transportation accounts for 29% of greenhouse gas emissions in the U.S. The electrification of transportation is a key strategy for reducing carbon emissions.

In addition to growing our use of renewable resources and engaging around energy efficiency, we are working with customers, stakeholders, municipalities and other community partners to grow the use of electric vehicles (EV) and to facilitate charging options throughout our community.

We have been advancing alternative fuel vehicles since we began building our EV public charging network 10 years ago. Today, the number of EVs on the road continues to grow. MGE is prepared to meet the need with our growing public charging network of more than 35 stations—powered by wind energy—and programs to facilitate charging at home, at work and on the go. Our public charging network features four DC fast chargers, which can provide 60 to 80 miles of range in about 20 minutes.

Enabling charging options

Charge@Home, MGE's home charging program, makes it easy for EV drivers to charge efficiently at their home, which is where 80% of charging happens. With Charge@Home, MGE owns, maintains and coordinates the installation of Level 2 charging stations at customers' homes. With no up-front cost, customers pay a monthly fee plus the cost of electricity. The program gives MGE the ability to study drivers' charging habits and to explore remote

management of charging sessions to better understand the potential impact of EVs on the grid.

MGE also helps area employers of all sizes and multifamily developers who want to offer employees and residents charging. We discuss options and help them navigate the decision-making and implementation process.



EV engagement at MGE

MGE seeks to engage our employees in our efforts to grow the use of EVs. We offer five workplace charging stations, each with dual ports, to enable charging for employees while at work. Workplace charging offers many benefits, including employee attraction and retention, and support for sustainable initiatives.

MGE's EV fleet by the numbers

We have been testing commercially available fleet operations EVs for more than a decade. We are continuing to add all-electric or hybrid vehicles to our fleet, where possible. Our fleet includes a plug-in electric pickup truck, hybrid step van, hybrid bucket trucks and two all-electric Chevy Bolts.

Electric buses coming to Madison

In 2020, three all-electric buses will become part of the City of Madison's Metro Transit (Metro) fleet. MGE worked with Metro to secure a \$1.3 million federal grant for the zero-emission buses. MGE is partnering with the City of Madison to help electrify its bus fleet by 2030.

As part of the ongoing collaboration, MGE is providing:

- 100% of the required local matching funds for charging infrastructure for the three buses.
- · Continued in-kind support and expertise to address technological issues and facilitate cost-effective and efficient use of energy.

Zero-emission buses will play a key role in efforts to reduce carbon emissions. According to the U.S. Department of Transportation, for every zero-emission bus on the road, carbon emissions are reduced by nearly 1,700 tons over their estimated 12-year life span. With three electric buses, that would be an estimated carbon reduction of 5.100 tons. MGE continues to work with the City to seek ways to further the electrification of transportation.



MGE EV/hybrid fleet Electric hybrid bucket trucks

All-electric vehicles

Gas/electric hybrid vehicles



Partnering with Lyft

One of our newest partnerships is with Lyft, the ridesharing company. MGE is partnering with Lyft to increase the use of EV ridesharing in the Madison area and to grow awareness of the benefits of EVs. The two companies are offering a \$500 bonus to Madison-area EV drivers who sign up to drive with Lyft.

Working with regional stakeholders

As part of the Great Plains Institute's Midcontinent Transportation Electrification Collaborative (M-TEC), we're working with other utilities, state governments, automakers, EV charging companies and environmental groups to advance EV infrastructure and increase use of EVs. Working together, our group conducts research, develops white papers and policy recommendations, and hosts workshops for stakeholders in the region.

Resources and tools to educate drivers

MGE helps to educate customers, businesses and our community at-large about the benefits of EVs. Our experts are on hand at many community events with our all-electric Chevy Bolt to share information on driving and charging EVs.

By "meeting customers where they are," we are able to connect customers to new technologies, such as EVs, and work together to advance sustainability and new technologies with all customers.

For example, in 2018, MGE and the

Madison Area Chinese Community

Organization (MACCO)

partnered to host a "kick the tires" event featuring several

EVs. MACCO helped to translate MGE's EV-related

availab availab electric vehicles. there's a lot to love.

information into Chinese

ahead of the event, which was held by one of MGE's DC fast charging stations. MGE regularly hosts "kick the tires" events in



neighborhoods throughout our community to engage customers directly.

In 2018, MGE launched our LovEV website to help customers discover why "there's a lot to love" about EVs. LovEV highlights available models, explains charging options, and details cost and environmental savings.

It is an easy, one-stop online resource at mge.com/LovEV.

The online tool, Explore My EV, gives users the opportunity to compare the costs of plug-in

hybrid and all-electric vehicles to gasolinepowered models. The tool, available at mge.com/exploremyev, considers commute distances, available tax credits and maintenance costs, among other things when doing its online analysis.



Collaborating to advance sustainability and innovation

By working together with our customers and other stakeholders, we can develop solutions to the energy challenges of our times and reach our shared energy goals. For example, MGE is a partner in the Midcontinent Power Sector Collaborative (MPSC) facilitated by the Great Plains Institute (GPI) out of Minneapolis, Minn.

The MPSC, consisting of utilities, agencies, non-governmental organizations and environmental groups, worked together to develop the Road Map to Decarbonization in the Midcontinent: Electricity Sector.

MGE's local partners in the MPSC include the nonprofit Clean Wisconsin and the Dane County Office of Energy and Climate Change.

The MPSC brings together diverse viewpoints and priorities to develop options to continue driving toward a lower carbon future and better inform policymakers. The MPSC is one of many partnerships in which MGE is involved to further sustainable energy.

The Road Map identified that "a substantially decarbonized electricity sector is expected to grow and to enable the decarbonization of other sectors through efficiency and electrification."

We also partner to grow innovation. For example, MGE Energy is an investor and supporter of Energy Impact Partners (EIP), a utility-focused investment fund. EIP brings together capital and industry expertise to grow early-stage companies, such as Sense Labs.

MGE partnered with a number of residential customers to explore Sense Labs' home energy monitor. The monitor attaches to a residential electric panel to develop "profiles" of devices in the home that use electricity. An app gives customers access

to their household energy use information, equipping them with real-time data to help manage their use.

Technical Work Group

MGE continues to work with the Citizens
Utility Board and Clean Wisconsin as a
Technical Work Group, examining innovative
program ideas in a focused, deliberative
fashion. The work group, which began in
2014, seeks to identify ways that MGE can
be responsive to our customers' evolving
energy needs while ensuring a modern,
sustainable electric system. Some of
MGE's pilot programs, such as Shared Solar,
On Demand Savings, smart thermostat
demand response (MGE Connect) and
Charge@Home, have been informed by
the group's efforts.



Ensuring reliability

MGE is a national leader in electric reliability. We are committed to transitioning to greater use of renewable resources while maintaining our top-ranked reliability.

For 2018, MGE's electric service reliability ranked number one in the country for the fewest number of electric outages and ranked second for the shortest duration of outages per customer, according to a nationwide industry survey including more than 80 electric utilities.

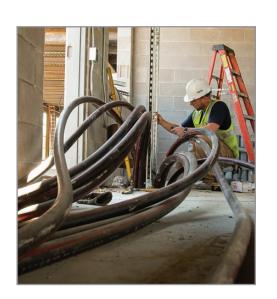
MGE has ranked in the top three utilities in the country for the fewest number of outages in each of the last 12 years. We have ranked number one nationwide for the fewest outages four of the last six years.

On average, MGE customers experience about one power outage every three years. That's compared to a nationwide average of more than four outages every three years.

A modern grid for the utility of the future

We take seriously our responsibility and commitment to those we serve. We're investing in the systems and capabilities to enable an electric grid that supports new technology such as distributed energy sources like solar and battery storage. We have an important role to play to ensure that these new resources and technologies are harnessed for the benefit of all customers.









SAFETY AND OPERATIONS

Safety is a core value at MGE and is reflected in all our employees. When it comes to safety, every person and every company can always improve upon their safety performance. That is why we embrace a philosophy of continuous improvement.

Twelve MGE employees from various operations departments took both written and practical tests throughout a one-week course to receive their OSHA certification for crane operators.

We Power Safety

In 2014, MGE launched a corporate safety commitment to improve our safety culture and begin MGE's journey to safety excellence. Our Safety Steering Team meets regularly to examine safety topics and to identify and to prioritize continuous improvement opportunities.



Our employees have taken the lead through their continuous improvement efforts to make MGE a safer place to work. Our employee-led Continuous Improvement Teams (CI Teams) are one example.

One of our employee-led CI Teams was tasked with developing a safety vision statement. The team drafted a statement of safety values that encompasses the business of MGE and creates a positive message that all MGE employees can adopt. This safety vision statement—we power safety—is highly visible throughout our organization.

In 2018, four years into our safety journey, MGE achieved historic safety results. We

recorded the lowest lost-time incident rate since we started keeping records in 1971. We also had our lowest total recordable incident rate since 1982 and second lowest since we started keeping records in 1971. In 2018, MGE employees worked more than one million hours without a lost-time incident.

Crane operator training

The Occupational Safety and Health Administration (OSHA) recently developed new safety rules requiring a new certification for crane operators. MGE has a total of five cranes that fall into three different categories, requiring this certification for our operators.

The certification must be obtained from an accredited, third-party crane certification organization. In January 2019, 12 MGE employees from various operations departments took both written and practical tests throughout a one-week course to receive their certification.

The training was conducted at the MGE Training Facility in Fitchburg, Wis. Before the training could take place there, MGE first had to become an approved training facility through the National Commission for the Certification of Crane Operators.

Continuous Improvement Teams

In 2018, we had two CI Teams. The first,

SWAT and SPOT

It empowers and

our Stop Work Authority Team (SWAT), strengthened a process that gives all employees the power to stop work and be safe.

provides employees with the responsibility and obligation to stop work when a real or perceived unsafe condition or behavior may result in an unwanted event.

Our Safety Proactive Observation Team (SPOT), the second 2018 CI Team, designed a process that provides employees with positive recognition and reinforcement

of positive behaviors. The process is designed to help showcase the good work practices that occur on a daily basis across MGE and to reinforce positive safety behaviors.

Risk Team Six

As we work to build on the historic safety success from 2018, our sixth CI Team is focusing on risk behaviors at work. Risk Team Six developed a strategy to gain a clear understanding if risks are taken by employees, why they would take risks and how to mitigate risks. The team is working with 28 focus groups of operations employees to develop a proactive plan to address risk behaviors.

Employee-led Risk Team Six completed a rapid improvement workshop and developed a plan to address employees' risk behaviors at work.

Near-miss/good catch

MGE's near-miss/good catch reporting process continues to be successful. This proactive process, developed by an employee-led CI Team in 2017, is designed to encourage reporting that identifies, documents, addresses and allows everyone to learn from safety impacts. The reporting process establishes accountability at all levels of the company to ensure it is implemented in a safe, no-blame environment.

In two years of using the near-miss/good catch process, more than 130 near-miss and good catch reports have been filed.

Sharing near-miss/good catch reports with

employees is designed to help all employees learn about safety issues and to help prevent incidents, both of which serve to improve our safety culture and collective performance.

Employee wellness

MGE offers employees a comprehensive wellness program. Our Healthy Rewards program includes exercise classes led by professional instructors; a fitness room with exercise equipment; educational sessions on nutrition, wellness, weight control and smoking cessation; expertise available from the Mayo Clinic through the managewell.com website; biometric screenings; health assessments; and annual flu shots. These offerings promote healthy living for our employees.

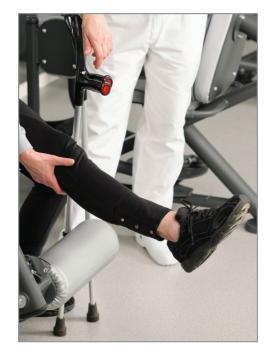


Preventing sprains and strains

MGE supports employees through a partnership with a workplace injury prevention sports medicine provider that employs athletic trainers. These trainers teach employees how to properly warm up and stretch before performing physically demanding work. This partnership was launched to address sprain and strain prevention proactively and before medical treatment becomes necessary.

We recognize that our operations employees are industrial athletes. Like a professional athlete, working athletes need the highest level of support and care. With easy access to the athletic trainers, employees are able to get the coaching they need from someone who understands the type of work they do and the type of injuries they may experience. Our trainers can help with early intervention to minimize and even eliminate those injuries. In early 2019, the program expanded to include MGE's office employees.

As a result of this partnership, sprain and strain injuries requiring medical treatment have fallen dramatically. It's a positive program for employees and the company, reducing injuries and producing savings in the workers' compensation fund.









All hazards response

Whether it's a natural disaster or a manmade disaster, such as a cyberattack, MGE has plans in place to prevent and mitigate damage. Having a well-defined and practiced All Hazards Response Plan is critical to managing and responding appropriately to an emergency situation. MGE's All Hazards Response Plan encompasses everything from storm response to cyberattacks.

Storm Response Plan

MGE takes seriously the risk from severe weather. We have a companywide Storm Response Plan (SRP), which serves as our guide or framework for rapid, effective response to emergencies caused by extreme weather events.

The Incident Commander leads the SRP functions and is supported by Section Chiefs who are responsible for running the major functional sections within the SRP. Some of those functions include assessing damage, ordering supplies and managing mutual assistance crews from other utilities as well as responding to media and customers experiencing an outage or other service-related issues from the event.

Successful joint response to storm and flood

In August 2018, record amounts of rain fell across MGE's service territory, causing unprecedented flooding and a joint storm response from MGE gas and electric crews. Typically, our storm response efforts focus entirely on electric restoration. This storm's subsequent flooding prompted a more collaborative storm response effort

from both Electric and Gas Operations and others across the organization, including Facilities Management.

The threat of flooding in downtown Madison also meant MGE incident command staff kept in close communication with City and County officials to prepare to respond to a prolonged flood event. MGE infrastructure did not suffer any serious issues.



Cybersecurity a priority

MGE recognizes the potential impact of cyber threats to our company and the utility industry. We are committed to protecting our computers, networks and data from unauthorized access to ensure safe, reliable service for customers. This requires ongoing effort, and we continue to update our response plans to proactively reduce risks.

Simulating a cyberattack is an effective way to help prepare for and safeguard against such an incident. In recent years, MGE has participated in both national and statewide cybersecurity exercises.



In 2018, MGE built a state-of-the-art Cyber Range training facility on its campus. The range allows MGE and its partners to practice cybersecurity methods and build experience and confidence in our Security Operations teams. The range was used in 2018 during an advanced cybersecurity

and emergency response exercise known as Dark Sky. The statewide exercise involved the Wisconsin Army National Guard and other partners. MGE and the Wisconsin Army National Guard continue their ongoing collaboration around cybersecurity.

Working to keep our communities safe

In addition to the safety of our employees, the safety of our customers also is a top priority. We strive to keep customers well informed about the potential dangers of electricity and natural gas and what to do in an emergency, using electric and natural gas safety advertising and information included with our bills, on our social media channels and on mge.com.

Safety Saturday

MGE is a proud sponsor of the Madison Fire Department's annual Safety
Saturday event. MGE employees from Electric Construction and Operations,
Gas Construction and Operations, and
Corporate Communications staff a display to share important gas and electric safety information.



Safety Saturday uses interactive displays and exhibits to educate parents, children and the public on ways to make safe decisions, to prevent injuries and to encourage the use of safety devices such as seat belts, bike helmets, smoke alarms and carbon monoxide detectors.

Safety in the classroom

MGE partners with schools throughout our service territory and offers a wide array of classroom lessons, including electric and natural gas safety. From curriculum supporting materials to visiting the classroom to share safety tips, MGE provides important energy safety lessons to students.

One of the most popular programs is MGE's Switch to Safety. In addition to discussing gas safety, an MGE representative uses a tabletop electric safety model to illustrate and simulate potentially dangerous outdoor electric safety situations.

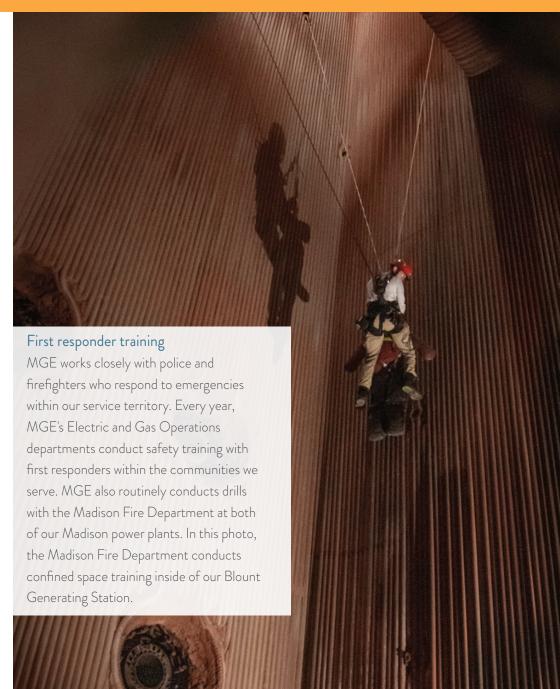


From the classroom to the street

In March 2019, after attending an MGE natural gas and electric safety presentation at his school, a fourth grader had an opportunity to "practice" what he learned. Walking home from school with his adult neighbor, the boy smelled something that reminded him of the scratch-and-sniff gas safety card he received during the MGE presentation.



When they got home, the neighbor contacted MGE. A crew came out and identified a gas leak between the sidewalk and curb near his neighbor's home. The crew made repairs while the boy and his family watched from their nearby home.



Natural gas safety and sustainability

Ensuring reliability and safety are top priorities at MGE along with our environmental commitment. We are committed to continuing to provide the high level of service our customers expect.



Industry leader in emergency response

When notified of a potential natural gas emergency, MGE crews continue to earn high marks. Again in 2018, our first responders recorded one of the fastest average response times, according to a nationwide industry survey of more than 80 utilities.

This ranking is reflective of our dedicated employees who always put customer safety first and understand what it means to serve

as your community energy company. It also shows what a good process MGE has in place—from when the call comes into the Customer Center to when our employees arrive on-site.

Suppliers' commitment to sustainability

MGE contracts with two natural gas transmission companies, Northern Natural and ANR Pipeline Company, owned by TC Energy.

Both of these companies, as part of their sustainability commitments, are part of the ONE Future Coalition. ONE Future is the trade name for "Our Nation's Energy Future Coalition, Inc." This group of natural gas companies works together to voluntarily reduce methane emissions across the natural gas supply chain.

TC Energy also is a founding partner in the EPA's Natural Gas STAR Methane Challenge Program, which launched in 2016. Partners in this voluntary program report systemic and comprehensive actions to reduce methane emissions as part of efforts to enhance transparency in the industry.

Sustainability benchmarking and partnerships

MGE is committed to reducing environmental impacts across all areas of the company. MGE voluntarily participates in two statewide environmental performance programs and participates in various industry sustainability and benchmarking groups.

Green Masters Program

In 2018, MGE earned the Green Master designation for the fifth consecutive year from the Wisconsin Sustainable Business Council. Only the top 20% of applying companies receive the Green Master designation.



The independent, points-based benchmarking program evaluates applicants in nine key areas: energy, climate change, water, waste, transportation, supply chain, community outreach, workforce and governance. MGE was the first utility to be awarded the distinction in 2014.



Energy Sustainability Interest Group

MGE partners with the Electric Power Research Institute (EPRI) in a number of areas, including the Energy Sustainability Interest Group (ESIG). The largest sustainability-focused group of its kind in the electric power industry, ESIG:

- Provides a collaborative industry forum for electric power companies to discuss sustainability issues.
- Conducts focused technical research and develops specific tools to support sustainability program development.
- Tackles the challenge of identifying and understanding sustainability issues, goals, metrics and disclosure.
- · Facilitates stakeholder engagement.
- Informs sustainability reporting initiatives.

ESIG projects focus on priority issues, goals, metrics and sustainability communication for the electric power industry and its stakeholders. The project work may be utilized by group members to inform the development of their own sustainability

programs and initiatives. Launched in 2008, ESIG has more than 40 members from the electric power industry.

Sustainability benchmarking

The year 2018 marked the fifth year of EPRI's ongoing effort to identify and understand metrics appropriate for benchmarking the performance of electric power companies on their priority sustainability issues. MGE has participated in this EPRI benchmarking since it began in 2014.

The Sustainability Benchmarking for Utilities project is conducted in collaboration with the previously mentioned ESIG and subject matter experts throughout EPRI. The project work is designed to advance technical research around what a sustainable electric power company looks like and how it can support the sustainable generation, delivery and utilization of electric power to customers.

Transparency and disclosure

To advance further transparency and disclosure in our operations and governance, MGE also participates in the Edison Electric Institute's (EEI) environmental, social,

governance (ESG) and sustainability-related reporting template. The voluntary, industryspecific template includes



both qualitative and quantitative information, such as generation and emissions data. Our EEI templates are available at mgeenergy.com/environment.

Task Force on Climate-related Financial Disclosures

Our report is organized to be consistent with the disclosure recommendations identified by the Task Force on Climate-related Financial Disclosures (TCFD) to help customers, investors and other stakeholders better understand our strategies, challenges and opportunities.

The company has reviewed the TCFD recommendations, performed an analysis of its disclosures relative to the TCFD recommendations and determined that MGE's disclosures are consistent with the TCFD guidance and recommendations.

Protecting our natural resources

MGE takes steps to protect our natural resources. This means doing our part to help improve waterways, preserve the natural beauty of our communities and protect wildlife habitats.

Stormwater management

Pollutants transported in stormwater are harmful to lakes, rivers, wetlands and waterways. MGE implements measures to protect our water bodies. For example, MGE's downtown parking lot has a stormwater filtration system. This system cleans stormwater before it drains into nearby Lake Monona. This system is effective in reducing pollutants such as petroleum compounds, sediment and phosphorus.

Erosion control

We are committed to implementing proper erosion-control methods at all work sites. This minimizes the likelihood of soil being washed out of a site. We track permits and inspections and have a committee that reviews new regulations, field techniques and technologies to ensure we effectively manage our erosion-control strategies.

Invasive species

Invasive species and non-native plants adversely affect areas where they spread. They also may pose a risk to human health. Invasive species can be found in forests, grasslands, wetlands, lakes and rivers.

MGE's Electric and Gas Operations employees are trained on how to identify invasive species in MGE's service area, plan work around them, avoid contact and follow procedures for post-work cleanup.



This photo helped an MGE gas crew determine if they had encountered an invasive species of snail.

During a recent gas project near Black
Earth Creek, MGE crews thought they
may have encountered a New Zealand
mudsnail, an invasive snail. The project
supervisor stopped work, took a picture
of the snail with a nickel by it for scale
and sent the photo to a member of MGE's

Environmental Affairs team. The photo then was shared with an invasive species expert at the Wisconsin Department of Natural Resources. Within 10 minutes of the photo being taken on-site, it was determined that it was a native snail and work was able to resume.

The combination of interdepartmental coordination and formal systems helps MGE stay in compliance, minimize impacts and avoid project shutdowns.

Solar powers corporate office

Nearly 450 solar panels on our corporate office in Madison, Wis., generate about 10% of the energy needed annually to power the facility. The array, along with 52 panels in our visitor parking lot, represent another step in our ongoing path toward greater sustainability throughout our operations.

In addition, MGE's 2,000-square-foot office building in Prairie du Chien, Wis., also has 20 solar panels on the roof capable of producing about 5.3 kW of energy.



Bottle filling stations and filtration systems

Throughout our facilities, MGE has 16 water bottle filling stations and filtration systems for employees to reduce the use of plastic bottles. In the seven years since the first one was installed, MGE employees have avoided using more than 488,000 disposable plastic bottles.



Eliminating waste with E-records

MGE's E-records Center allows employees to submit electronic documents to be stored as records rather than keeping paper copies. Over time, this will reduce our volume of paper. This environmentally friendly option also frees up physical storage space.

Paperless billing

MGE launched My Bill Pay, our new and improved paperless billing and online payment system, for

my bill

pay /

customers in 2016.
Online billing and payment is a "win-win" for customers and companies.

Studies find customers are more satisfied when viewing and paying their

bills electronically. Companies benefit by realizing paper and postage savings from not having to print and mail paper bills.

In July 2019, MGE hit 42% paperless billing adoption by customers, resulting in an estimated annualized savings of more than \$300,000. It also means more than 1.3 million bill pages are not printed each year, which saves:

- More than 2,600 reams of paper per year.
- More than 13,000 pounds, or six and a half tons, of paper per year.

Supply Chain and Waste Management

Successful waste management requires a solid recycling program. We encourage employees to make smart choices about the environment. That includes supporting our recycling and wastereduction efforts every day. We work to conserve, recycle and manage waste efficiently.

Reduce-reuse-recycle

Our all-in-one recycling method includes paper products, glass, plastic and aluminum. We also recycle various metals and other scrap materials left over from field work. Our computing equipment and supplies are sent to an e-Stewards certified company for recycling or reuse, and our alkaline batteries go to a vendor who recovers steel and zinc. Additionally, a local vendor takes our wood pallets, recycling them into mulch.

We also recycle thermostats and other mercury-containing devices, chemicals, steel, iron, copper, glass and cell phones.

Paint pilot

MGE continues to use earth-friendly paint options in place of aerosol cans that typically have been used to mark underground gas and electric facilities. Aerosol cans push out the paint using a propellant, which is often hazardous. Aerosol cans also are under pressure, which causes them to be considered hazardous waste even if the paint in the can is not hazardous.

Several years ago, MGE switched to a bagged paint technology, which offers several benefits, including:

- Reduced waste. Once empty, the pouched bags are biodegradable.
- Increased safety. The pouches, which also are less bulky, are not stored under pressure.

We continue to research and test earth-friendly painting options for marking our gas and electric underground facilities.

We currently are testing a steel can that is designed so it can be recycled when empty.

Early testing shows it is easier to use and has a more consistent marking quality than the bagged paint technology.

Aluminum cans also are a higher-value recyclable product than plastic bags.

Because recycling aluminum takes less energy, the market for recycled aluminum remains consistently high, and aluminum can be recycled repeatedly into new products without changing its elemental traits. We will continue to evaluate this new option from an operational and environmental perspective.

Buy local

Local purchases support the local economy and are typically more environmentally friendly. When it is time to purchase goods needed to run our company, we review our supplier database and buy from local vendors when possible and cost-effective. Many of the materials and equipment that utilities need are highly specialized; however, we buy U.S. products whenever possible.

Comprehensive risk minimization

MGE has transitioned to a new software system for use in risk minimization. MGE's environmental team oversees hundreds of routine monitoring, record-keeping and reporting tasks, some of which occur

every week. In the past, these were tracked on multiple different servers to manage the data and deadlines as the tasks were assigned to and tracked for employees across several departments.

In 2019, MGE began using the new software, which replaced all the old servers and more, with one comprehensive Environmental Management Information System (EMIS). The new EMIS makes it significantly easier to see and track the different tasks. For example, inspections in the field are now done and saved electronically, which means the data can be retrieved instantly.

The new system provides MGE with better and quicker access to the status of compliance activities and improved information for resource planning. It also improves our reporting performance. This leads to more efficient use of time, better alignment of information management processes and simplified training for turnover or responsibility transfers.

Green Tier

the Wisconsin Department of Natural
Resources for Green Tier certification,
which recognizes
environmental leadership.
Our primary goal in the
expanded contract is to
cover all MGE operations
under our Environmental
Management System (EMS). An
EMS is a continuous improvement
process that evaluates,
prioritizes and manages

accountab
Building ar
EMS

EMS

EMS

GREEN TIER

In 2017, MGE expanded the scope of

our renewed five-year contract with

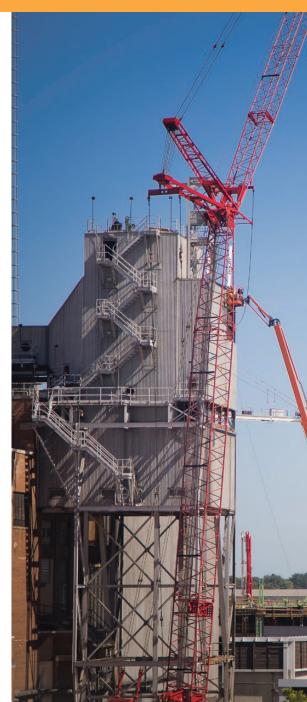
MGE previously used an EMS at our Blount Generating Station. The expanded scope of our EMS will capture environmental

environmental risks.

improvements across the company and further demonstrate our commitment to goal-setting and environmental accountability.

EMS is a major undertaking that requires a great deal of upfront documentation. MGE's first Continuous Improvement Sustainability Team is overseeing the EMS expansion. The team is making progress on the required documentation for the EMS and has identified an environmental risk assessment process, which is discussed on page 54.

In 2011, MGE stopped burning coal at our Blount Generating Station. This photo shows deconstruction of a precipitator at Blount. A precipitator is an emissions control device that captures particulate matter from the exhaust gas. As part of the deconstruction project, we created a new nesting box for our resident peregrine falcons, which had been using a box on top of the precipitator.





EMPLOYEES, CUSTOMERS AND COMMUNITIES

Twenty-five years ago, a small, informal group of MGE employees concerned about the environment laid the groundwork for something much greater. Their efforts evolved into a successful companywide effort to make environmentally responsible choices at work. From establishing a vehicle idling policy to expanding recycling efforts, MGE's employee-led Green Team has helped the company achieve milestones in corporate sustainability and responsibility.

Sustainability Steering Team

Today, our Green Team remains active and strong with a new structure and focus on advancing our history of sustainable practices.

In 2018, MGE formed a Sustainability
Steering Team. The goal is to ensure we are taking a more global approach in proactively growing our culture of sustainability throughout MGE.

The Sustainability Steering Team will oversee our Environmental Management System (EMS). It also will support external sustainability engagement and benchmarking such as our participation in the Green Tier and Green Masters programs. And, having team members from departments across the company will be a more efficient way to gather data for our voluntary sustainability reporting efforts.

Continuous Improvement Sustainability Teams

The Sustainability Steering Team will review, evaluate and prioritize continuous improvement opportunities. The group also will commission continuous improvement teams to take on specific improvement initiatives and tasks.

First team making progress

The first Continuous Improvement
Sustainability Team is charged with
overseeing the expansion of our EMS
to cover all of MGE's operations.
Currently, the EMS focuses only
on Blount Generating Station.

Building and implementing an expanded EMS is a major undertaking that requires a great deal of up-front documentation. The team is making great progress on the required documentation for the EMS and has identified an environmental risk assessment process, which is discussed on page 54.

The team also proposed improvements to our environmental policy. A new, updated version of our companywide Environmental and Sustainability policy is available on page 1.

Wisconsin Monarch Collaborative

Monarch butterflies face many risks that are causing a serious decline in their populations. According to the Wisconsin Monarch Collaborative, in the last 20 years, the eastern North American monarch butterfly population has declined by 90%.

One of the biggest impacts on the monarch population is the loss of habitat for breeding, migrating and overwintering. Pesticides used to control insects and weeds also have harmful consequences for monarchs. The loss of habitat is forcing changes in migratory patterns.

Created in 2017, the Wisconsin Monarch
Collaborative is working to create
and implement a statewide monarch
conservation strategy that covers habitat
creation and enhancement, education and
outreach, and research and monitoring.
MGE is proud to be a part of the Wisconsin
Monarch Collaborative.



Importance of pollinators

In addition to monarchs, MGE also is working to help protect pollinators.

Pollinators play an important role in ensuring that the fruits, vegetables and other plant

products we eat make it to our tables. One out of every three bites of food we eat is because of pollinators.

Pollinating animals travel from plant to plant carrying pollen on their bodies in a vital interaction that allows plants to create fruit, nuts and other edible parts. The vast majority of pollinators in the United States are insects such as bees, butterflies, moths, beetles and even some wasps. Other pollinators include birds, bats and other small mammals.

Support for pollinator habitat

Utilities are in a unique position to help support pollinator habitat. They can protect existing habitat and create new habitat along rights-of-way and on other owned facilities. MGE's large-scale solar projects in development will host pollinator habitat.

The U.S. Fish and Wildlife Service is currently working with utilities to draft conservation agreements to protect the monarch butterfly. These conservation agreements would help the monarch and other pollinator species while allowing utilities to continue to maintain and upgrade their facilities.

We are exploring how a conservation agreement might fit at MGE. We already actively protect the rusty patched bumble bee by supporting the replacement of habitat when we install and maintain our electric and gas lines.

National Pollinator Week at MGE

MGE employees helped celebrate National Pollinator Week by planting wildflowers in two flower beds at our downtown Madison campus. We worked with the University of Wisconsin-Extension to plant native wildflowers that will help attract bees, butterflies and other beneficial insects.

At a pollinator open house, employees had a chance to win a mason bee home built by one of their coworkers, get gardening tips, see and learn about a monarch caterpillar and take home some butterfly weed seeds. Butterfly weed plants provide critical habitat for monarch butterflies.



The buzz about mason bees

Mason bees have pollinator power with a 95% pollination rate versus a 5% pollination rate for honeybees. Mason bees are very solitary and do not live in hives or swarm.



Compared to other bees, mason bees rarely sting, making them a great addition to garden areas. MGE will have two mason bee homes near the wildflower pollinator gardens planted by employees.

Employee engagement and development

The energy world is ever-changing. We believe it is important to engage our employees as our industry evolves. MGE is committed to sustainable workforce practices such as career development and training.

Professional development opportunities

MGE offers all employees the opportunity to learn and grow—whether it is to become more proficient in their job, improve decision—making skills or prepare for a move to another role. Our employees have the tools available to develop the knowledge and skills necessary to grow and to be successful.

The Learning Center is an online resource available to all MGE employees. Launched in 2017, this cloud-based tool contains a vast library of courses for online learning. It recommends training courses for employees based on the courses they've already taken and subjects in which they have shown interest, and it provides a transcript of courses they have taken in The Learning Center as well as corporate training they attend.

MGE ____ Learn THE LEARNING CENTER

The Learning Center is constantly updated with courses relevant to MGE employees. This helps ensure employees are equipped with the knowledge and skills to effectively navigate our changing industry.

Informational sessions for employees

Informational brown bags, or lunch-and-learn types of sessions, are one of the ways MGE employees are informed of industry trends and changes and the impacts these may have on MGE.

Three to four times a year, members of MGE's executive team host informal employee discussion sessions. These "brown bag" sessions are designed for the executive management to provide company and industry updates to employees and to answer employee questions on topics relating to the business or industry. These sessions also provide the executives with an opportunity to ask employees questions about their experiences and get direct insights into issues facing the company and industry. These engagement opportunities are held in multiple locations with employees in both our corporate office and field reporting sites.

Other informational sessions for employees take place throughout the year on a variety of topics, often organized by different departments. For example, each spring and fall MGE's Energy Supply and Trading

department hosts an Energy Marketplace
Update session for interested employees.
The one-hour events provide seasonal
updates on what is happening in the energy
marketplace. They examine the current
supply/demand fundamentals and how those
may impact energy prices.

Customer engagement

As your community energy company, we seek to engage all our customers in many different ways. MGE values the diversity of perspectives across our service territory. We are committed to deepening our engagement efforts to reach shared energy goals and to improve the health and vitality of our community.

Supporting our neighborhoods

Vibrant neighborhoods—and the active neighborhood associations that serve them—contribute to the quality of life in our community. Throughout the Madison area, festivals and community activities like concerts, picnics and potlucks help neighborhood associations raise funds for important local projects and provide community-driven, family-friendly activities.



MGE has been a longtime partner to many of the neighborhood associations across our service territory. Sponsoring events and staffing booths with our energy experts allow us to meet customers where they are to provide energy efficiency tips and information on driving and charging electric vehicles and to discuss how programs such as Green Power Tomorrow and Shared Solar are convenient and effective ways for customers to support the growth of clean energy.

Engaging customers through workshops

In fall 2018, as winter heating season approached, MGE conducted a targeted engagement effort to help educate customers about managing their energy use and to make them aware of energy assistance resources.

Working with community centers, churches and nonprofits, our energy experts visited neighborhoods to talk one-on-one with customers to learn about their needs. From there, we set up workshops for residents. At the workshops, MGE and a local nonprofit provided tips and strategies for conserving energy, helped attendees navigate our websites to find conservation information and connect to local resources, and gave attendees free kits from Focus on Energy, Wisconsin's statewide energy efficiency and renewable resource program.

Madison Night Market

In keeping with our approach of "meeting customers where they are," MGE supports and sponsors many community events, which give us an opportunity to connect with customers and serve as a community energy resource.



In 2019, the Madison Night Market returned for a third year with help from MGE. The popular summertime, open-air market features food, live music, local arts and fresh produce.

Members of MGE's Residential and Community Services and Commercial and Industrial Marketing teams were on hand at the markets scheduled between May and September, bringing our all-electric Chevy Bolt and a display about electric vehicles (EVs). Customers are able to learn about the environmental benefits of EVs and how MGE can help them charge an EV using clean energy.

Día de Fútbol

Día de Fútbol has become an annual event each fall at Madison's Breese Stevens Field. The partnership among MGE, the Madison Mallards organization, Forward



Madison FC and La Movida Radio provides the community a chance to enjoy free youth soccer clinics and scrimmages, food, music and information from MGE's energy experts. From electric and natural gas safety to energy efficiency tips and EVs, families have an opportunity to interact faceto-face with our energy experts and get answers to their energy-related questions.

Giving back to our community

MGE's commitment to those we serve extends far beyond reliable energy. We are committed to helping to improve the quality of life for all of those we serve. We contribute to and help to better our community in three different ways.

The MGE Foundation

Established in 1967, the MGE Foundation is our philanthropic arm. Support from the Foundation helps our local organizations improve lives today and the lives of future generations by working to preserve longterm health and vitality of our community. In the last five years, the Foundation has given more than \$5.2 million to more than 400 community organizations. In 2018 alone, the Foundation contributed to more than 175 local organizations. This

charitable giving includes support for local organizations dedicated to environmental initiatives.

MGE corporate giving

MGE collaborates and works together with hundreds of organizations to provide service, help improve lives, tackle challenges and seize opportunities facing our community. We partner with local stakeholders in a variety of ways to advance shared goals and initiatives.



Our employees' volunteerism and service

Our dedicated employees embody what it means to serve as your community energy company. Outside of their jobs at MGE, they play active roles in helping improve our community. Many of our more than 700 employees volunteer on local boards and committees and as members of economic development and nonprofit organizations.

MGE Annual Report on Giving

MGE publishes an Annual Report on Giving, which highlights some of the ways in which we give, partner and work to support the communities we are privileged to serve. Our full report on annual giving is available at mge.com/Foundation.

STEAM Camp

For the third year in a row in 2019, MGE hosted about 50 middle school students participating in STEAM Camp activities. STEAM Camp is a weeklong event held at sites across Madison to help raise awareness of educational pathways that lead to careers in Science, Technology, Engineering, Art and Mathematics (STEAM).

MGE employees helped STEAM Camp participants learn how MGE uses the sun to make electricity and how we keep the



lights on and the gas flowing. They also got an up-close look at EV charging technology and learned about STEAM careers in the utility industry.

Strang Architects of Madison partners with the Urban League of Greater Madison to bring STEAM Camp to MGE and other local organizations.

MGE Career Ambassadors

Eight Madison high school students spent six weeks at MGE over summer 2019 as the fourth class of students in MGE's Career Ambassador Program. MGE partners with the Boys & Girls Club of Dane County, Centro Hispano, 100 Black Men of Madison and the Urban League of Greater Madison to host the student interns. The students

learn about the utility business and utilityrelated career opportunities. They also gain experience in interpersonal and professional skills.

KidWind Challenge

MGE sponsored the second annual Wisconsin KidWind Challenge in 2019. Teams of middle and high school students from throughout the state competed in a hands-on wind turbine design competition for a chance to compete in a national competition. Students designed, built and tested a functional, creative wind turbine. They also documented and presented their design and construction process. The highlight of the event was testing their turbines in a powerful 4-foot-tall wind tunnel.





United Way

MGE is a longtime supporter of the United Way of Dane County. Its extensive reach helps our customers and broader community. The United Way works toward lasting change, sharing MGE's goal of making our community a better place to live, work and enjoy.



Employee-led activities like the bake sale contribute to MGE's support of the United Way organization.

MGE consistently ranks among the top 10 companies in total donations to the United Way. In 2018, our generous employees and retirees gave more than \$163,000 to the Dane County campaign. We were recognized for our 2018 campaign efforts with a United Way Community Impact Award. This award honors MGE and its employees for their commitment to building a strong community where everyone can succeed in school, work and life.

MGE employees also serve on various United Way boards, committees and Leadership Giving groups, helping to set the direction and address the needs facing the community.

Madison becomes a "Kiva City"

A healthy economy contributes to a healthy community.

In early 2019, Kiva Greater Madison launched. MGE, the City of Madison, Doyenne, an organization that supports female entrepreneurs, and the Wisconsin Women's Business Initiative Corporation partnered to bring a local chapter of the international non-profit organization to the Madison area. Known globally, Kiva has been empowering entrepreneurs through crowdfunded microloans since 2005.

Kiva is an option for those with less access to a traditional bank loan due to lower credit scores, lack of credit history or loan amounts that are too small for a bank to consider. A majority of Kiva loans go to women, people of color, immigrants, veterans and lower-income individuals.

We see Kiva as a way to support underserved entrepreneurs in the Madison area. This unique program enables entrepreneurs and small businesses that would otherwise be excluded from traditional financial capital to move their business idea forward and start down a path of self-sustainability.

The MGE Foundation contributed to a three-year pilot project to make the Madison area a Kiva City.

Support for biotech start-ups

MGE and its philanthropic arm, the MGE Foundation, are helping to advance the next generation of innovation by supporting Forward BIOLABS.

With the goal of helping life science start-up companies succeed, the incubator provides fully equipped and supported lab space. The model eliminates the need for these emerging companies to lease, equip and operate their own labs.

Forward BIOLABS also facilitates interactions among members, lab service providers, investors, industry and academia.

A longtime partner in advancing innovation and entrepreneurship throughout the Madison area, MGE in 1989 partnered with University of Wisconsin-Madison affiliate University Research Park, where Forward BIOLABS is now located, to establish the MGE Innovation Center. The Center helps early-stage companies cultivate their technologies for real-world applications. Today, it is a hub for Wisconsin's thriving biohealth industry, which is responsible for an estimated \$48 billion in economic output and more than 100,000 jobs created in the state.



In addition to our support for incubators and sponsorships of network building events, MGE also supports our service territory's economic development and entrepreneurial growth through our expertise and resources.

Falcon restoration

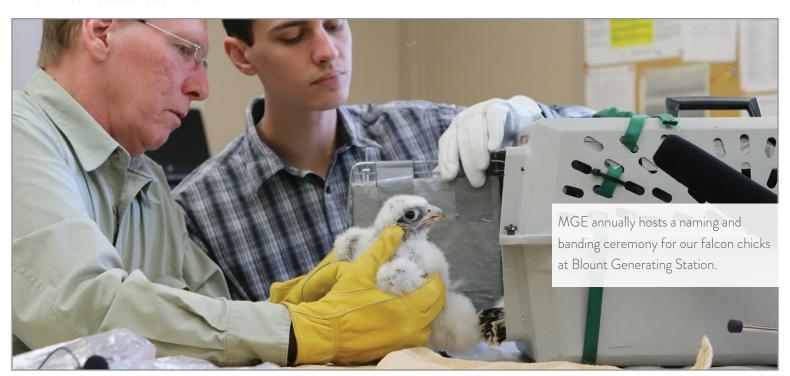
Since 2009, peregrine falcons have nested at our Blount Generating Station in downtown Madison, Wis. Man-made nesting boxes at power plants have proven ideal homes for the birds of prey, which are an endangered species in Wisconsin. The use of DDT pesticide beginning in the 1940s eradicated them.

Falcons were reintroduced to Wisconsin in the 1980s and have made a slow, steady comeback due to statewide efforts and

nesting boxes like the one at Blount. The original nesting box at Blount was installed in 1999. It was built by an MGE employee and his son. In fall 2018, due to renovations at Blount, employees built a new falcon box and moved it to a new location at the plant, which the falcons used in 2019 for nesting.

MGE has seen 42 falcons hatch at Blount, including the 2019 chicks. Falcon expert Greg Septon visits Blount every spring for our naming ceremony during which the chicks also are banded for tracking throughout their lifetimes. For more information on MGE's falcons, visit mge.com/falcons.

MGE is proud to support the ongoing recovery of these raptors through our nesting box and support from the MGE Foundation for Hoo's Woods Raptor Center, a local nonprofit dedicated to the rehabilitation of birds of prey and the preservation of their ecosystems.



Peregrine timeline

The use of the pesticide DDT begins during World War II.

1960s The peregrine population continues to decline; there are no peregrines in the eastern U.S.

1971 Wisconsin bans the use of DDT.

1972 The Environmental Protection Agency bans the use of DDT.

1973 The American peregrine falcon is listed as endangered under the Endangered Species Act.

1999 MGE installs its falcon nesting box at Blount Generating Station.

The peregrine falcon is declassified as a federally endangered species.

A pair of falcons begins using MGE's nesting box, hatching three chicks named Steve, Genny and Cole.

Three falcon chicks hatch in MGE's nesting box, bringing the total to 42 chicks since 2009.



wildflowers play in providing habitat for pollinators.









GOVERNANCE AND OVERSIGHT

Our Board of Directors has a commitment to corporate responsibility and environmental accountability. Community-focused and with a breadth and diversity of experience, board members bring strong, effective oversight in their service to MGE and MGE Energy.

Active board committed to engagement

Our board is very active and engaged with 10 regularly scheduled meetings of the full board each year, in addition to committee meetings. These meetings help directors stay well-informed of industry and company developments.

Board meetings are held at the company's corporate headquarters in Madison, Wis., and are structured to provide for regular presentations and active dialogue with MGE management. Internal and external subject matter experts present to the board on issues of strategic importance to inform board members' decision-making and oversight.

Ongoing board education

In summer 2018, the board tapped expertise on climate change science, scenarios and projections from the University of Wisconsin-Madison's Nelson Institute Center for Climatic Research and the Wisconsin Initiative on Climate Change Impacts. The initiative brings together scientists and other experts to conduct science-based assessments of potential climate change impacts on Wisconsin.

These regular interactions with internal and external subject matter experts provide useful information and insight relative to critical business initiatives and corporate strategy, including financial performance, environmental performance, risk management and oversight, and corporate succession planning.

In 2018, the board held a strategic planning and review session with all officers of the company. This session was designed to review corporate strategy across all aspects of the company's business and to provide directors with the opportunity to engage the entire senior management team on issues of strategic importance. The board plans to continue holding these strategic planning and review sessions with all officers periodically.

Shareholder engagement

Our board believes that understanding and considering shareholder perspectives advances accountability and transparency.

Our investor relations efforts also help executive management and the board understand how investors view the company's policies and practices, strategies

and long-term direction, and help leadership assess and address investors' emerging areas of interest, such as ESG-related topics.

Officers engage shareholders in several ways, including through discussions with a number of our institutional shareholders; presentations at industry conferences and investor meetings; meetings with analysts and investment firms; our Annual Meeting; and inquiries taken through the company's investor site, board email and in-house Shareholder Services staff. These efforts are in addition to the company's regular and ongoing investor relations program.



More than 1,500 people attend the MGE Energy Annual Meeting, giving MGE employees the opportunity to hear from investors and to share information, such as the benefits of electric vehicles.

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Effective oversight

Directors understand sustainability is integral to the company's long-term success and share management's commitments in these areas, from long-term and strategic direction to day-to-day business practices companywide. Their oversight includes review of environmental risks and mitigation as well as assessment of current and/or future environmental regulations. It also includes review of the company's environmental and sustainability performance.

In 2018, MGE moved from biennial to annual production of our Environmental and Sustainability Report. This report is reviewed by the board every year.

Executive compensation

MGE Energy's Board of Directors' compensation committee, composed of independent directors, takes into consideration environmental performance, among other factors such as cost containment and management of day-to-day operations, when evaluating executive compensation. The committee also considers other performance goals, such as earnings, system reliability and

customer satisfaction as well as long-term strategic goals, including those related to sustainability.

As part of its ongoing assessment of corporate performance, the board of directors regularly reviews how well the company is advancing its overall goals around carbon emission reductions as well as progress on its specific strategies for deep decarbonization.

State and federal oversight

As a public utility, MGE operates under state and federal regulations. These regulations serve to protect the interests of customers, investors and the environment.

MGE is subject to regulation by the Public Service Commission of Wisconsin (PSCW), which has authority to regulate most aspects of MGE's business, including rates, terms and conditions of service, accounts, issuance of securities and construction of infrastructure, such as generation siting.

The Federal Energy Regulatory Commission (FERC) has jurisdiction, under the Federal Power Act, over certain accounting practices and certain other aspects of MGE's business. MGE Energy's subsidiaries

also are subject to regulation under local, state and federal laws regarding air and water quality and solid waste disposal.

Risk management

Enterprise-wide risk assessment and oversight are fundamental responsibilities of our board. Directors are involved in the process of overseeing the primary risks facing the company.

As part of the company's Enterprise Risk Management program, our board receives on an ongoing basis information from management related to key business risks and mitigation strategies. These business risks include existing and emerging risks related to environmental performance and sustainability.

Our board engages in a comprehensive risk assessment and mitigation review biannually. In addition, on a biennial basis, the board engages in a broad-based exercise with all company officers on risk and emerging risk identification, assessment and mitigation strategies.

Third-party evaluation of risk

Additionally, MGE is employing an independent third party to oversee the expansion of the company's Environmental Management System (EMS). In 2017, MGE expanded the scope of its renewed five-year contract with the Wisconsin Department of Natural Resources for its Green Tier certification, which recognizes environmental leadership. Our primary goal in the expanded contract is to cover all MGE operations under our EMS.

Our independent third-party's expertise in risk management and compliance is helping MGE to identify operational and environmental risks and to evaluate those risks under the scope of our expanded EMS. This further demonstrates our commitment to goal-setting and to environmental accountability.

MGE operates within a culture of sustainability and risk management, which is brought to the entire board. All officers of the company take ownership in and are accountable for managing and mitigating corporate risk. Our comprehensive approach encourages all our directors to initiate discussion at any time, either directly or through our Lead Independent Director, on any areas of concern, including risk identification and assessment, controls, management and oversight.





ENVIRONMENTAL AND SUSTAINABILITY **REPORT 2019**

MGE is committed to environmental stewardship. This report is printed on recycled paper.

Madison Gas and Electric Company P.O. Box 1231 Madison, WI 53701-1231

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