

C0. Introduction

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C0.1

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**(C0.1) Give a general description and introduction to your organization.**

Madison Gas and Electric (MGE) generates and distributes electricity to 161,000 customers in Dane County and purchases and distributes natural gas to 173,000 customers in seven south-central and western Wisconsin counties. MGE is a subsidiary of MGE Energy (Nasdaq: MGEE), an investor-owned public utility holding company based in Madison, Wis. MGE's roots in the Madison area date back more than 150 years. Assets total approximately \$2.5 billion. In 2022, revenue was approximately \$715 million.

We are pleased to present information within this Climate Change Disclosure. As we work toward our industry leading climate goals, consistent with science and powered by new and emerging technologies, our employees help drive our success. Your community energy company continues to transition its energy supply, targeting net-zero carbon electricity. MGE expects to achieve carbon reductions of at least 80% by 2030. The main strategies that will be used to achieve this goal are decarbonizing electric generation, helping customers use energy efficiently, and electrifying other energy uses, including transportation. This year we are further reporting our goal to achieve net-zero methane emissions from our natural gas distribution system by 2035. We intend to meet our climate goals while maintaining our fundamental commitments to safe, reliable and affordable energy and to community focused customer service.

This report contains forward-looking statements that reflect management's current assumptions and estimates regarding future performance and economic conditions—especially as they relate to economic conditions, future load growth, revenues, expenses, capital expenditures, financial resources, regulatory matters, and the scope and expense associated with future environmental regulation. These forward-looking statements are made pursuant to the provisions of the Private Securities Litigation Reform Act of 1995. Words such as "believe," "expect," "anticipate," "estimate," "could," "should," "intend," "will," and other similar words, and words relating to goals, targets, and projections, generally identify forward-looking statements. These forward-looking statements are subject to known and unknown risks and uncertainties that may cause actual results to differ materially from those projected, expressed, or implied. MGE Energy and MGE undertake no obligation to release publicly any revision to these forward-looking statements to reflect events or circumstances after the date of this report.

C0.2

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**(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.**

**Reporting year**

**Start date**

January 1 2022

**End date**

December 31 2022

**Indicate if you are providing emissions data for past reporting years**

No

**Select the number of past reporting years you will be providing Scope 1 emissions data for**

<Not Applicable>

**Select the number of past reporting years you will be providing Scope 2 emissions data for**

<Not Applicable>

**Select the number of past reporting years you will be providing Scope 3 emissions data for**

<Not Applicable>

C0.3

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**(C0.3) Select the countries/areas in which you operate.**

United States of America

C0.4

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**(C0.4) Select the currency used for all financial information disclosed throughout your response.**

USD

C0.5

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**(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.**

Equity share

C-EU0.7

**(C-EU0.7) Which part of the electric utilities value chain does your organization operate in? Select all that apply.**

Row 1

**Electric utilities value chain**

Electricity generation  
Distribution

**Other divisions**

Gas storage, transmission and distribution  
Smart grids / demand response

C0.8

**(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?**

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, a Ticker symbol	MGEE

C1. Governance

C1.1

**(C1.1) Is there board-level oversight of climate-related issues within your organization?**

Yes

C1.1a

**(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.**

Position of individual or committee	Responsibilities for climate-related issues
Board Chair	As the individual with primary responsibility for managing the Company's day-to-day operations and for executing on the Company's vision and strategy, our CEO is best positioned to chair regular board meetings as we discuss key business and strategic issues. Climate-related issues are among the key business and strategic issues.
Chief Executive Officer (CEO)	As explained above, MGE's Chief Executive Officer is responsible for managing the Company's day-to-day operations and for executing on the Company's vision and strategy. Climate-related issues are among the key business and strategic issues overseen by the Board.
Other, please specify (Board of Directors)	<p>Our board has oversight of the Company's ESG and climate-related matters. This 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 corporate responsibility, environmental and sustainability performance and MGE's annual Corporate Responsibility and Sustainability Report.</p> <p>Directors understand corporate responsibility and sustainability are integral to the Company's long-term success and share management's commitment in these areas, from long-term and strategic direction to day-to-day business practices throughout the organization. To help facilitate effective oversight of ESG-related matters, the board receives timely and relevant information on a regular basis related to the Company's sustainability initiatives and performance and a wide range of ESG topics, including diversity, equity and inclusion, workforce and culture, safety, human rights, supply chain and other ESG topics.</p> <p>The board has ten regular full board meetings each year. Board meetings are structured to provide for regular presentations by and active dialogue with MGE management. Subject matter experts from across the Company regularly present to the board on issues of strategic importance. These regular interactions provide useful information and insight relative to critical business initiatives and corporate strategy, including environmental performance and sustainability, and risk management and oversight. In addition, the board takes advantage of external expertise as needed on key strategic topics. The board's engagement with management and the Company's participation in third-party benchmarking and evaluation programs help to assess performance and promote continuous improvement.</p>

C1.1b

**(C1.1b) Provide further details on the board’s oversight of climate-related issues.**

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Other, please specify (Quarterly)	Reviewing and guiding annual budgets Overseeing major capital expenditures Overseeing acquisitions, mergers, and divestitures	<Not Applicable>	Quarterly review of SEC filings at the Board level are conducted which include climate-related risks.
Other, please specify (Annually)	Reviewing and guiding annual budgets Overseeing major capital expenditures Overseeing acquisitions, mergers, and divestitures Overseeing and guiding employee incentives Reviewing and guiding strategy Overseeing and guiding the development of a transition plan	<Not Applicable>	The company’s Internal Audit department, on behalf of MGE management and the Board of Directors’ Audit Committee, conducts an annual Enterprise Risk Management meeting with each officer of the company. The sessions with individual company officers and management update existing areas of risk, classify new or emerging areas of risk and identify owners responsible for assessing, managing and/or mitigating areas of risk.
Other, please specify (Biannually)	Reviewing and guiding annual budgets Overseeing acquisitions, mergers, and divestitures Overseeing and guiding employee incentives Overseeing and guiding the development of a transition plan Monitoring the implementation of a transition plan Overseeing and guiding scenario analysis	<Not Applicable>	The Board engages in a comprehensive risk assessment and mitigation review biannually. And, on a biennial basis, the board conducts a broad-based exercise with all company officers on risk and emerging risk identification, assessment, and mitigation strategies.
Other, please specify (As important issues arise)	Reviewing and guiding annual budgets Overseeing major capital expenditures Overseeing acquisitions, mergers, and divestitures Overseeing and guiding employee incentives Monitoring the implementation of a transition plan Overseeing and guiding scenario analysis	<Not Applicable>	The company’s comprehensive approach to risk management encourages all directors to initiate discussion at any time, either directly or through the Lead Independent Director, on any areas of concern, including risk identification and assessment, controls, management, and oversight. The board and MGE management have created a culture of sustainability, responsibility, and risk management. All officers of the company take ownership in and are accountable for managing and mitigating corporate risk.

**C1.1d**

**(C1.1d) Does your organization have at least one board member with competence on climate-related issues?**

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues	Primary reason for no board-level competence on climate-related issues	Explain why your organization does not have at least one board member with competence on climate-related issues and any plans to address board-level competence in the future
Row 1	Yes	The board conducts an annual Board of Directors assessment. The assessment includes an extensive survey that covers board structure, board meetings, board committees, key board responsibilities and board management. In addition, the board periodically evaluates the directors’ expertise and experience. This evaluation covers key professional skills, diversity, and breadth of community and other business experience and knowledge and includes financial expertise, business development, strategic planning, business operations, cybersecurity, sustainability, business processes and effectiveness, information technology and community engagement.  Climate-related issues primarily fall in the environmental/safety skill area; however, they are also covered in several other of the assessed experience/skill areas. Five of the nine board members have experience/skills in the environmental/safety category.	<Not Applicable>	<Not Applicable>

**C1.2**

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**(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.**

**Position or committee**

Chief Executive Officer (CEO)

**Climate-related responsibilities of this position**

Developing a climate transition plan  
Implementing a climate transition plan  
Integrating climate-related issues into the strategy  
Setting climate-related corporate targets  
Assessing climate-related risks and opportunities  
Managing climate-related risks and opportunities

**Coverage of responsibilities**

<Not Applicable>

**Reporting line**

Reports to the board directly

**Frequency of reporting to the board on climate-related issues via this reporting line**

More frequently than quarterly

**Please explain**

Our Chief Executive Officer (CEO) is also the President of the Company and Chairman of the Board of Directors. Our CEO is the individual with primary responsibility for managing the Company's day-to-day operations and for executing on the Company's vision and strategy. Our CEO is best positioned to chair regular board meetings to discuss key business and strategic issues. This includes climate-related risks and opportunities.

Although involved in all aspects of climate-related activities, our CEO is directly involved in developing/implementing transition plans, assessing/managing risk and opportunities, and integrating climate-related issues into our strategy and setting targets.

Our Company seeks to foster a proactive and forward-thinking approach to ESG-related matters, beginning with board oversight of and executive leadership on key topics and emerging issues. The board takes seriously its responsibility to oversee corporate responsibility and environmental performance of the Company. Directors are kept informed and educated through collaboration with and numerous presentations by officers of the Company and various subject matter experts, including experts from outside the Company and through industry and director training opportunities and reports provided to them by senior management on a regular basis. Our governance structure helps to ensure that oversight and management of ESG and sustainability-related risks and initiatives throughout the Company are incorporated into our long-term strategy and day-to-day management and operations. Our approach to these matters extends from the Board of Directors to our executive officers to our Sustainability Steering Team, leaders and internal subject matter experts. Along with the CEO, the other key positions are summarized.

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**Position or committee**

Other C-Suite Officer, please specify (VP General Counsel and Secretary)

**Climate-related responsibilities of this position**

Setting climate-related corporate targets  
Monitoring progress against climate-related corporate targets  
Managing public policy engagement that may impact the climate  
Assessing climate-related risks and opportunities  
Managing climate-related risks and opportunities

**Coverage of responsibilities**

<Not Applicable>

**Reporting line**

CEO reporting line

**Frequency of reporting to the board on climate-related issues via this reporting line**

More frequently than quarterly

**Please explain**

The VP General Counsel and Secretary oversees Legal Services, Government Affairs, and Safety, Sustainability and Environmental Affairs, is the Corporate Secretary, serves on the Sustainability Executive Team, and reports directly to the CEO. The VP General Counsel and Secretary is our officer with primary sustainability and ESG responsibilities.

Although involved in many aspects of climate-related activities, our VP General Counsel and Secretary is directly involved in managing public policy engagement, setting targets, monitoring progress on targets, and assessing/managing risk and opportunities.

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**Position or committee**

Other C-Suite Officer, please specify (VP Chief Financial Officer and Treasurer)

**Climate-related responsibilities of this position**

Managing annual budgets for climate mitigation activities  
Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)  
Assessing climate-related risks and opportunities  
Managing climate-related risks and opportunities

**Coverage of responsibilities**

<Not Applicable>

**Reporting line**

CEO reporting line

**Frequency of reporting to the board on climate-related issues via this reporting line**

More frequently than quarterly

**Please explain**

The VP Chief Financial Officer and Treasurer serves on the Sustainability Executive Committee and reports to the CEO.

Although involved in many aspects of climate-related activities, our VP Chief Financial Officer and Treasurer is directly involved in managing annual budgets for climate mitigation activities, managing major capital and/or operational expenditures related to low carbon products/services, and assessing/managing risk and opportunities.

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**Position or committee**

Other, please specify (VP Energy Operations)

**Climate-related responsibilities of this position**

Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)  
Implementing a climate transition plan  
Assessing climate-related risks and opportunities  
Managing climate-related risks and opportunities

**Coverage of responsibilities**

<Not Applicable>

**Reporting line**

CEO reporting line

**Frequency of reporting to the board on climate-related issues via this reporting line**

More frequently than quarterly

**Please explain**

The VP-Energy Operations serves on the Sustainability Executive Committee and reports to the CEO.

Among other duties, our VP-Energy Operations manages major capital and operational expenditures related to low-carbon products and services, implements climate transition plans and assess/manages climate-related risks/opportunities.

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**Position or committee**

Other, please specify (Director Safety, Sustainability, and Environmental Affairs)

**Climate-related responsibilities of this position**

Conducting climate-related scenario analysis  
Setting climate-related corporate targets  
Monitoring progress against climate-related corporate targets  
Assessing climate-related risks and opportunities

**Coverage of responsibilities**

<Not Applicable>

**Reporting line**

Other, please specify (Reports to VP General Counsel and Secretary)

**Frequency of reporting to the board on climate-related issues via this reporting line**

More frequently than quarterly

**Please explain**

The Director of Safety, Sustainability and Environmental Affairs has responsibility for Sustainability and ESG performance. This position reports to the VP General Counsel and Secretary.

Among other duties, this position has responsibility for conducting climate-related scenario analysis, evaluating potential targets, monitoring progress against targets and assessing climate-related risks/opportunities.

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**Position or committee**

Other, please specify (Sustainability Executive Team which includes Executive VP-Marketing and Communications; VP Chief Financial Officer and Treasurer; VP-Energy Operations)

**Climate-related responsibilities of this position**

Monitoring progress against climate-related corporate targets  
Assessing climate-related risks and opportunities  
Managing climate-related risks and opportunities

**Coverage of responsibilities**

<Not Applicable>

**Reporting line**

Other, please specify (Executive Team reports to CEO)

**Frequency of reporting to the board on climate-related issues via this reporting line**

More frequently than quarterly

**Please explain**

Our Sustainability Executive Team has officer representation from across the company to provide input and oversight to Steering Team direction and initiatives.

In this capacity, the members monitor progress against objectives and assess/manage climate-related risks/opportunities.

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**Position or committee**

Other, please specify (Sustainability Steering Team, which includes 18 employees from different departments and field operations)

**Climate-related responsibilities of this position**

Providing climate-related employee incentives  
Setting climate-related corporate targets  
Monitoring progress against climate-related corporate targets  
Assessing climate-related risks and opportunities  
Managing climate-related risks and opportunities

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**Coverage of responsibilities**

<Not Applicable>

**Reporting line**

Other, please specify (Steering Team members report to respective lines of supervision)

**Frequency of reporting to the board on climate-related issues via this reporting line**

More frequently than quarterly

**Please explain**

Our Sustainability Steering team is composed of employees from across the company. They manage our Environmental Management System, drive sustainability, engagement, benchmarking and continuous improvement initiatives.

In this capacity, the members are primarily involved in engaging and providing climate-related opportunities to employees, setting targets/objectives, monitoring progress on objectives and assessing/managing risks/opportunities.

**C1.3**

**(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?**

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	

**C1.3a**

**(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).**

**Entitled to incentive**

Corporate executive team

**Type of incentive**

Monetary reward

**Incentive(s)**

Other, please specify (Monetary reward; Bonus - set figure)

**Performance indicator(s)**

Progress towards a climate-related target  
Implementation of an emissions reduction initiative  
Other (please specify) (Other ESG objectives as discussed)

**Incentive plan(s) this incentive is linked to**

Short-Term Incentive Plan

**Further details of incentive(s)**

Our executive officers are partially compensated through annual short-term incentives or bonuses. The incentives are based on objective metric-specific targets, a subjective assessment of overall corporate performance and a subjective assessment of individual performance.

**Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan**

Goals related to environmental, social and governance and climate-related transition that are reviewed by the board in assessing management include: Advances "Energy 2030" framework and "Net-zero carbon by 2050" goals; Maintains or improves culture of environmental stewardship including preparing the annual Corporate Responsibility and Sustainability Report; Promotes and improves a diverse, equitable and inclusive workplace; Maintains or improves safety culture; Upholds compliance with regulatory requirements.

Full text on executive compensation begins on page 33 of this year's proxy statement.

**C2. Risks and opportunities**

**C2.1**

**(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?**

Yes

**C2.1a**

**(C2.1a) How does your organization define short-, medium- and long-term time horizons?**

	From (years)	To (years)	Comment
Short-term	1	5	These are general guidelines for how we think of time frames regarding climate-related topics
Medium-term	6	15	These are general guidelines for how we think of time frames regarding climate-related topics
Long-term			

**C2.1b**

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**(C2.1b) How does your organization define substantive financial or strategic impact on your business?**

MGE defines substantive financial or strategic impact consistent with the guidelines of the US Securities and Exchange Commission (SEC). These results are described in the Management Discussion and Analysis (MD&A) section of the company's annual 10-K Form and other periodic public filings to the SEC. The MD&A provides an overview of the company's strategy as well as qualitative results on the company's performance relative to implementation of the strategy. Primary indicators of financial results include net income and earnings per share. Additional quantitative indicators include capital investments expending company-owned renewable generation as well as investments in supporting resources and modernizing infrastructure that will enable maximizing operation on the electricity grid. See <https://www.mgeenergy.com/MGEEnergy/media/Library/documents/sec-reports/sec-filings/MGE-Energy-Proxy-Statement.pdf>

**C2.2**

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**(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.**

**Value chain stage(s) covered**

Direct operations  
Upstream  
Downstream

**Risk management process**

Integrated into multi-disciplinary company-wide risk management process

**Frequency of assessment**

More than once a year

**Time horizon(s) covered**

Short-term  
Medium-term  
Long-term

**Description of process**

Enterprise-wide risk assessment and oversight are fundamental responsibilities of our board. Directors are involved in the process of overseeing the primary risks we face in the conduct of our business. Trends in economic, business and commodity market conditions and trends in legislative and regulatory initiatives are reviewed by the board as part of the Company's Enterprise Risk Management program.

The 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, information technology systems and cybersecurity, operational risks, financial risks, reliability risks and regulatory risks.

The Company's Internal Audit department, on behalf of MGE management and the Board of Directors' Audit Committee, conducts a biannual Enterprise Risk Management meeting with each officer of the Company. The sessions with individual Company officers and management update existing areas of risk, classify new or emerging areas of risk and identify owners responsible for assessing, managing and/or mitigating areas of risk. This broad-based exercise serves to complement ongoing and regular presentations and reports from Company officers and subject matter experts on risk and emerging risk identification, assessment and mitigation strategies.

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. The board and MGE management have created a culture of environmental sustainability and risk management.

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**Value chain stage(s) covered**

Direct operations  
Upstream  
Downstream

**Risk management process**

A specific climate-related risk management process

**Frequency of assessment**

More than once a year

**Time horizon(s) covered**

Short-term  
Medium-term  
Long-term

**Description of process**

Sustainability Steering Team and Sustainability Executive Team

MGE has an established Sustainability Steering Team. Composed of employees from across the company, the Sustainability Steering Team oversees our Environmental Management System (EMS). It also supports external sustainability engagement and benchmarking, such as our participation in the Green Tier and Green Masters programs. Both of these programs are sustainability benchmarking and performance programs specific to the State of Wisconsin. Having team members from departments across the company is a more efficient way to gather data for our voluntary sustainability reporting efforts. The Sustainability Steering Team is overseen by and receives guidance from our Executive Sustainability Team, which has officer representation from across MGE.

MGE also has an established Sustainability Executive Team. Composed of officers of the company, this team provides guidance and resources to the Sustainability Steering Team.

**Continuous Improvement Sustainability Teams**

The Sustainability Steering Team reviews, evaluates and prioritizes continuous improvement opportunities for the company. The group assembles Continuous Improvement Sustainability Teams to address specific improvement initiatives and tasks.

**Company-wide EMS**

Our first Continuous Improvement Sustainability Team oversaw the expansion of our EMS to cover all MGE operations. An EMS is a continuous improvement process that evaluates, prioritizes and manages environmental risks. MGE previously used an EMS at our Blount Generating Station. The expanded scope of our EMS captures and manages environmental risks across all of our company's operations. It also further demonstrates our commitment to goal setting and environmental accountability.

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C2.2a



**(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?**

	Relevance & Inclusion	Please explain
Current regulation	Relevant, always included	Our business is subject to regulation at the State and Federal levels. We are subject to regulation as a holding company by the Public Service Commission of Wisconsin (PSCW). The PSCW regulates MGE's rates; terms and conditions of service; various business practices and transactions; financing; the closure of generating facilities and related cost recovery; and transactions between it and its affiliates, including MGE Energy. MGE is also subject to regulation by the Federal Energy Regulatory Commission (FERC), which regulates certain aspects of its business. We are also subject to oversight and monitoring by Midcontinent Independent System Operator (MISO). Possible changes to MISO's methodology establishing capacity planning reserve margin requirements may impact new generating facilities such as solar and wind and its accredited energy capacity which may require adjustments to the current resource plan and the need to add additional resources to comply with MISO's proposal or procure capacity in the market whereby such costs might not be recovered in rates. The lack of availability of new and existing generating facilities may also impact our current resource plan to be in accordance with MISO's methodology. American Transmission Company, LLC (ATC), in which we have an investment, is subject to regulation by FERC as to, among other things, rates. The regulations adopted by the State and Federal agencies affect how we do business, our ability to undertake specified actions since pre-approval or authorization may be required for projects, the costs of operations, and the rates charged to recover those costs. Our ability to attract capital also depends, in part, upon our ability to recover our costs and obtain a fair return for shareholders. More specific information on risks can be found in MGE's 10-K Section 1A.
Emerging regulation	Relevant, always included	We are subject to environmental laws and regulations that affect the manner in which we conduct business, including capital expenditures, operating costs, and potential liabilities. Regulatory action continues on climate change-related matters, including restrictions on greenhouse gas emissions, such as carbon. While it is difficult to know the extent of possible legislation or regulatory activity, it is expected there will be an increase in the number and scope of environmental laws and regulations aimed at fossil-fueled generation and the transportation of natural gas. These possible changes, as well as evolving consumer sentiment, have affected and may continue to affect our business plans, make them more costly, or expose us to liabilities for past, present, or future operations. More specific information on risks can be found in MGE's 10-K Section 1A.
Technology	Relevant, always included	Our capital projects, such as our renewable generation projects, are subject to various completion risks that could cause costs to increase or delays in completion. These risks include shortages of, the inability to obtain, the cost of, and the consistency of, labor, materials and equipment; the inability of the contractors to perform under their contracts; the inability to agree to terms of contracts or disputes in contract terms; work stoppages; adverse weather conditions; the inability to obtain necessary permits in a timely manner; changes in applicable laws or regulations; adverse interpretation or enforcement of permit conditions; governmental actions or tariffs; legal action; and unforeseen engineering or technology issues. In the case of our renewable generation projects, we may face delays in the completion of the necessary transmission system connections or upgrades to accommodate the project. More specific information on risks can be found in MGE's 10-K Section 1A.
Legal	Relevant, always included	Our subsidiaries operate or co-own electric power plants that burn fossil fuels, deliver natural gas, and deliver electricity to customers. These business activities are subject to evolving public concern regarding greenhouse gases (GHG), legislative and regulatory action, and possible litigation in response to that public concern. The primary greenhouse gas associated with our subsidiaries' combustion of fossil fuels, and the largest emission in our system overall, is carbon dioxide (CO2). Our subsidiaries have incurred and are expected to continue to incur costs from more stringent regulation of GHG from power plants, natural gas delivery, GHG used in power distribution, and efficiencies lost during power distribution. While it is difficult to know the extent of possible legislation or regulatory activity, the federal government is likely to consider and pass some form of greenhouse gas legislation or regulations. In addition, litigation by environmental nongovernment organizations targeting GHG emissions from the electric power industry is also likely if the federal government fails to act on greenhouse gas initiatives. More specific information on risks can be found in MGE's 10-K Section 1A.
Market	Relevant, always included	MGE Energy's and MGE's operations are affected by local, national and worldwide economic conditions. The consequences of a prolonged period of reduced economic activity may include lower demand for energy, uncertainty regarding energy prices and the capital and commodity markets, and increased credit risk. A decline in energy consumption may adversely affect our revenues and future growth. Increased credit risk reflects the risk that our retail customers will not pay their bills in a timely manner or at all, which may lead to a reduction in liquidity and an eventual increase in bad debt expense. More specific information on risks can be found in MGE's 10-K Section 1A.
Reputation	Relevant, always included	If we are not seen as being proactive in addressing climate-related concerns we may experience reputational issues among our customers and the communities that we serve. Those issues could affect customers' energy choices, including efforts at self-supply, and could affect the handling and treatment of our rate requests and cost recovery. We may also experience difficulty in attracting investors, which could affect the availability and cost of capital and financing. More specific information on risks can be found in MGE's 10-K Section 1A.
Acute physical	Relevant, always included	A terrorist attack, war, natural disaster, pandemic virus or disease, including the COVID-19 pandemic, or other catastrophic or unpredictable event could adversely affect our future revenues, expenses and operating results by: interrupting our normal business operations; causing employee absences or casualties, including loss of our key employees; interrupting or affecting supplier operations; requiring substantial expenditures and expenses to repair, replace and restore normal business operations; and reducing investor confidence. Facilities for electric generation, transmission, and gas and electric distribution are potential targets of terrorist threats and activities. A terrorist act or catastrophic event at our facilities or the facilities of other companies to which we are interconnected could result in a disruption of our ability to generate, transmit, transport, purchase, or distribute electricity or natural gas. Such an event would have additional adverse effects, including environmental ramifications, increased security and insurance costs, as well as general economic volatility or uncertainty within our service territories. The inability to maintain operational continuity and any additional costs incurred for repairing our facilities or making alternative arrangements could materially and adversely affect our financial condition and results of operations. More specific information on risks can be found in MGE's 10-K Section 1A.
Chronic physical	Relevant, always included	The demand for electricity and gas is affected by weather. Very warm and very cold temperatures, especially for prolonged periods, can dramatically increase the demand for electricity and gas for cooling and heating, respectively, as opposed to the softening effect of more moderate temperatures. Our electric revenues are sensitive to the summer cooling season and, to a lesser extent, the winter heating season. Similarly, very cold temperatures can dramatically increase the demand for gas for heating. A significant portion of our gas system demand is driven by heating. Extreme summer conditions or storms may stress electric systems, resulting in increased maintenance costs and limiting the ability to meet peak customer demand. More specific information on risks can be found in MGE's 10-K Section 1A.

**C2.3**

**(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?**

Yes

**C2.3a**

**(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.**

**Identifier**

Risk 1

**Where in the value chain does the risk driver occur?**

Direct operations

**Risk type & Primary climate-related risk driver**

Emerging regulation	Mandates on and regulation of existing products and services
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**Primary potential financial impact**

Increased direct costs

**Climate risk type mapped to traditional financial services industry risk classification**

<Not Applicable>

**Company-specific description**

MGE Energy and MGE are subject to local, state, and federal regulations concerning air quality, water quality, land use, threatened and endangered species, hazardous

materials handling, and solid waste disposal. These regulations affect the manner in which we conduct our operations, the costs of those operations, as well as capital and operating expenditures. Regulatory initiatives, proposed rules, and court challenges to adopted rules have the potential to have a material effect on our capital expenditures and operating costs.

**Time horizon**

Short-term

**Likelihood**

About as likely as not

**Magnitude of impact**

Unknown

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

**Cost of response to risk**

**Description of response and explanation of cost calculation**

MGE has a process in place to evaluate and to anticipate regulatory and legislative developments on an ongoing basis. We review the international and national science on carbon reduction expectations. Our company goals are consistent with current climate science. MGE has pledged at least an 80% reduction of electric generation carbon dioxide emissions by 2030 and net-zero carbon electricity by 2050. We continue to evaluate potential impacts from mandates and regulations of greenhouse gas emissions on our business strategy and our pace toward our goals. We recently updated our goals using this process and will continue to do so.

**Comment**

The impact has not been quantified financially. A wide range of specific potential impacts from mandates or regulation can occur and there are interactions with other inherent risks.

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**Identifier**

Risk 2

**Where in the value chain does the risk driver occur?**

Direct operations

**Risk type & Primary climate-related risk driver**

Technology	Transitioning to lower emissions technology
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**Primary potential financial impact**

Increased direct costs

**Climate risk type mapped to traditional financial services industry risk classification**

<Not Applicable>

**Company-specific description**

Our capital projects, such as our renewable generation projects, are subject to various completion risks that could cause costs to increase or cause delays in completion. These risks include shortages of, the inability to obtain, the cost of, and the consistency of, labor, materials and equipment; the inability of the contractors to perform under their contracts; the inability to agree to terms of contracts or disputes in contract terms; work stoppages; adverse weather conditions; the inability to obtain necessary permits in a timely manner; changes in applicable laws or regulations; adverse interpretation or enforcement of permit conditions; governmental actions or tariffs; legal action; and unforeseen engineering or technology issues. In the case of our renewable generation projects, we may face delays in the completion of the necessary transmission system connections or upgrades to accommodate the project. If a capital project exceeds the approved project costs approved by the PSCW, we may not be able to recover those excess costs through regulated customer rates. If that happens, we may have to finance overruns through cash from operations, which may delay other projects, or by securing additional financing. Any or all of these methods may not be available when or in the amounts needed or may adversely affect our financial condition, results of operations and cash flows. Inability to recover excess costs, or inability to complete the project in a timely manner, could adversely impact our financial condition and results of operations. Further, our revenues and cash flows may not increase immediately following our expenditure of funds on a particular project, which could affect our liquidity and financial position.

**Time horizon**

Short-term

**Likelihood**

About as likely as not

**Magnitude of impact**

Medium-low

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

**Cost of response to risk**

**Description of response and explanation of cost calculation**

MGE mitigates the risk of renewable energy project delays through its reserve margin of energy production, project controls, and operation of dispatchable assets.

**Comment**

The impact has not been quantified financially. A wide-range of specific potential impacts from transitional risks can occur and there are interactions with other inherent risks.

**Identifier**

Risk 3

**Where in the value chain does the risk driver occur?**

Direct operations

**Risk type & Primary climate-related risk driver**

Acute physical	Storm (including blizzards, dust, and sandstorms)
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**Primary potential financial impact**

Increased direct costs

**Climate risk type mapped to traditional financial services industry risk classification**

<Not Applicable>

**Company-specific description**

A terrorist attack, war, natural disaster, pandemic virus or disease, including the COVID-19 pandemic, or other catastrophic or unpredictable event could adversely affect our future revenues, expenses and operating results by: interrupting our normal business operations; causing employee absences or casualties, including loss of our key employees; interrupting or affecting supplier operations; requiring substantial expenditures and expenses to repair, replace and restore normal business operations; and reducing investor confidence. Facilities for electric generation, transmission, and gas and electric distribution are potential targets of terrorist threats and activities. A terrorist act or catastrophic event at our facilities or the facilities of other companies to which we are interconnected could result in a disruption of our ability to generate, transmit, transport, purchase, or distribute electricity or natural gas. Such an event would have additional adverse effects, including environmental ramifications, increased security and insurance costs, as well as general economic volatility or uncertainty within our service territories. The inability to maintain operational continuity and any additional costs incurred for repairing our facilities or making alternative arrangements could materially and adversely affect our financial condition and results of operations.

**Time horizon**

Short-term

**Likelihood**

About as likely as not

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

The Company maintains budgets for unplanned expenses. These budgets are to be used for things such as catastrophic and unpredictable events that have an impact on operations.

**Cost of response to risk**

**Description of response and explanation of cost calculation**

MGE has plans in place to prevent and mitigate damage from unplanned events including extreme weather and storms. The intent is to ensure reliability for our customers and safety for our workers and our community in response to these events. Having a well-defined and practiced All Hazards Response Plan (AHRP) is critical to managing and responding appropriately to emergency situations. MGE's AHRP encompasses everything from storm response to cyberattacks. The incident command structure within the plan oversees, logistics, operations, and planning. It is supported by communications, legal, environmental, safety, and IT resources.

**Comment**

The impact has not been quantified financially. A wide-range of operational impacts can occur and there are interactions with other inherent risks of operations.

**C2.4**

**(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?**

Yes

**C2.4a**

**(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.**

**Identifier**

Opp1

**Where in the value chain does the opportunity occur?**

Direct operations

**Opportunity type**

Energy source

**Primary climate-related opportunity driver**

Use of lower-emission sources of energy

**Primary potential financial impact**

Returns on investment in low-emission technology

**Company-specific description**

MGE's solar, wind, and battery storage projects are a major step toward deep decarbonization and greater use of clean energy sources in pursuit of our net-zero carbon electricity goal. Since 2015, MGE has announced several new joint and wholly-owned utility-scale wind and solar projects, which are expected to increase MGE's owned renewable capacity by more than nine times when completed.

**Time horizon**

Short-term

**Likelihood**

Virtually certain

**Magnitude of impact**

Medium-high

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

&lt;Not Applicable&gt;

**Potential financial impact figure – minimum (currency)**

&lt;Not Applicable&gt;

**Potential financial impact figure – maximum (currency)**

&lt;Not Applicable&gt;

**Explanation of financial impact figure**

Eliminating coal-fired generation from our portfolio, transitioning to cleaner fuels and increasing our investments in renewable energy are key strategies to achieving net-zero carbon electricity by 2050. Increasing our renewable energy resources creates new investment opportunities while also reducing our exposure to potential future climate regulations. As a regulated utility, our financial earnings are driven by the allowed specific rate of return on assets included in rate base. Increasing our investments in renewable energy reduces our reliance on coal-fired generation and increases the percentage of cleaner technologies in our rate base.

Planned wind, solar and battery storage projects make up more than 40% of the company's expected capital investment through 2027. These cost-effective renewable energy investments will help to replace lost capacity with the expected retirement of the coal-fired Columbia Energy Center by mid-2026. MGE is a minority owner of the Columbia plant.

**Cost to realize opportunity**

465700000

**Strategy to realize opportunity and explanation of cost calculation**

Our strategies for achieving our carbon reduction goals are investing in renewable energy and reducing the company's reliance on fossil fuels for electricity generation, electrifying transportation and other end uses and advancing energy efficiency,

In spring 2022, MGE's 8-megawatt (MW) Hermsdorf Solar Fields in southeast Madison came online. The project, built under our Renewable Energy Rider for large customers, provides carbon-free energy to the City of Madison and the Madison Metropolitan School District. The Hermsdorf facility is one of several new renewable energy projects to help MGE achieve deep decarbonization. In 2023, the 92-MW Red Barn Wind Farm came online. MGE owns 9.1 MW of the wind farm in Grant County, Wis. MGE is purchasing a 10% ownership interest in the 250-MW Darien Solar Energy Center with 75 MW of battery storage, the 200-MW Paris Solar Battery Park with 110 MW of battery storage and the 300-MW Koshkonong Solar Energy Center with 165-MW battery storage system.

**Comment**

Our projected investments in renewable energy and battery storage are expected to account for more than 40% of our expected capital expenditures through 2027. Between 2015 and 2027, we have an estimated total investment of over \$750 million in renewable energy and battery storage capacity.

**Identifier**

Opp2

**Where in the value chain does the opportunity occur?**

Direct operations

**Opportunity type**

Products and services

**Primary climate-related opportunity driver**

Development of new products or services through R&amp;D and innovation

**Primary potential financial impact**

Returns on investment in low-emission technology

**Company-specific description**

MGE is working to achieve a more sustainable energy future by investing in cost-effective renewable generation and new, innovative low-emission technologies and services to serve ALL customers. MGE has emphasized this innovation by developing customer programs to address climate change and to encourage our customers to use clean energy and practice energy efficiency and conservation. Our Renewable Energy Rider and Shared Solar programs reduce MGE's carbon emissions while providing customers the ability to purchase cost-effective renewable energy to meet their needs. Our smart thermostat demand response MGE Connect program for

residential electric customers helps customers to reduce demand for electricity during peak hours while our electric vehicle (EV) programs and resources help to advance sustainable transportation and offer MGE the opportunity to manage EV charging to better manage the grid for the benefit of all customers.

**Time horizon**

Medium-term

**Likelihood**

Virtually certain

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

Offering customers options to participate in programs that grow renewable energy and advance energy efficiency and conservation drives investment in clean energy and facilitates more efficient grid management. In turn, these programs help MGE to achieve our deep decarbonization goals by growing our use of clean energy and managing demand.

**Cost to realize opportunity**

**Strategy to realize opportunity and explanation of cost calculation**

Examples of specific programs to realize this opportunity include growing renewable energy through our Renewable Energy Rider and Shared Solar and Green Power Tomorrow programs; managing peak demand through our smart thermostat program MGE Connect®; researching and demonstrating residential solar/battery storage projects; researching charging patterns, grid impacts and remote management of EV charging through our EV programs and projects, such as Charge@Home and Charge Ahead; and reducing peak demand and reducing energy use through our MyMeter (formerly On Demand Savings) program.

**Comment**

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**Identifier**

Opp3

**Where in the value chain does the opportunity occur?**

Direct operations

**Opportunity type**

Resource efficiency

**Primary climate-related opportunity driver**

Other, please specify (Increased development of electric grid)

**Primary potential financial impact**

Returns on investment in low-emission technology

**Company-specific description**

Capital investments in our electric grid infrastructure earn a rate of return, can reduce our operating costs, and improve access to demand management options for our customers.

**Time horizon**

Medium-term

**Likelihood**

Virtually certain

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

Capital investments in our electric grid infrastructure can reduce our operating costs and improve access to demand management options for our customers. Investment in these grid technologies is a part of advancing our strategies for achieving net-zero carbon electricity by 2050. As a regulated utility, our financial earnings are driven by the allowed specific rate of return on assets included in rate base.

**Cost to realize opportunity**

**Strategy to realize opportunity and explanation of cost calculation**

MGE is investing in infrastructure improvements to enhance the electric distribution grid to support and integrate new technology while working to ensure reliable and resilient service at a reasonable cost. Modernization of the grid includes projects that can improve the two-way flow of electricity from traditional sources as well as distributed sources of renewable energy as we transition to cleaner energy sources. Additional initiatives to further enhance reliability and resiliency include Distribution

Automation; Asset Renewal projects, such as moving overhead wires underground and voltage conversions; and physical and technological security, communication, and control upgrades. These projects help to improve the resiliency, reliability, security, and safety of the grid while also enabling new renewable energy sources, and advancing innovative customer programs and technologies to deliver a more integrated and efficient grid for the benefit of all customers.

**Comment**

**C3. Business Strategy**

**C3.1**

**(C3.1) Does your organization’s strategy include a climate transition plan that aligns with a 1.5°C world?**

**Row 1**

**Climate transition plan**

Yes, we have a climate transition plan which aligns with a 1.5°C world

**Publicly available climate transition plan**

Yes

**Mechanism by which feedback is collected from shareholders on your climate transition plan**

We have a different feedback mechanism in place

**Description of feedback mechanism**

MGE has a link to our 1.5-degree analysis and climate transition strategy on our websites, mge.com and mgeenergy.com. The University of Wisconsin-Madison studied MGE’s 2050 net-zero carbon electricity goal in its report, "Interpreting Global Energy Scenarios for Emissions Planning at the Utility Scale" published in fall 2020. This analysis supports that MGE’s plan reflects carbon reductions consistent with limiting global warming to 1.5 degrees Celsius.

Specific investor feedback occurs in many ways. MGE is a small, investor-owned utility. As Your Community Energy Company, our Officers and Directors are members of our community and generally available to the public. MGE Energy has a larger than typical number of retail shareowners. Those shareowners often communicate directly with our management, employees, Officers and Directors when out in our community attending local events, in local stores/restaurants, and other places. MGE also prioritizes regular engagement with institutional investor groups. MGE Officers also engage proactively at least twice a year with our largest institutional shareholders to obtain their feedback on our climate transition, and all shareholders are invited to ask questions during our Annual Shareholder meeting. MGE Energy’s website has an email portal for investor questions to be addressed by the company. Investors also can provide feedback via either Investor Relations or to the Secretary of the Company at any time.

**Frequency of feedback collection**

More frequently than annually

**Attach any relevant documents which detail your climate transition plan (optional)**

UW\_Climate\_Report\_November\_2020  
UW\_Climate\_Report\_November\_2020.pdf

**Explain why your organization does not have a climate transition plan that aligns with a 1.5°C world and any plans to develop one in the future**

<Not Applicable>

**Explain why climate-related risks and opportunities have not influenced your strategy**

<Not Applicable>

**C3.2**

**(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?**

	<b>Use of climate-related scenario analysis to inform strategy</b>	<b>Primary reason why your organization does not use climate-related scenario analysis to inform its strategy</b>	<b>Explain why your organization does not use climate-related scenario analysis to inform its strategy and any plans to use it in the future</b>
Row 1	Yes, qualitative and quantitative	<Not Applicable>	<Not Applicable>

**C3.2a**

**(C3.2a) Provide details of your organization’s use of climate-related scenario analysis.**

Climate-related scenario		Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Physical climate scenarios	Customized publicly available physical scenario	Business division	1.5°C	To evaluate what combination of energy and land-use policies could support the 1.5 degree C goal, multiple research groups around the world have developed computer models. These models attempt to project the global temperature response to different assumptions about energy technology and other factors over the next 100 years. The results of these computer models were reported in the SR15 report of the IPCC and shared through an online database managed by the Integrated Assessment Modeling Consortium (IAMC). The IAMC database provides researchers, companies, and the general public with information to support planning for a low-carbon future. The University of Wisconsin-Madison Nelson Institute for Environmental Studies and the Department of Atmospheric and Oceanic Sciences worked with MGE to evaluate the IPCC scenarios relevant to its operations. The IPCC database used in this study includes 414 scenarios of future energy use. The scenarios considered were those that had a temperature rise below 1.5 degrees or 1.5 degrees with low overshoot, in industrialized countries, and representing CO2 emissions from the electricity sector. Five scenarios met these requirements for inclusion in this analysis. The results of the analysis can be found in the report, "Interpreting Global Energy Scenarios for Emissions Planning at the Utility Scale" at <a href="https://www.mge.com/net-zero-carbon-electricity/uw-madison-analysis-of-mge-net-zero-carbon-goal">https://www.mge.com/net-zero-carbon-electricity/uw-madison-analysis-of-mge-net-zero-carbon-goal</a>

**C3.2b**

**(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.**

**Row 1**

**Focal questions**

We set out to evaluate our goal and decarbonization strategies for our electric energy decarbonization pathway. The evaluation applies to the electric energy supplied to our customers consistent with the five IPCC 1.5C scenarios considered in the UW-Madison analysis.

**Results of the climate-related scenario analysis with respect to the focal questions**

From the UW analysis report, "Interpreting Global Energy Scenarios for Emissions Planning at the Utility Scale", MGE's goal of 100% net-zero carbon emissions by 2050 is in line with these scenarios, and in fact, more aggressive than any of the five.

**C3.3**

**(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.**

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	The products and services MGE provides to its customers are influenced by and part of our strategy for transitioning to a low carbon future. MGE is working to achieve a more sustainable energy future by investing in cost-effective renewable generation and innovative new technologies and services to benefit all customers. MGE has emphasized this innovation by developing customer programs to address climate change and by partnering with our customers around clean energy, electric vehicles, and energy efficiency and conservation. Our Renewable Energy Rider and Shared Solar programs are two examples of programs that help to reduce MGE's carbon emissions while providing customers the option to grow their use of renewable energy as MGE works to decarbonize its energy supply for all customers. We also have been working on many fronts in the community to further the electrification of transportation and the practice of energy efficiency.
Supply chain and/or value chain	Yes	In 2022, MGE evaluated its Scope 3 GHG emissions and established a framework to address them. A large portion of our GHG inventory is in Scope 3, which is in our supply chain. The framework addresses those emissions and includes a number of strategies.
Investment in R&D	Yes	MGE is involved in several types of research and collaborations that are influenced by our climate-related risks and opportunities. These risks and opportunities are inherent to our business and therefore trade organizations like EEI and EPRI coordinate research and development in these areas for the electric utility industry. MGE is a member of these organizations. Research topics include decarbonization pathways, low/no carbon energy, electrification, energy efficiency and energy storage. We have also partnered with the University of Wisconsin-Madison to evaluate our decarbonization path and related research.  MGE is also a supporter of Energize Ventures and a member of Energy Impact Partners. Energize Ventures is a leading climate software investor. They partner with various stakeholders to accelerate the decarbonization transition. Energy Impact Partners invests in new technologies and innovation to also accelerate decarbonization.
Operations	Yes	Climate-related risks and opportunities influence our operations since MGE's path to achieve at least an 80% reduction in carbon by 2030 is based on the transition away from coal, the addition of new renewable generation and other decarbonization strategies to achieve net-zero carbon electricity by 2050. MGE also is investing in the infrastructure we operate to enhance the electric distribution grid to support and integrate new technology while ensuring reliable and resilient service at a reasonable cost.

**C3.4**

**(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.**

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Indirect costs Capital expenditures Assets Liabilities	Climate-related risks and opportunities are an inherent aspect of our financial planning. Our primary focus today and for the foreseeable future is our core utility customers at MGE as well as creating long-term value for our shareholders. MGE continues to face the challenge of providing its customers with reliable power at competitive prices. MGE works on meeting this challenge by investing in more efficient generation projects, including renewable energy sources. As we work toward achieving at least an 80% carbon reduction by 2030 (from 2005 levels), MGE continues to examine and pursue opportunities to reduce the proportion that coal generation represents in its generation mix and to grow ownership of renewable generation sources. MGE has announced plans to eliminate coal from our generation mix at the only two coal facilities owned partially by MGE through the retirement of Columbia Energy Center (a coal generation plant) and the change in the Elm Road Generating Station fuel source from coal to natural gas. MGE will continue to focus on growing earnings while controlling operating and fuel costs. MGE's goal is to provide safe and efficient operations in addition to providing customer value. We believe it is critical to maintain a strong credit rating consistent with financial strength in MGE as well as the parent company in order to accomplish these goals.

**C3.5**

**(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?**

	Identification of spending/revenue that is aligned with your organization's climate transition	Indicate the level at which you identify the alignment of your spending/revenue with a sustainable finance taxonomy
Row 1	Yes, we identify alignment with our climate transition plan	<Not Applicable>

**C3.5a**

**(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's climate transition.**

**Financial Metric**

CAPEX

**Type of alignment being reported for this financial metric**

Alignment with our climate transition plan

**Taxonomy under which information is being reported**

<Not Applicable>

**Objective under which alignment is being reported**

<Not Applicable>

**Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)**

**Percentage share of selected financial metric aligned in the reporting year (%)**

40

**Percentage share of selected financial metric planned to align in 2025 (%)**

45

**Percentage share of selected financial metric planned to align in 2030 (%)**

**Describe the methodology used to identify spending/revenue that is aligned**

MGE deploys resources - both human and financial - that advance its decarbonization strategies and the company's Energy 2030 framework for a more sustainable future. Energy 2030 guides MGE's work with customers to achieve a number of foundational objectives, which include transitioning to a more environmentally sustainable energy supply, building a more dynamic, integrated grid that enables new technology and ensuring that all customers benefit from changing technology. MGE committed to further reducing carbon emissions from the energy supplied to customers by at least 80% by 2030. MGE is growing its use of solar and wind energy and investing in battery storage in pursuit of its decarbonization goals, and the company expects to invest in other renewable energy projects beyond what is currently planned. MGE leadership has stated since setting the company's carbon reduction goals, if the company can go further faster by working with its customers, it will. MGE is working with customers to pursue globally recognized decarbonization strategies to achieve carbon reductions consistent with climate science. In addition to growing its use of renewable energy, MGE also is working to further engage customers in energy efficiency and working to electrify transportation and other energy end uses.

**C4. Targets and performance**

**C4.1**

**(C4.1) Did you have an emissions target that was active in the reporting year?**

Absolute target

**C4.1a**



(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

**Target reference number**

Abs 1

**Is this a science-based target?**

No, but we are reporting another target that is science-based

**Target ambition**

<Not Applicable>

**Year target was set**

2005

**Target coverage**

Business activity

**Scope(s)**

Scope 1

Scope 3

**Scope 2 accounting method**

<Not Applicable>

**Scope 3 category(ies)**

Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

**Base year**

2005

**Base year Scope 1 emissions covered by target (metric tons CO2e)**

2308469

**Base year Scope 2 emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)**

**Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year total Scope 3 emissions covered by target (metric tons CO2e)**

912517

**Total base year emissions covered by target in all selected Scopes (metric tons CO2e)**

3220986

**Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1**

**Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2**

<Not Applicable>

**Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)**

**Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)**

<Not Applicable>

**Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)**

**Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes**

**Target year**

**Targeted reduction from base year (%)**

20

**Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]**

2576788.8

**Scope 1 emissions in reporting year covered by target (metric tons CO2e)**

1521865

**Scope 2 emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)**

**Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)**

438266

**Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)**

1960131

**Does this target cover any land-related emissions?**

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

**% of target achieved relative to base year [auto-calculated]**

195.725004703529

**Target status in reporting year**

Achieved

**Please explain target coverage and identify any exclusions**

In 2005, MGE set a goal to reduce CO2 emissions from electric energy supplied to customers by at least 20% by 2015. The CDP system does not allow the target date of 2015 to be entered. Our decarbonization goals for electricity supplied to our customers include emissions from our owned generation (Scope 1) and purchased generation (Scope 3). We include this previously achieved target to demonstrate MGE's commitment to GHG emissions reductions and to illustrate the company's approach to goal-setting. Our carbon reduction goals are consistent with climate science and signal the company's direction but do not determine its pace in working to achieve decarbonization as quickly and cost-effectively as possible.

**Plan for achieving target, and progress made to the end of the reporting year**

<Not Applicable>

**List the emissions reduction initiatives which contributed most to achieving this target**

In 2011, MGE discontinued burning coal at the Blount Generating Station as part of its previous long-term framework called Energy 2015. In addition to discontinuing the use of coal at Blount, under Energy 2015, MGE increased its energy from renewable resources by almost 12 times between 2005 and 2015 in order to achieve the 20% goal. In 2015, MGE set the additional goal to reduce CO2 emissions from electric energy supplied to customers from 2005 levels by at least 40% by 2030, and has since updated this goal to an 80% reduction from 2005 levels by 2030.

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**Target reference number**

Abs 2

**Is this a science-based target?**

No, and we do not anticipate setting one in the next two years

**Target ambition**

<Not Applicable>

**Year target was set**

2015

**Target coverage**

Business activity

**Scope(s)**

Scope 1

Scope 3

**Scope 2 accounting method**

<Not Applicable>

**Scope 3 category(ies)**

Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

**Base year**

2005

**Base year Scope 1 emissions covered by target (metric tons CO2e)**

2308469

**Base year Scope 2 emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)**

**Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year total Scope 3 emissions covered by target (metric tons CO2e)**

912517

**Total base year emissions covered by target in all selected Scopes (metric tons CO2e)**

3220986

**Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1**

**Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2**

<Not Applicable>

**Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1:**

**Purchased goods and services (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)**

**Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)**

<Not Applicable>

**Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)**

**Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes**

**Target year**

2030

**Targeted reduction from base year (%)**

40

**Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]**

1932591.6

**Scope 1 emissions in reporting year covered by target (metric tons CO2e)**

1521865

**Scope 2 emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)**

**Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)**

438266

**Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)**

1960131

**Does this target cover any land-related emissions?**

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

**% of target achieved relative to base year [auto-calculated]**

97.8625023517644

**Target status in reporting year**

Replaced

**Please explain target coverage and identify any exclusions**

Under our Energy 2030 framework for a more sustainable future, introduced in November 2015, MGE committed to reducing carbon emissions from the energy supplied to customers by at least 40% by 2030. This target has since been replaced twice by a new goal to reduce carbon emissions from the energy supplied to customers. The current goal is at least 80% by 2030 from 2005 levels. Our decarbonization goals for electricity supplied to our customers include emissions from our owned generation (Scope 1) and purchased generation (Scope 3).

**Plan for achieving target, and progress made to the end of the reporting year**

<Not Applicable>

**List the emissions reduction initiatives which contributed most to achieving this target**

<Not Applicable>

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**Target reference number**

Abs 3

**Is this a science-based target?**

Yes, we consider this a science-based target, but we have not committed to seek validation of this target by the Science Based Targets initiative within the next two years

**Target ambition**

1.5°C aligned

**Year target was set**

2020

**Target coverage**

Business activity

**Scope(s)**

Scope 1

Scope 3

**Scope 2 accounting method**

<Not Applicable>

**Scope 3 category(ies)**

Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

**Base year**

2005

**Base year Scope 1 emissions covered by target (metric tons CO2e)**

2308469

**Base year Scope 2 emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)**

**Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year total Scope 3 emissions covered by target (metric tons CO2e)**

912517

**Total base year emissions covered by target in all selected Scopes (metric tons CO2e)**

3220986

**Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1**

**Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2**

<Not Applicable>

**Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1:**

**Purchased goods and services (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)**

**Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)**

<Not Applicable>

**Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)**

**Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes**

**Target year**

2030

**Targeted reduction from base year (%)**

65

**Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]**

1127345.1

**Scope 1 emissions in reporting year covered by target (metric tons CO2e)**

1521865

**Scope 2 emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)**

**Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>



**Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)**

438266

**Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)**

1960131

**Does this target cover any land-related emissions?**

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

**% of target achieved relative to base year [auto-calculated]**

60.2230783703165

**Target status in reporting year**

Replaced

**Please explain target coverage and identify any exclusions**

In fall 2020, the University of Wisconsin-Madison released its analysis of Madison Gas and Electric's (MGE) goal of net-zero carbon electricity by 2050. The report compared the company's goal to the modeled pathways for the electricity sector in industrialized nations to limit global warming to 1.5° Celsius. At that time MGE updated its interim 2030 goal for electricity supplied to customers from 40% to at least 65%. This target has since been replaced by a more recent goal of at least 80% by 2030. Our decarbonization goals for electricity supplied to our customers include emissions from our owned generation (Scope 1) and purchased generation (Scope 3). We believe this is a science-based target based on the University of Wisconsin-Madison Nelson Institute for Environmental Studies and the Department of Atmospheric and Oceanic Sciences study described further in Section C3 of this CDP report. In this work, IPCC scenarios relevant to its operations and targets were evaluated. See <https://www.mge.com/net-zero-carbon-electricity/uw-madison-analysis-of-mge-s-net-zero-carbon-goal>

**Plan for achieving target, and progress made to the end of the reporting year**

<Not Applicable>

**List the emissions reduction initiatives which contributed most to achieving this target**

<Not Applicable>

**Target reference number**

Abs 4

**Is this a science-based target?**

Yes, we consider this a science-based target, but we have not committed to seek validation of this target by the Science Based Targets initiative within the next two years

**Target ambition**

1.5°C aligned

**Year target was set**

2019

**Target coverage**

Business activity

**Scope(s)**

Scope 1

Scope 3

**Scope 2 accounting method**

<Not Applicable>

**Scope 3 category(ies)**

Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

**Base year**

2005

**Base year Scope 1 emissions covered by target (metric tons CO2e)**

2308469

**Base year Scope 2 emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)****Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year total Scope 3 emissions covered by target (metric tons CO2e)**

912517

**Total base year emissions covered by target in all selected Scopes (metric tons CO2e)**

3220986

**Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1**

**Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2**

<Not Applicable>

**Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1:**

**Purchased goods and services (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)**

**Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)**

<Not Applicable>

**Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)**

**Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes**

**Target year**

2050

**Targeted reduction from base year (%)**

100

**Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]**

0

**Scope 1 emissions in reporting year covered by target (metric tons CO2e)**

1521865

**Scope 2 emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)**

**Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)**

438266

**Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)**

1960131

**Does this target cover any land-related emissions?**

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

**% of target achieved relative to base year [auto-calculated]**

39.1450009407057

**Target status in reporting year**

Underway

**Please explain target coverage and identify any exclusions**

In May 2019, MGE announced a goal of net-zero carbon electricity by 2050, which aligns with the Intergovernmental Panel on Climate Change (IPCC) and its assessment of limiting global temperature increases to 1.5 degrees Celsius. In 2019, MGE began working with the University of Wisconsin-Madison's Nelson Institute for Environmental Studies to evaluate the company's goal of net-zero carbon electricity by 2050. The analysis was done within the context of the October 2018 special report on global warming of 1.5 degrees Celsius by the IPCC. Models were used to analyze MGE's goal, and suggested that by 2050, emissions from electricity generation in industrialized countries should be 87% to 99% lower than the 2005 baseline. MGE's plan for net-zero carbon emissions by 2050 is a 100% reduction from 2005 levels and reflects carbon reductions consistent with limiting global warming to 1.5 degrees Celsius. Our decarbonization goals for electricity supplied to our customers include emissions from our owned generation (Scope 1) and purchased generation (Scope 3). We believe this is a science-based target based on the University of Wisconsin-Madison Nelson Institute for Environmental Studies and the Department of Atmospheric and Oceanic Sciences study. See <https://www.mge.com/net-zero-carbon-electricity/uw-madison-analysis-of-mge-s-net-zero-carbon-goal>

**Plan for achieving target, and progress made to the end of the reporting year**

In late 2021, MGE announced plans to eliminate coal-fired generation from its portfolio by 2035. This includes planned retirements and transitions to cleaner fuels at units co-owned by MGE. In addition, MGE has developed projects that are expected will increase owned renewable capacity by roughly nine times by the end of 2024. Overall, MGE is decarbonizing its electricity generation, projecting an estimated total of \$645 million in nearly 400 megawatts (MW) of wind, solar and battery storage between 2015 and 2024. Consistent with climate science, MGE expects to achieve carbon reductions of at least 80% by 2030. The main strategies that will be used to achieve this goal are decarbonizing electric generation, helping customers use energy efficiently, and electrifying other energy uses, including transportation.

**List the emissions reduction initiatives which contributed most to achieving this target**

&lt;Not Applicable&gt;

**Target reference number**

Abs 5

**Is this a science-based target?**

Yes, we consider this a science-based target, but we have not committed to seek validation of this target by the Science Based Targets initiative within the next two years

**Target ambition**

1.5°C aligned

**Year target was set**

2022

**Target coverage**

Business activity

**Scope(s)**

Scope 1

Scope 3

**Scope 2 accounting method**

&lt;Not Applicable&gt;

**Scope 3 category(ies)**

Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

**Base year**

2005

**Base year Scope 1 emissions covered by target (metric tons CO2e)**

2308469

**Base year Scope 2 emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)****Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)**

&lt;Not Applicable&gt;

**Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year total Scope 3 emissions covered by target (metric tons CO2e)**

912517

**Total base year emissions covered by target in all selected Scopes (metric tons CO2e)**

3220986

**Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1**

**Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2**

<Not Applicable>

**Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)**

**Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)**

<Not Applicable>

**Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)**

**Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes**

**Target year**

2030

**Targeted reduction from base year (%)**

80

**Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]**

644197.2

**Scope 1 emissions in reporting year covered by target (metric tons CO2e)**

1521865

**Scope 2 emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)**

**Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)**

438266

**Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)**

1960131

**Does this target cover any land-related emissions?**

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

**% of target achieved relative to base year [auto-calculated]**

48.9312511758822

**Target status in reporting year**

Underway

**Please explain target coverage and identify any exclusions**

In early 2022, MGE updated its previous 2030 goal to set a goal of 80% reduction in carbon emissions by 2030 from 2005 levels in addition to the net-zero carbon electricity goal by 2050. Our decarbonization goals for electricity supplied to our customers include emissions from our owned generation (Scope 1) and purchased generation (Scope 3). We believe this is a science-based target based on the University of Wisconsin-Madison Nelson Institute for Environmental Studies and the Department of Atmospheric and Oceanic Sciences study described further in Section C3 of this CDP report. In this work, IPCC scenarios relevant to its operations and targets were evaluated. See <https://www.mge.com/net-zero-carbon-electricity/uw-madison-analysis-of-mge-s-net-zero-carbon-goal>

**Plan for achieving target, and progress made to the end of the reporting year**

In late 2021, MGE announced plans to eliminate coal-fired generation from its portfolio by 2035. This includes planned retirements and transitions to cleaner fuels at units co-owned by MGE. In addition, MGE has developed projects that are expected will increase owned renewable capacity by roughly nine times by the end of 2024. Overall, MGE is decarbonizing its electricity generation, projecting an estimated total of \$645 million in nearly 400 megawatts (MW) of wind, solar and battery storage between 2015 and 2024. Consistent with climate science, MGE expects to achieve carbon reductions of at least 80% by 2030. The main strategies that will be used to achieve this goal are decarbonizing electric generation, helping customers use energy efficiently, and electrifying other energy uses, including transportation.

**List the emissions reduction initiatives which contributed most to achieving this target**

<Not Applicable>

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**Target reference number**

Abs 6

**Is this a science-based target?**

No, but we are reporting another target that is science-based

**Target ambition**

<Not Applicable>

**Year target was set**

2018

**Target coverage**

Business activity

**Scope(s)**

Scope 1

Scope 3

**Scope 2 accounting method**

<Not Applicable>

**Scope 3 category(ies)**

Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

**Base year**

2005

**Base year Scope 1 emissions covered by target (metric tons CO2e)**

2308469

**Base year Scope 2 emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)**

<Not Applicable>

**Base year total Scope 3 emissions covered by target (metric tons CO2e)**

912517

**Total base year emissions covered by target in all selected Scopes (metric tons CO2e)**

3220986

**Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1**

**Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2**

<Not Applicable>

**Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)**

**Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)**

<Not Applicable>

**Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)**

<Not Applicable>

**Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)**



**Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes**

**Target year**

2050

**Targeted reduction from base year (%)**

80

**Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]**

644197.2

**Scope 1 emissions in reporting year covered by target (metric tons CO2e)**

1521865

**Scope 2 emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)**

**Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)**

<Not Applicable>

**Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)**

438266

**Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)**

1960131

**Does this target cover any land-related emissions?**

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

**% of target achieved relative to base year [auto-calculated]**

48.9312511758822

**Target status in reporting year**

Replaced

**Please explain target coverage and identify any exclusions**

In 2018, MGE committed to reducing carbon dioxide emissions by at least 80% by 2050 to be consistent with the U.S. Mid-Century Strategy (MCS) for Deep Decarbonization. That goal was replaced in 2019 with the target of net-zero carbon electricity by 2050.

**Plan for achieving target, and progress made to the end of the reporting year**

<Not Applicable>

**List the emissions reduction initiatives which contributed most to achieving this target**

<Not Applicable>

## C4.2

---

### (C4.2) Did you have any other climate-related targets that were active in the reporting year?

Target(s) to increase low-carbon energy consumption or production

Net-zero target(s)

Other climate-related target(s)

## C4.2a

---

### (C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

#### Target reference number

Low 1

#### Year target was set

2015

#### Target coverage

Business activity

#### Target type: energy carrier

Electricity

#### Target type: activity

Production

#### Target type: energy source

Renewable energy source(s) only

#### Base year

2005

#### Consumption or production of selected energy carrier in base year (MWh)

42078

#### % share of low-carbon or renewable energy in base year

1.2

#### Target year

2025

#### % share of low-carbon or renewable energy in target year

25

#### % share of low-carbon or renewable energy in reporting year

21.4

#### % of target achieved relative to base year [auto-calculated]

84.8739495798319

#### Target status in reporting year

Underway

#### Is this target part of an emissions target?

Yes, this target supports MGE's original Energy 2030 goal of achieving at least a 40% reduction in carbon from energy supplied to customers by 2030, which has since been replaced with a goal to reduce carbon by 80% by 2030, and the Energy 2050 goal of achieving net zero carbon from energy supplied to customers by 2050.

#### Is this target part of an overarching initiative?

Other, please specify

#### Please explain target coverage and identify any exclusions

This target is an interim target aimed at supplying 25% of retail energy from renewable sources by 2025.

#### Plan for achieving target, and progress made to the end of the reporting year

MGE continues to make new investments in generation, including more energy from renewable resources and natural gas. MGE has committed to eliminate coal from its generation mix by 2035. MGE continues to work closely with customers and through partnerships to encourage energy efficiency and conservation through education, information, technical assistance, and other resources. MGE plans the estimated addition of nearly 400 MW of wind, solar and battery storage between 2015 and 2024 and is on track to meet this 25% renewable energy target by 2025.

#### List the actions which contributed most to achieving this target

<Not Applicable>

---

#### Target reference number

Low 2

#### Year target was set

2015

#### Target coverage

Business activity

#### Target type: energy carrier

Electricity

**Target type: activity**

Production

**Target type: energy source**

Renewable energy source(s) only

**Base year**

2005

**Consumption or production of selected energy carrier in base year (MWh)**

42078

**% share of low-carbon or renewable energy in base year**

1.2

**Target year**

2030

**% share of low-carbon or renewable energy in target year**

30

**% share of low-carbon or renewable energy in reporting year**

21.4

**% of target achieved relative to base year [auto-calculated]**

70.1388888888889

**Target status in reporting year**

Underway

**Is this target part of an emissions target?**

Yes, this target supports MGE's original Energy 2030 goal of achieving at least a 40% reduction in carbon from energy supplied to customers by 2030, which has since been replaced with a goal to reduce carbon by 80% by 2030, and the Energy 2050 goal of achieving net zero carbon from energy supplied to customers by 2050.

**Is this target part of an overarching initiative?**

Other, please specify

**Please explain target coverage and identify any exclusions**

This target aims to supply 30% of retail energy from renewable sources by 2030.

**Plan for achieving target, and progress made to the end of the reporting year**

MGE continues to make new investments in generation, including more energy from renewable resources and natural gas. MGE has committed to eliminate coal from its generation mix by 2035. MGE continues to work closely with customers and through partnerships to encourage energy efficiency and conservation through education, information, technical assistance, and other resources. MGE plans the estimated addition of nearly 400 MW of wind, solar and battery storage between 2015 and 2024 and is on track to meet this 30% renewable energy target by 2030.

**List the actions which contributed most to achieving this target**

<Not Applicable>

---

C4.2b

---

**(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.**

**Target reference number**

Oth 1

**Year target was set**

2020

**Target coverage**

Business activity

**Target type: absolute or intensity**

Absolute

**Target type: category & Metric (target numerator if reporting an intensity target)**

Low-carbon vehicles	Percentage of low-carbon vehicles in company fleet
---------------------	--

**Target denominator (intensity targets only)**

<Not Applicable>

**Base year**

**Figure or percentage in base year**

**Target year**

2030

**Figure or percentage in target year**

100

**Figure or percentage in reporting year**

25

**% of target achieved relative to base year [auto-calculated]**

<Calculated field>

**Target status in reporting year**

Underway

**Is this target part of an emissions target?**

No

**Is this target part of an overarching initiative?**

No, it's not part of an overarching initiative

**Please explain target coverage and identify any exclusions**

The target is to convert 100% of the light duty vehicles in the MGE fleet to electric vehicles or plug-in hybrid vehicles by 2030.

**Plan for achieving target, and progress made to the end of the reporting year**

MGE plans to purchase only electric or plug-in hybrid light-duty vehicles for its fleet going forward. This is planned to be accomplished primarily through the replacement of vehicles that end their useful life.

**List the actions which contributed most to achieving this target**

<Not Applicable>

**C4.2c**

**(C4.2c) Provide details of your net-zero target(s).**

**Target reference number**

NZ1

**Target coverage**

Business activity

**Absolute/intensity emission target(s) linked to this net-zero target**

Abs1

Abs2

Abs3

Abs4

Abs5

**Target year for achieving net zero**

2050

**Is this a science-based target?**

Yes, we consider this a science-based target, but we have not committed to seek validation of this target by the Science Based Targets initiative within the next two years

**Please explain target coverage and identify any exclusions**

Under the MGE Energy 2050 plan, the target is to provide net-zero carbon electricity by 2050. We believe this is a science-based target based on the University of Wisconsin-Madison Nelson Institute for Environmental Studies and the Department of Atmospheric and Oceanic Sciences study described further in Section C3 of this CDP report. In this work, IPCC scenarios relevant to its operations and targets were evaluated.

**Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?**

Yes

**Planned milestones and/or near-term investments for neutralization at target year**

Our net-zero ambitions include offsetting any residual emissions that remain from our operations consistent with the evolving technology.

**Planned actions to mitigate emissions beyond your value chain (optional)**

---

**Target reference number**

NZ2

**Target coverage**

Business activity

**Absolute/intensity emission target(s) linked to this net-zero target**

Not applicable

**Target year for achieving net zero**

2035

**Is this a science-based target?**

No, but we are reporting another target that is science-based

**Please explain target coverage and identify any exclusions**

MGE's goal is to achieve net-zero methane in our natural gas distribution system by 2035. If we can go further faster, we will. MGE's strategies for achieving net-zero methane emissions include: Enhanced Leak Detection and Repair: MGE will explore strategies, practices and/or commercially available technologies that help us to meet or exceed current federal and state regulatory requirements surrounding leak detection and repair methods. We continue to gather data to improve our inventory of emissions data throughout our distribution system and to inform reduction efforts and strategies. Implementation of Cost-Effective Technologies and Processes: Improved monitoring of our system and estimated emissions will inform priorities for reduction opportunities. Consistent with those priorities, MGE will implement cost-effective technology to improve the detection, measurement, mitigation and/or reduction of emissions from the operation and maintenance of our natural gas distribution system. Renewable Natural Gas (RNG) to Offset Residual Emissions: MGE will explore the use of RNG in our natural gas system to offset any remaining emissions that cannot be directly controlled by MGE. New technologies, such as carbon capture, green hydrogen (zero-carbon hydrogen) and potentially other alternative fuels, continue to emerge and to evolve. MGE supports the research and development of these new technologies and will explore their potential use as they become available.

**Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?**

Yes

**Planned milestones and/or near-term investments for neutralization at target year**

MGE has already replaced all piping made of cast iron, bare or unprotected steel, and other material considered to be leak-prone in our natural gas distribution system. In addition, our leak inspection and repair schedules exceed federal requirements.

Other strategies for achieving net-zero methane emissions include:

- Enhanced leak detection and repair
- Implementation of cost-effective technologies and processes to improve the detection, measurement, mitigation and reduction of emissions from the operation and maintenance of the natural gas system.
- Exploring the use of renewable natural gas (RNG) and other new technologies to offset residual emissions.

**Planned actions to mitigate emissions beyond your value chain (optional)**

---

**C4.3**

**(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.**

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation		
To be implemented*	6	0
Implementation commenced*		
Implemented*	9	356886
Not to be implemented		

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

**Initiative category & Initiative type**

Low-carbon energy consumption	Solar PV
-------------------------------	----------

**Estimated annual CO2e savings (metric tonnes CO2e)**

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 1

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

**Investment required (unit currency – as specified in C0.4)**

**Payback period**

Please select

**Estimated lifetime of the initiative**

Please select

**Comment**

MGE had an additional solar generating facility come online in 2022. The Hermsdorf Solar Fields is a 8-MW project that operates under a Renewable Energy Rider (RER) agreement to serve two major customers in MGE's service territory, the City of Madison and the Madison Metropolitan School District. Other renewable energy projects are in the process of being implemented or planned for the next several years. The project capacities discussed below represent MGE's share of projects constructed in partnerships with other utility companies. These partnerships provide scale on costs and technology. MGE's share of these projects include: 9.16 MW of the Red Barn Wind Farm (which came online in 2023); 50 MW of the Badger Hollow Solar Farm Phase 2; 20 MW of solar and 11 MW of battery storage from the Paris Solar-Battery Park (under construction); 25 MW of solar and 7.5 MW of battery storage from the Darien Solar Energy Center (under construction); and, 30 MW of solar and 16.5 MW of battery storage from the Koshkonong Solar Energy Center (under construction). MGE also plans to purchase the 6-MW Tyto Solar project under construction in the City of Fitchburg, Wis. In addition, MGE along with its partners plan to retire the Columbia Energy Center units 1 and 2 by June 2026. MGE currently has a 19% share of these units.

**Initiative category & Initiative type**

Waste reduction and material circularity	Other, please specify (Company policy or behavioral change: Waste management)
--	---

**Estimated annual CO2e savings (metric tonnes CO2e)**

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 3 category 5: Waste generated in operations

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

**Investment required (unit currency – as specified in C0.4)**

**Payback period**

Please select

**Estimated lifetime of the initiative**

Please select

**Comment**

In 2022, MGE initiated a new waste management practice in the corporate office to increase recycling effectiveness. The policy removed waste and recycling bins from individual workstations and increased the number of area waste and recycling containers. With better marking and signage, we expect recycling compliance to increase and divert waste from the landfill.

**Initiative category & Initiative type**

Transportation	Teleworking
----------------	-------------

**Estimated annual CO2e savings (metric tonnes CO2e)**

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 3 category 7: Employee commuting

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

**Investment required (unit currency – as specified in C0.4)**

**Payback period**

Please select

**Estimated lifetime of the initiative**

Please select

**Comment**

In 2022, MGE instituted a hybrid work policy by which eligible employees can work up to two days a week from home. A benefit from this arrangement is less miles driven commuting.

**Initiative category & Initiative type**

Transportation	Company fleet vehicle replacement
----------------	-----------------------------------

**Estimated annual CO2e savings (metric tonnes CO2e)**

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 1

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

**Investment required (unit currency – as specified in C0.4)**

**Payback period**

Please select

**Estimated lifetime of the initiative**

Please select

**Comment**

In 2022, MGE continued progress toward our goal of transitioning all light-duty vehicles in our fleet to electric vehicles. In 2022, we added nine electric vehicles to our light-duty fleet.

**C4.3c**

**(C4.3c) What methods do you use to drive investment in emissions reduction activities?**

Method	Comment
Compliance with regulatory requirements/standards	As a public utility, MGE operates under state and federal regulations. These regulations serve to protect the interests of customers, employees, investors, and the environment. MGE is subject to regulation by the Public Service Commission of Wisconsin, 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 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. Since determination of MGE's electric rates are regulated by the State of Wisconsin, we are only allowed to pass along costs to customers for activities that are deemed to be economically prudent or mandated by law. We continue to analyze the potential impacts of future legislation or regulation that may impact our electric generation resources.
Other	MGE is investing in long-term sustainability to benefit all stakeholders while maintaining top-ranked energy reliability. MGE is 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. 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 possible projected carbon emissions limits to help ensure our decisions are financially sound—regardless of whether or how carbon is regulated in the future.

**C4.5**

**(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?**

Yes

**C4.5a**

**(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.**

**Level of aggregation**

Product or service

**Taxonomy used to classify product(s) or service(s) as low-carbon**

Other, please specify (Midwest Renewable Energy Tracking System)

**Type of product(s) or service(s)**

Other	Other, please specify (Green Power Tomorrow Product)
-------	--

**Description of product(s) or service(s)**

MGE's Green Power Tomorrow (GPT) is our green pricing program, which offers a convenient and effective way for customers to support local and regional renewable energy and offset their greenhouse gas emissions. Today, about 10,000 customers buy green power through this program. Our GPT program is served by our local and regional renewable energy resources.

**Have you estimated the avoided emissions of this low-carbon product(s) or service(s)**

Yes

**Methodology used to calculate avoided emissions**

Other, please specify (RECs accounting)

**Life cycle stage(s) covered for the low-carbon product(s) or services(s)**

Use stage

**Functional unit used**

The functional unit used to define the activity is kWh of energy used by the Green Power Tomorrow program.

**Reference product/service or baseline scenario used**

The alternative to a kWh of energy used from renewable resources for the Green Power Tomorrow is energy from our grid that has a calculated carbon intensity.

**Life cycle stage(s) covered for the reference product/service or baseline scenario**

Use stage

**Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario**

46900

**Explain your calculation of avoided emissions, including any assumptions**

The calculation is  $G \text{ kWh/yr} * R \text{ lb/KWh} * 0.0005 \text{ ton/lb} * 0.9072 \text{ metric ton/ton} = \text{AE metric ton/yr}$ , where:

G is kWh/yr of GPT participation

R is carbon intensity of our energy supplied

AE is the metric ton/year avoided by GPT

**Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year**

**Level of aggregation**

Group of products or services

**Taxonomy used to classify product(s) or service(s) as low-carbon**

Other, please specify (Midwest Renewable Energy Tracking System)

**Type of product(s) or service(s)**

Other	Other, please specify (Shared Solar and Renewable Energy Rider)
-------	---

**Description of product(s) or service(s)**

MGE's Shared Solar program offers customers locally generated solar energy at minimal upfront cost. Shared Solar gives residential and small business customers the option to power their household or business with solar energy for up to half of their annual energy use. It's an affordable option for customers who want to support local solar. Our Renewable Energy Rider (RER) gives MGE and larger business customers who seek customized renewable energy solutions the opportunity to partner to grow locally generated renewable energy. The program 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. MGE has built more than 40 MW of solar capacity under RER agreements since earning regulatory approval in 2017 to begin offering this clean energy option.

**Have you estimated the avoided emissions of this low-carbon product(s) or service(s)**

Yes

**Methodology used to calculate avoided emissions**

Other, please specify (Energy production)

**Life cycle stage(s) covered for the low-carbon product(s) or services(s)**

Use stage

**Functional unit used**

The functional unit used to define the activity is kWh of energy generated by the Shared Solar or RER program.

**Reference product/service or baseline scenario used**

The alternative to a kWh of energy used from Shared Solar or RER is energy from our grid that has a calculated carbon intensity.

**Life cycle stage(s) covered for the reference product/service or baseline scenario**

Use stage

**Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario**

46050

**Explain your calculation of avoided emissions, including any assumptions**



The calculation is  $S \text{ kWh/yr} * R \text{ lb/KWh} * 0.0005 \text{ ton/lb} * 0.9072 \text{ metric ton/ton} = \text{AE metric ton/yr}$ , where:

S is kwh/yr of Shared Solar and RER production

R is carbon intensity of our energy supplied

AE is the metric ton/year avoided by Shared Solar and RER

**Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year**

---

**Level of aggregation**

Group of products or services

**Taxonomy used to classify product(s) or service(s) as low-carbon**

Other, please specify (Midwest Renewable Energy Tracking System)

**Type of product(s) or service(s)**

Other	Other, please specify (Electrification of transportation initiatives)
-------	---

**Description of product(s) or service(s)**

MGE provides low carbon products to advance the electrification of transportation. Charge@Home is MGE's home EV charging program. MGE owns, maintains and coordinates the installation of Level 2 charging stations at customers' homes. The program allows MGE to study charging habits and to explore remote management of charging sessions to better understand the potential impact of EVs on the grid, including how grid management can help to lower costs for all MGE customers by optimizing our use of generation resources. A companion project is Charge Ahead, which also gives MGE the ability to manage customers' home charging remotely using a vehicle's onboard communications system. By managing charging, MGE is able to shift EV charging to manage both long-term costs and peak demand on the grid. During the first phase of the Charge Ahead project, MGE was able to shift about 93% of customer charging to off-peak periods. MGE also helps to facilitate and to accelerate the growth of electric transportation through its public charging network, which is powered by renewable energy. MGE's latest addition to our public charging station network is a fast-charging hub in downtown Madison. With power levels up to 350 kilowatts, the hub has some of the most powerful EV chargers in the Midwest. Through a partnership with Tesla, the hub also has eight Superchargers.

**Have you estimated the avoided emissions of this low-carbon product(s) or service(s)**

No

**Methodology used to calculate avoided emissions**

<Not Applicable>

**Life cycle stage(s) covered for the low-carbon product(s) or services(s)**

<Not Applicable>

**Functional unit used**

<Not Applicable>

**Reference product/service or baseline scenario used**

<Not Applicable>

**Life cycle stage(s) covered for the reference product/service or baseline scenario**

<Not Applicable>

**Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario**

<Not Applicable>

**Explain your calculation of avoided emissions, including any assumptions**

<Not Applicable>

**Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year**

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C-EU4.6

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**(C-EU4.6) Describe your organization’s efforts to reduce methane emissions from your activities.**

MGE recently announced a goal to achieve net-zero methane in our natural gas distribution system by 2035. See <https://www.mge.com/about-mge/natural-gas/net-zero-methane-emissions>. If we can go further faster, we will. MGE’s strategies for achieving net-zero methane emissions include:

**Renewable Natural Gas (RNG):** MGE will explore similar opportunities to partner with customers to advance RNG projects in our service territory. RNG is considered a net-zero carbon biogas that can be used in place of conventional natural gas. RNG projects capture methane from food waste, animal manure or wastewater sludge and redirect it away from the environment, repurposing it as a clean energy source that acts like conventional natural gas.

**Enhanced Leak Detection and Monitoring, Measurement and Repair:** MGE will explore any strategies, practices and/or commercially available technologies that meet or exceed current federal and state regulatory requirements surrounding leak detection, measurement and repair methods. MGE already has replaced all piping made of cast iron, bare or unprotected steel, and other material considered to be leak-prone. The company’s leak inspection and repair schedules for our natural gas distribution system also exceed federal requirements.

**Supplier Engagement:** MGE will work with our natural gas suppliers and pipeline operators to ensure we are serving our customers with cost-effective, environmentally responsible sources of natural gas. We will work with our suppliers and pipeline operators to gain an understanding of their leak detection and prevention efforts and GHG emissions goals and how they align with our framework to reduce GHG emissions.

MGE contracts with two natural gas transmission companies, Northern Natural Gas, a Berkshire Hathaway Energy Pipeline Group Company, 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.,” which is a voluntary group of companies working together to reduce methane emissions across the natural gas supply chain to 1% or less by 2025. In its 2021 report, ONE Future cited a methane intensity of less than one half of one percent, beating its 1% goal.

Northern Natural Gas and ANR Pipeline Company also are part of the U.S. Environmental Protection Agency’s Methane Challenge Program. Partners in this voluntary program report systemic and comprehensive actions to reduce methane emissions as part of efforts to enhance transparency in the industry.

**Customer Partnerships:** By engaging and partnering with our customers in new ways, we also will determine how best to fulfill this commitment to reducing GHG emissions associated with our natural gas distribution service. As new and emerging technologies evolve and become commercially available and other opportunities develop, we will continue to collaborate with customers to develop and advance our path forward.

**Energy Efficiency and Conservation:** MGE will explore ways to partner further with customers to promote the role of energy efficiency and conservation and the wise use of natural gas. Customer support for and participation in energy efficiency programs and investment in energy-efficient equipment and appliances will be critical to managing and reducing emissions associated with the use of natural gas.

**Electrification:** MGE will explore ways to partner with customers to promote the role of electrification of appliances and other equipment to achieve deep decarbonization.

In 2022, MGE launched our Smart Water Heater Rewards project, partnering with residents at a local multifamily property to test technology that allowed MGE to shift water heating—powered by electricity—without impacting customer comfort. The smart devices, which were installed on the electric water heaters, helped us shift heating to off-peak times or when renewable resources were generating the most electricity.

**New Technologies:** New technologies, such as carbon capture, RNG, green hydrogen (zero-carbon hydrogen) and potentially other alternative fuels, continue to emerge and to evolve. MGE supports the research and development of these new technologies.

**C5. Emissions methodology**

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**C5.1**

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**(C5.1) Is this your first year of reporting emissions data to CDP?**

No

**C5.1a**

---

**(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?**

**Row 1**

**Has there been a structural change?**

No

**Name of organization(s) acquired, divested from, or merged with**

<Not Applicable>

**Details of structural change(s), including completion dates**

<Not Applicable>

**C5.1b**

---

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	No	<Not Applicable>

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start

January 1 2014

Base year end

December 31 2014

Base year emissions (metric tons CO2e)

1803960

Comment

Scope 2 (location-based)

Base year start

January 1 2014

Base year end

December 31 2014

Base year emissions (metric tons CO2e)

21452

Comment

Emissions are from estimated distribution line losses associated with purchased power.

Scope 2 (market-based)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 1: Purchased goods and services

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 2: Capital goods

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start

January 1 2014

Base year end

December 31 2014

Base year emissions (metric tons CO2e)

791926

Comment

Includes emissions from purchased power for resale.

Scope 3 category 4: Upstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

**Scope 3 category 5: Waste generated in operations**

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

**Scope 3 category 6: Business travel**

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

**Scope 3 category 7: Employee commuting**

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

**Scope 3 category 8: Upstream leased assets**

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

**Scope 3 category 9: Downstream transportation and distribution**

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

**Scope 3 category 10: Processing of sold products**

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

**Scope 3 category 11: Use of sold products**

**Base year start**

January 1 2014

**Base year end**

December 31 2014

**Base year emissions (metric tons CO2e)**

1309834.2

**Comment**

As reported and following the requirements and methods of 40 CFR Part 98, Subpart NN. MGE reports the potential CO2 quantities associated with natural gas received by end-users that receive less than 460,000 thousand standard cubic feet of natural gas per year at a single meter.

**Scope 3 category 12: End of life treatment of sold products**

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

**Scope 3 category 13: Downstream leased assets**

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

**Scope 3 category 14: Franchises**

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

**Scope 3 category 15: Investments**

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

**Scope 3: Other (upstream)**

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

**Scope 3: Other (downstream)**

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

**C5.3**

---

**(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.**

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

The Greenhouse Gas Protocol: Scope 2 Guidance

US EPA Center for Corporate Climate Leadership: Direct Fugitive Emissions from Refrigeration, Air Conditioning, Fire Suppression, and Industrial Gases

US EPA Center for Corporate Climate Leadership: Indirect Emissions From Purchased Electricity

US EPA Center for Corporate Climate Leadership: Direct Emissions from Stationary Combustion Sources

US EPA Center for Corporate Climate Leadership: Direct Emissions from Mobile Combustion Sources

US EPA Mandatory Greenhouse Gas Reporting Rule

US EPA Emissions & Generation Resource Integrated Database (eGRID)

**C6. Emissions data**

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**C6.1**

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**(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?**

**Reporting year**

**Gross global Scope 1 emissions (metric tons CO2e)**

1607191.1

**Start date**

<Not Applicable>

**End date**

<Not Applicable>

**Comment**

Scope 1 emissions include company-owned fossil fuel electricity generation, other fossil fuel-fired equipment at company facilities, fleet vehicles, refrigerant losses, and natural gas distribution system losses.

**C6.2**

---

**(C6.2) Describe your organization's approach to reporting Scope 2 emissions.**

**Row 1**

**Scope 2, location-based**

We are reporting a Scope 2, location-based figure

**Scope 2, market-based**

We are reporting a Scope 2, market-based figure

**Comment**

C6.3

---

**(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?**

**Reporting year**

**Scope 2, location-based**

14929

**Scope 2, market-based (if applicable)**

14929

**Start date**

<Not Applicable>

**End date**

<Not Applicable>

**Comment**

Emissions are from estimated distribution line losses associated with purchased power.

C6.4

---

**(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?**

No

C6.5

---

**(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.**

**Purchased goods and services**

**Evaluation status**

Relevant, not yet calculated

**Emissions in reporting year (metric tons CO2e)**

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

**Please explain**

Data and systems to track this information and estimate this category of Scope 3 emissions are not yet in place.

**Capital goods**

**Evaluation status**

Relevant, not yet calculated

**Emissions in reporting year (metric tons CO2e)**

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

**Please explain**

Data and systems to track this information and estimate this category of Scope 3 emissions are not yet in place.

## Fuel-and-energy-related activities (not included in Scope 1 or 2)

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO2e)

615075

### Emissions calculation methodology

Hybrid method

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

6

### Please explain

Category 3 includes emissions from purchased power sold to end users, and upstream emissions from purchased natural gas.

For energy market purchases from the Midcontinent Independent System Operator (MISO), an emission rate is used that reflects regional average data from 7 states: Wisconsin, Minnesota, Illinois, Iowa, Missouri, Indiana, and Michigan. For non-emitting renewable energy sources, including wind and solar, there are zero emissions. The regional average rates are determined using the latest actual generation data from the U.S. Energy Information Administration (EIA).

Upstream emissions from purchased natural gas are calculated using an average production loss based on the review of several peer reviewed studies, and represent emissions from natural gas upstream of the MGE distribution system.

## Upstream transportation and distribution

### Evaluation status

Relevant, not yet calculated

### Emissions in reporting year (metric tons CO2e)

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

The company is in the process of evaluating potential methods for calculating emissions from this Scope 3 category.

## Waste generated in operations

### Evaluation status

Relevant, not yet calculated

### Emissions in reporting year (metric tons CO2e)

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

Data and systems to track this information and estimate this category of Scope 3 emissions are not yet in place.

## Business travel

### Evaluation status

Relevant, not yet calculated

### Emissions in reporting year (metric tons CO2e)

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

Data and systems to track this information and estimate this category of Scope 3 emissions are not yet in place.

## Employee commuting

### Evaluation status

Relevant, not yet calculated

### Emissions in reporting year (metric tons CO2e)

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

Data and systems to track this information and estimate this category of Scope 3 emissions are not yet in place.

**Upstream leased assets****Evaluation status**

Not relevant, explanation provided

**Emissions in reporting year (metric tons CO2e)**

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

**Please explain**

The company has no upstream leased assets that produce Scope 3 emissions.

**Downstream transportation and distribution****Evaluation status**

Not relevant, explanation provided

**Emissions in reporting year (metric tons CO2e)**

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

**Please explain**

Not applicable

**Processing of sold products****Evaluation status**

Not relevant, explanation provided

**Emissions in reporting year (metric tons CO2e)**

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

**Please explain**

Not applicable

**Use of sold products****Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO2e)**

1550786

**Emissions calculation methodology**

Other, please specify (Methodology from 40 CFR Part 98, Subpart NN)

**Percentage of emissions calculated using data obtained from suppliers or value chain partners****Please explain**

As reported and following the requirements and methods of 40 CFR Part 98, Subpart NN. MGE reports the potential CO2 quantities associated with natural gas received by end-users that receive less than 460,000 thousand standard cubic feet of natural gas per year at a single meter. The emissions represent all natural gas received by MGE customers.

**End of life treatment of sold products****Evaluation status**

Not relevant, explanation provided

**Emissions in reporting year (metric tons CO2e)**

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

**Please explain**

Electricity and natural gas products do not have a conventional useful life.



**Downstream leased assets**

**Evaluation status**

Not relevant, explanation provided

**Emissions in reporting year (metric tons CO2e)**

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

**Please explain**

The company does not have any downstream leased assets.

**Franchises**

**Evaluation status**

Not relevant, explanation provided

**Emissions in reporting year (metric tons CO2e)**

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

**Please explain**

The company does not have any franchises.

**Investments**

**Evaluation status**

Relevant, not yet calculated

**Emissions in reporting year (metric tons CO2e)**

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

**Please explain**

Data and systems to track this information and estimate this category of Scope 3 emissions are not yet in place.

**Other (upstream)**

**Evaluation status**

Not evaluated

**Emissions in reporting year (metric tons CO2e)**

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

**Please explain**

Not applicable

**Other (downstream)**

**Evaluation status**

Not evaluated

**Emissions in reporting year (metric tons CO2e)**

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

**Please explain**

Not applicable

**C6.7**

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**(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?**

No

## C6.10

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**(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.**

**Intensity figure**

0.0023

**Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)**

1622120.1

**Metric denominator**

unit total revenue

**Metric denominator: Unit total**

714519000

**Scope 2 figure used**

Location-based

**% change from previous year**

33

**Direction of change**

Decreased

**Reason(s) for change**

Other emissions reduction activities

**Please explain**

The majority of MGE's emissions are Scope 1 emissions from the generation of electricity from fossil fuels. From 2021 to 2022 MGE increased their electricity generation from renewables by over 30%. In addition, MGE's revenue was higher in 2022 compared to the previous year, resulting in a decrease in the tonne per \$ revenue intensity figure.

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**Intensity figure**

0.669

**Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)**

1622120.1

**Metric denominator**

megawatt hour generated (MWh)

**Metric denominator: Unit total**

2424068

**Scope 2 figure used**

Location-based

**% change from previous year**

14

**Direction of change**

Decreased

**Reason(s) for change**

Other emissions reduction activities

**Please explain**

The majority of MGE's emissions are Scope 1 emissions from the generation of electricity from fossil fuels. From 2021 to 2022 MGE increased their electricity generation from renewables by over 30%. Despite generating slightly less total electricity in 2022 compared to the previous year, the tonne per MWh of electricity generated intensity figure decreased due to the increased renewable generation.

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## C7. Emissions breakdowns

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### C7.1

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**(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?**

Yes

### C7.1a

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**(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).**

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	1584879	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	16971	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	5324	IPCC Fifth Assessment Report (AR5 – 100 year)
HFCs	17.3	IPCC Fifth Assessment Report (AR5 – 100 year)
SF6	0	IPCC Fifth Assessment Report (AR5 – 100 year)

## C-EU7.1b

**(C-EU7.1b) Break down your total gross global Scope 1 emissions from electric utilities value chain activities by greenhouse gas type.**

	Gross Scope 1 CO2 emissions (metric tons CO2)	Gross Scope 1 methane emissions (metric tons CH4)	Gross Scope 1 SF6 emissions (metric tons SF6)	Total gross Scope 1 emissions (metric tons CO2e)	Comment
Fugitives	17.7	587	0	16478	Emissions from natural gas distribution system losses and refrigerants
Combustion (Electric utilities)	1577943	18.7	0	1583781	Emissions from owned fossil generation, also includes CO2e from N2O.
Combustion (Gas utilities)	0	0	0	0	
Combustion (Other)	6918	0.1	0	6932	Emissions from natural gas-fired equipment and appliances at MGE facilities and MGE fleet vehicles. Also includes CO2e from N2O
Emissions not elsewhere classified	0	0	0	0	

## C7.2

**(C7.2) Break down your total gross global Scope 1 emissions by country/area/region.**

Country/area/region	Scope 1 emissions (metric tons CO2e)
United States of America	1607191

## C7.3

**(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.**

By activity

## C7.3c

**(C7.3c) Break down your total gross global Scope 1 emissions by business activity.**

Activity	Scope 1 emissions (metric tons CO2e)
Electric generation combustion (Scope 1)	1583781
Other stationary combustion (Scope 1)	5024
Mobile combustion (Scope 1)	1909
Natural gas distribution system losses (Scope 1)	16460

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

**(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.**

	Gross Scope 1 emissions, metric tons CO2e	Net Scope 1 emissions , metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Electric utility activities	1583781	<Not Applicable>	This amount represents CO2e from generation by company-owned facilities.
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (midstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

**C7.5**

**(C7.5) Break down your total gross global Scope 2 emissions by country/area/region.**

Country/area/region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
United States of America	14929	

**C7.6**

**(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.**

By activity

**C7.6c**

**(C7.6c) Break down your total gross global Scope 2 emissions by business activity.**

Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Distribution line losses associated with purchased power	14929	

**C7.7**

**(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?**

Not relevant as we do not have any subsidiaries

**C7.9**

**(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?**

Decreased

**C7.9a**

**(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.**

	Change in emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption		<Not Applicable>		
Other emissions reduction activities	497233	Decreased	24	The vast majority of Scope 1 and Scope 2 emissions at MGE (over 98%) are from electrical production using fossil fuels. In 2022, MGE increased electrical production using renewable energy sources by over 30% compared to 2021. This resulted in an overall decrease in electrical production from fossil fuel sources and a 24% decrease in Scope 1 emissions from electrical production activities.
Divestment		<Not Applicable>		
Acquisitions		<Not Applicable>		
Mergers		<Not Applicable>		
Change in output		<Not Applicable>		
Change in methodology		<Not Applicable>		
Change in boundary		<Not Applicable>		
Change in physical operating conditions		<Not Applicable>		
Unidentified		<Not Applicable>		
Other		<Not Applicable>		

**C7.9b**

**(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?**

Location-based

**C8. Energy**

**C8.1**

**(C8.1) What percentage of your total operational spend in the reporting year was on energy?**

More than 15% but less than or equal to 20%

**C8.2**

**(C8.2) Select which energy-related activities your organization has undertaken.**

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

**C8.2a**

**(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.**

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	5667129	5667129
Consumption of purchased or acquired electricity	<Not Applicable>			
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	39	<Not Applicable>	39
Total energy consumption	<Not Applicable>	39	5667129	5667168

**C8.2b**

**(C8.2b) Select the applications of your organization's consumption of fuel.**

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	Yes

**C8.2c**

**(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.**

**Sustainable biomass**

**Heating value**

**Total fuel MWh consumed by the organization**

**MWh fuel consumed for self-generation of electricity**

**MWh fuel consumed for self-generation of heat**

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self- cogeneration or self-trigeneration**

**Comment**

**Other biomass**

**Heating value**

**Total fuel MWh consumed by the organization**

**MWh fuel consumed for self-generation of electricity**

**MWh fuel consumed for self-generation of heat**

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self- cogeneration or self-trigeneration**

**Comment**

**Other renewable fuels (e.g. renewable hydrogen)**

**Heating value**

Total fuel MWh consumed by the organization

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

**Comment**

**Coal**

**Heating value**

HHV

Total fuel MWh consumed by the organization

3826453

MWh fuel consumed for self-generation of electricity

3826453

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

0

**Comment**

**Oil**

**Heating value**

HHV

Total fuel MWh consumed by the organization

1996

MWh fuel consumed for self-generation of electricity

1829

MWh fuel consumed for self-generation of heat

23

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

144

**Comment**

**Gas**

**Heating value**

HHV

Total fuel MWh consumed by the organization

1838680

MWh fuel consumed for self-generation of electricity

592547

MWh fuel consumed for self-generation of heat

9063

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

1237070

**Comment**

**Other non-renewable fuels (e.g. non-renewable hydrogen)**

**Heating value**

Total fuel MWh consumed by the organization

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

**Comment**

**Total fuel**

**Heating value**

HHV

Total fuel MWh consumed by the organization

5667129

MWh fuel consumed for self-generation of electricity

1660469

MWh fuel consumed for self-generation of heat

486517

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

142550

**Comment**

**C8.2d**

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity		3354		39
Heat		9086		
Steam				
Cooling				

**C-EU8.2d**

(C-EU8.2d) For your electric utility activities, provide a breakdown of your total power plant capacity, generation, and related emissions during the reporting year by source.

**Coal – hard**

Nameplate capacity (MW)

317

Gross electricity generation (GWh)

Net electricity generation (GWh)

1220

Absolute scope 1 emissions (metric tons CO2e)

1247683

Scope 1 emissions intensity (metric tons CO2e per GWh)

1023

**Comment**



**Lignite**

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

Net electricity generation (GWh)

Absolute scope 1 emissions (metric tons CO2e)

Scope 1 emissions intensity (metric tons CO2e per GWh)

Comment

**Oil**

Nameplate capacity (MW)

60

Gross electricity generation (GWh)

Net electricity generation (GWh)

0.5

Absolute scope 1 emissions (metric tons CO2e)

459

Scope 1 emissions intensity (metric tons CO2e per GWh)

967

Comment

**Gas**

Nameplate capacity (MW)

454

Gross electricity generation (GWh)

Net electricity generation (GWh)

539

Absolute scope 1 emissions (metric tons CO2e)

335638

Scope 1 emissions intensity (metric tons CO2e per GWh)

622

Comment

**Sustainable biomass**

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

Net electricity generation (GWh)

Absolute scope 1 emissions (metric tons CO2e)

Scope 1 emissions intensity (metric tons CO2e per GWh)

Comment

**Other biomass**

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

Net electricity generation (GWh)

Absolute scope 1 emissions (metric tons CO2e)

Scope 1 emissions intensity (metric tons CO2e per GWh)

Comment

**Waste (non-biomass)**

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

Net electricity generation (GWh)

Absolute scope 1 emissions (metric tons CO2e)

Scope 1 emissions intensity (metric tons CO2e per GWh)

Comment

**Nuclear**

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

Net electricity generation (GWh)

Absolute scope 1 emissions (metric tons CO2e)

Scope 1 emissions intensity (metric tons CO2e per GWh)

Comment

**Fossil-fuel plants fitted with CCS**

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

Net electricity generation (GWh)

Absolute scope 1 emissions (metric tons CO2e)

Scope 1 emissions intensity (metric tons CO2e per GWh)

Comment

**Geothermal**

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

Net electricity generation (GWh)

Absolute scope 1 emissions (metric tons CO2e)

Scope 1 emissions intensity (metric tons CO2e per GWh)

Comment

**Hydropower**

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

Net electricity generation (GWh)

Absolute scope 1 emissions (metric tons CO2e)

Scope 1 emissions intensity (metric tons CO2e per GWh)

Comment

**Wind**

Nameplate capacity (MW)

125

Gross electricity generation (GWh)

Net electricity generation (GWh)

394

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

**Solar**

Nameplate capacity (MW)

146

Gross electricity generation (GWh)

Net electricity generation (GWh)

270

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

**Marine**

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

Net electricity generation (GWh)

Absolute scope 1 emissions (metric tons CO2e)

Scope 1 emissions intensity (metric tons CO2e per GWh)

Comment

**Other renewable**

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

Net electricity generation (GWh)

Absolute scope 1 emissions (metric tons CO2e)

Scope 1 emissions intensity (metric tons CO2e per GWh)

Comment

**Other non-renewable**

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

Net electricity generation (GWh)

Absolute scope 1 emissions (metric tons CO2e)

Scope 1 emissions intensity (metric tons CO2e per GWh)

Comment

**Total**

Nameplate capacity (MW)

1102

Gross electricity generation (GWh)

Net electricity generation (GWh)

2424

Absolute scope 1 emissions (metric tons CO2e)

1583781

Scope 1 emissions intensity (metric tons CO2e per GWh)

653

Comment

C8.2e

---

**(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in C6.3.**

**Country/area of low-carbon energy consumption**

Please select

**Sourcing method**

None (no active purchases of low-carbon electricity, heat, steam or cooling)

**Energy carrier**

<Not Applicable>

**Low-carbon technology type**

<Not Applicable>

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

<Not Applicable>

**Tracking instrument used**

<Not Applicable>

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

<Not Applicable>

**Are you able to report the commissioning or re-powering year of the energy generation facility?**

<Not Applicable>

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

<Not Applicable>

**Comment**

MGE does not account for zero or near-zero emissions in the market-based Scope 2 figure reported in C6.3.

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## C8.2g

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**(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.**

**Country/area**

United States of America

**Consumption of purchased electricity (MWh)**

0

**Consumption of self-generated electricity (MWh)**

3354

**Is this electricity consumption excluded from your RE100 commitment?**

<Not Applicable>

**Consumption of purchased heat, steam, and cooling (MWh)**

0

**Consumption of self-generated heat, steam, and cooling (MWh)**

9086

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

12440

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## C-EU8.4

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**(C-EU8.4) Does your electric utility organization have a transmission and distribution business?**

Yes

## C-EU8.4a

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**(C-EU8.4a) Disclose the following information about your transmission and distribution business.**

**Country/area/region**

United States of America

**Voltage level**

Distribution (low voltage)

**Annual load (GWh)**

3190.9

**Annual energy losses (% of annual load)**

3.4

**Scope where emissions from energy losses are accounted for**

Scope 2 (location-based)

**Emissions from energy losses (metric tons CO2e)**

14929

**Length of network (km)**

3471

**Number of connections**

**Area covered (km2)**

684

**Comment**

Scope 2 emissions from energy losses are from purchased power only. Emissions from energy losses from electricity generated and distributed by MGE-owned facilities are already accounted for in Scope 1 emissions.

**C9. Additional metrics**

**C9.1**

**(C9.1) Provide any additional climate-related metrics relevant to your business.**

**C-EU9.5a**

**(C-EU9.5a) Break down, by source, your organization's CAPEX in the reporting year and CAPEX planned over the next 5 years.**

**Coal – hard**

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**

11673000

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

12

**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

3

**Most recent year in which a new power plant using this source was approved for development**

**Explain your CAPEX calculations, including any assumptions**

Planned CAPEX is over the next 5 years. Planned investments as transition away from coal.

**Lignite**

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

**Most recent year in which a new power plant using this source was approved for development**

<Not Applicable>

**Explain your CAPEX calculations, including any assumptions**

**Oil**

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

**Most recent year in which a new power plant using this source was approved for development**

<Not Applicable>

**Explain your CAPEX calculations, including any assumptions**

**Gas**

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**  
13344000

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**  
14

**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**  
19

**Most recent year in which a new power plant using this source was approved for development**

**Explain your CAPEX calculations, including any assumptions**  
Planned CAPEX is over the next 5 years. Investments in new gas generation.

**Sustainable biomass**

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

**Most recent year in which a new power plant using this source was approved for development**  
<Not Applicable>

**Explain your CAPEX calculations, including any assumptions**

**Other biomass**

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

**Most recent year in which a new power plant using this source was approved for development**  
<Not Applicable>

**Explain your CAPEX calculations, including any assumptions**

**Waste (non-biomass)**

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

**Most recent year in which a new power plant using this source was approved for development**  
<Not Applicable>

**Explain your CAPEX calculations, including any assumptions**

**Nuclear**

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

**Most recent year in which a new power plant using this source was approved for development**  
<Not Applicable>

**Explain your CAPEX calculations, including any assumptions**

**Geothermal**

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

**Most recent year in which a new power plant using this source was approved for development**  
<Not Applicable>

**Explain your CAPEX calculations, including any assumptions**

**Hydropower**

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

**Most recent year in which a new power plant using this source was approved for development**  
<Not Applicable>

**Explain your CAPEX calculations, including any assumptions**

## Wind

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**

3149000

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

3

**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

13

**Most recent year in which a new power plant using this source was approved for development**

**Explain your CAPEX calculations, including any assumptions**

Planned CAPEX is over the next 5 years. MGE is targeting at least 80% carbon reduction from electric generation by 2030 (from 2005 levels) and net-zero carbon electricity by 2050. Solar, wind, and battery storage projects are a major step toward deep decarbonization and greater use of clean energy sources in pursuit of our goal. MGE continues to evaluate solar, wind, and battery storage projects that align with its goals as legacy fossil fuel-fired facilities are retired.

## Solar

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**

64458000

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

69

**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

39

**Most recent year in which a new power plant using this source was approved for development**

**Explain your CAPEX calculations, including any assumptions**

Planned CAPEX is over the next 5 years. MGE is targeting at least 80% carbon reduction from electric generation by 2030 (from 2005 levels) and net-zero carbon electricity by 2050. Solar, wind, and battery storage projects are a major step toward deep decarbonization and greater use of clean energy sources in pursuit of our goal. MGE continues to evaluate solar, wind, and battery storage projects that align with its goals as legacy fossil fuel-fired facilities are retired.

## Marine

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

**Most recent year in which a new power plant using this source was approved for development**

<Not Applicable>

**Explain your CAPEX calculations, including any assumptions**

## Fossil-fuel plants fitted with CCS

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

**Most recent year in which a new power plant using this source was approved for development**

<Not Applicable>

**Explain your CAPEX calculations, including any assumptions**

## Other renewable (e.g. renewable hydrogen)

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**

1566000

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

2

**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

26

**Most recent year in which a new power plant using this source was approved for development**

**Explain your CAPEX calculations, including any assumptions**

Planned CAPEX is over the next 5 years. MGE is targeting at least 80% carbon reduction from electric generation by 2030 (from 2005 levels) and net-zero carbon electricity by 2050. Solar, wind, and battery storage projects are a major step toward deep decarbonization and greater use of clean energy sources in pursuit of our goal. MGE continues to evaluate solar, wind, and battery storage projects that align with its goals as legacy fossil fuel-fired facilities are retired.

## Other non-renewable (e.g. non-renewable hydrogen)

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

**Most recent year in which a new power plant using this source was approved for development**

<Not Applicable>

**Explain your CAPEX calculations, including any assumptions**

C-EU9.5b

(C-EU9.5b) Break down your total planned CAPEX in your current CAPEX plan for products and services (e.g. smart grids, digitalization, etc.).

Products and services	Description of product/service	CAPEX planned for product/service	Percentage of total CAPEX planned products and services	End of year CAPEX plan
Other, please specify ((Enhanced Metering Solution))	Advanced metering infrastructure	36000000	100	2027

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	No	

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	No third-party verification or assurance
Scope 3	No third-party verification or assurance

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

High assurance

**Attach the statement**

**Page/ section reference**

No References

**Relevant standard**

Other, please specify (CEMS certified according to Clean Air Act 40 CFR Part 75)

**Proportion of reported emissions verified (%)**

99

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

No, we do not verify any other climate-related information reported in our CDP disclosure

C11. Carbon pricing

C11.1



**(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?**

No, and we do not anticipate being regulated in the next three years

**C11.2**

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**(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?**

No

**C11.3**

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**(C11.3) Does your organization use an internal price on carbon?**

Yes

**C11.3a**

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**(C11.3a) Provide details of how your organization uses an internal price on carbon.**

**Type of internal carbon price**

Other, please specify (Potential carbon restrictions)

**How the price is determined**

Cost of required measures to achieve emissions reduction targets

**Objective(s) for implementing this internal carbon price**

Drive low-carbon investment  
Identify and seize low-carbon opportunities  
Stakeholder expectations

**Scope(s) covered**

Scope 1  
Scope 3 (downstream)

**Pricing approach used – spatial variance**

Uniform

**Pricing approach used – temporal variance**

Evolutionary

**Indicate how you expect the price to change over time**

Resource planning is a dynamic process so the potential carbon restrictions considered therein will also vary with the project economics and conditions.

**Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO2e)**

**Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO2e)**

**Business decision-making processes this internal carbon price is applied to**

Capital expenditure  
Operations  
Risk management  
Opportunity management  
Public policy engagement

**Mandatory enforcement of this internal carbon price within these business decision-making processes**

No

**Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan**

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 possible projected carbon emissions limits to help ensure our decisions are financially sound—regardless of whether or how carbon is regulated in the future.

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**C12. Engagement**

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**C12.1**

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**(C12.1) Do you engage with your value chain on climate-related issues?**

Yes, our suppliers  
Yes, our customers/clients  
Yes, other partners in the value chain

C12.1a

**(C12.1a) Provide details of your climate-related supplier engagement strategy.**

**Type of engagement**

Information collection (understanding supplier behavior)

**Details of engagement**

Collect GHG emissions data at least annually from suppliers

**% of suppliers by number**

**% total procurement spend (direct and indirect)**

10

**% of supplier-related Scope 3 emissions as reported in C6.5**

**Rationale for the coverage of your engagement**

MGE annually calculates its emissions from its energy supply mix in its value chain which provides electric service to its customers. 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 (MISO) 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.

**Impact of engagement, including measures of success**

Engagement with our purchase power suppliers helps inform and to measure our GHG inventory and the progress in achieving the company's carbon reduction goals of at least 80% by 2050 and net-zero carbon electricity by 2050.

**Comment**

**Type of engagement**

Information collection (understanding supplier behavior)

**Details of engagement**

Collect GHG emissions data at least annually from suppliers

**% of suppliers by number**

**% total procurement spend (direct and indirect)**

32

**% of supplier-related Scope 3 emissions as reported in C6.5**

**Rationale for the coverage of your engagement**

MGE works with our natural gas suppliers and pipeline operators to estimate emissions in our value chain and ensure we are serving our customers with cost-effective, environmentally responsible sources of natural gas.

MGE contracts with two natural gas transmission companies, Northern Natural Gas, a Berkshire Hathaway Energy Pipeline Group Company, 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.," which is a voluntary group of companies working together to reduce methane emissions across the natural gas supply chain to 1% or less by 2025. In its 2021 report, ONE Future cited a methane intensity of less than one half of one percent, beating its 1% goal.

Northern Natural Gas and ANR Pipeline Company also are part of the U.S. Environmental Protection Agency's Methane Challenge Program. Partners in this voluntary program report systemic and comprehensive actions to reduce methane emissions as part of efforts to enhance transparency in the industry.

**Impact of engagement, including measures of success**

Engagement with our natural gas suppliers helps inform and to measure our GHG inventory and the progress on minimizing the overall inventory.

**Comment**

C12.1b

**(C12.1b) Give details of your climate-related engagement strategy with your customers.**

**Type of engagement & Details of engagement**

Education/information sharing	Run an engagement campaign to education customers about your climate change performance and strategy
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**% of customers by number**

100

**% of customer - related Scope 3 emissions as reported in C6.5**

**Please explain the rationale for selecting this group of customers and scope of engagement**

Energy efficiency is one of MGE's key strategies for achieving deep decarbonization. Through the use of new technologies, hands-on workshops, energy education (tools and resources), conservation kits and innovative rate options, MGE engages customers to help them take control of their energy use. Engaging and educating our residential and commercial and industrial customers around energy efficiency helps to reduce the amount of electric generation needed and the associated GHG emissions. Engaging with a diverse customer base requires a diverse set of strategies to achieve the company's energy goals. MGE has communications tools (bill inserts, video, websites, newsletters, email marketing, social media, Home Energy Line, advertising, events) as well as programs, products and services (MGE Connect, MyMeter, Charge Ahead, partnership with Focus on Energy, etc.) to advance this key decarbonization strategy. Using a variety of channels, MGE provides culturally and linguistically relevant information, materials, workshops and presentations. We serve customers who come to us for information as well as take information into the community through workshops and other events for direct engagement. MGE's Home Energy Line and Ask the Experts email address to "ask the experts" is an efficient way for residential

customers to get energy tips and answers to their energy-related questions via phone or email. MGE also maintains a separate line for commercial and industrial customers who need assistance. MGE also partners with community organizations and works with community media to reach targeted and underserved customers to share and to promote our programs, products and services, resources and tools. In addition, MGE partners with schools and youth-oriented organizations to educate the next generation of consumers about using energy wisely (and safely).

**Impact of engagement, including measures of success**

MGE teams engage in many different ways to reach the company's diverse customer base. One of those ways is through live segments on a local Spanish language radio station. Members of MGE's Residential and Community Services (RCS) team co-host "Viviendo con Energia," which covers energy efficiency and conservation, electrification, payment options and safety. Social media is one of the communications vehicles used by MGE to share information about energy conservation and energy efficiency with customers. In 2022, MGE continued its digital engagement to deliver core MGE energy education and messaging to reach more than 200,000 Facebook users and nearly 44,000 Instagram users. In addition, MGE continued its efforts to engage vulnerable customers through the distribution of more than 3,000 energy-saving LED light bulbs and more than 10,000 energy brochures through community partners in targeted geographic areas with high concentrations of low-income families. 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. In 2022, the RCS team, in partnership with Focus on Energy, launched the Strategic Energy Management for Multifamily pilot. The innovative pilot included a two-pronged approach, including tenant engagement and operations and maintenance. The tenant workshops focused on cooling, dehumidification, ventilation and basic plug load strategies. For the operations/maintenance segment of the pilot, Focus on Energy conducted energy scans of the buildings and compiled lists of energy-saving opportunities ranging from HVAC and other mechanicals to lighting for the property managers. MGE's Home Energy Line and Ask the Experts email provided individualized consultation to 1,340 customers with residential energy-related questions. Many of these consultations involved more than one area of inquiry. MGE staff refer customers to Focus on Energy, Energy Assistance, Low Income Weatherization and related programs.

**Type of engagement & Details of engagement**

Collaboration & innovation	Other, please specify (MGE Connect)
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**% of customers by number**

**% of customer - related Scope 3 emissions as reported in C6.5**

**Please explain the rationale for selecting this group of customers and scope of engagement**

Energy efficiency is a key decarbonization strategy. Electric use peaks during stretches of hot, humid days when air conditioners run in a majority of households and businesses, putting pressure on the electric grid and generation resources. With MGE Connect®, MGE is able to manage participating residential air conditioners to reduce energy use during periods of high demand, helping to manage both demand on our distribution grid and long-term costs to customers.

**Impact of engagement, including measures of success**

MGE's demand response program for residential customers, MGE Connect, continues to expand. As of mid-2023, nearly 5,000 customers participate. With customers' permission, minor temperature adjustments are made to their smart thermostats to reduce energy use during periods of high demand. Nearly 3,500 households participated in the summer 2022 season. Some of the events in summer 2022 lowered demand by nearly three megawatts each hour.

**Type of engagement & Details of engagement**

Collaboration & innovation	Other, please specify (Residential Battery Storage)
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**% of customers by number**

**% of customer - related Scope 3 emissions as reported in C6.5**

**Please explain the rationale for selecting this group of customers and scope of engagement**

In late 2020, MGE launched a technology demonstration project featuring battery storage in partnership with several residential electric customers who have solar photovoltaic systems. The homeowner's rooftop solar system charges the battery, which is used during times of peak demand and as a backup source of power for the household. This project helps MGE understand how batteries operate in Wisconsin temperatures and how batteries could help control long-term costs by managing our collective use of energy.

**Impact of engagement, including measures of success**

This program is in its infancy and four customers are currently engaged.

**Type of engagement & Details of engagement**

Collaboration & innovation	Other, please specify (Charge Ahead)
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**% of customers by number**

**% of customer - related Scope 3 emissions as reported in C6.5**

**Please explain the rationale for selecting this group of customers and scope of engagement**

Advancing the electrification of transportation is one of MGE's key strategies for deep decarbonization. MGE launched the Charge Ahead demonstration project in March 2021 with a number of Tesla drivers. This program gives eligible electric vehicle (EV) drivers the opportunity to test new technology for MGE to manage EV charging. The program and partnership with customers helps MGE explore ways to meet the needs of EV drivers into the future while planning for the impact of EVs on our distribution grid. A software platform is used to manage charging through the vehicles' on-board modems. Charge Ahead customers provide a need-by time for their vehicle and enable smart charging. The software then optimizes charging. In the program's inaugural year, participating customers were assigned to one of three groups that allowed MGE to shift 80% of charging to off-peak times or curtail charging during peak times. In 2023, MGE is expanding the program to involve more customers and vehicle models.

**Impact of engagement, including measures of success**

Participating customers were assigned to one of three groups that allowed MGE to shift 80% of charging to off-peak times or curtail charging during peak times. In 2022, 34 customers were enrolled in Charge Ahead. In 2023, MGE is expanding the pilot to involve more customers and vehicle models. MGE has regulatory approval to expand Charge Ahead to 150 participants through 2024.

**Type of engagement & Details of engagement**

Collaboration & innovation	Other, please specify (MyMeter Energy Dashboard)
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**% of customers by number**

**% of customer - related Scope 3 emissions as reported in C6.5**

**Please explain the rationale for selecting this group of customers and scope of engagement**

More than 200 commercial customers have access to MGE's MyMeter Energy Dashboard, formerly known as MGE's On Demand Savings (ODS) program. MGE expects to make MyMeter available to all commercial customers by the end of 2023. The MyMeter Energy Dashboard allows customers to track their energy usage daily, set threshold alerts and energy markers and to benchmark their facilities using ENERGY STAR portfolio manager. The MyMeter Energy Dashboard builds upon the success of MGE's ODS program, which offered large customers tools and strategies to reduce their energy use, especially during periods when demand for electricity is at its peak. ODS used 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 ODS 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. A third-party evaluation of ODS in 2021 found an average demand reduction of 3.3% across all participating sites and a 4% reduction in energy use.

**Impact of engagement, including measures of success**

34% of 2022 commercial and industrial electric sales was managed under MGE's MyMeter Energy Dashboard. MGE expects to make the dashboard accessible to all commercial customers by the end of 2023. A 2021 third-party evaluation of the On Demand Savings (ODS) program, which preceded MGE's MyMeter Energy Dashboard, revealed high levels of customer satisfaction. The evaluators found an average demand reduction of 3.3% across all participating sites and a 4% reduction in energy use.

**Type of engagement & Details of engagement**

Collaboration & innovation	Other, please specify (Renewable Flat Bill Pilot)
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**% of customers by number**

**% of customer - related Scope 3 emissions as reported in C6.5**

**Please explain the rationale for selecting this group of customers and scope of engagement**

MGE's Renewable Flat Bill pilot offers eligible residential electric customers the opportunity to sign up for a fixed monthly electric bill based on their expected usage. Qualified participants receive 100% renewable energy with a monthly fixed bill for 12 months. The pilot program utilizes MGE's Green Power Tomorrow (GPT) program. For every kilowatt-hour (kWh) of green power purchased by customers participating in GPT, there's a kWh of electricity that won't be generated with non-renewable fuels.

**Impact of engagement, including measures of success**

Enrollment is capped at 30 customers; and 13 customers participated as of year end 2022. MGE is working to recruit additional customers to participate in the pilot.

**Type of engagement & Details of engagement**

Collaboration & innovation	Other, please specify (Shared Solar)
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**% of customers by number**

**% of customer - related Scope 3 emissions as reported in C6.5**

**Please explain the rationale for selecting this group of customers and scope of engagement**

MGE works with customers to grow the company's use of clean energy. MGE's community solar program, Shared Solar, offers customers locally generated solar energy at minimal upfront cost. Shared Solar gives residential and small business customers the option to power their household or business with local solar for up to half of their annual energy use. Shared Solar participants lock in electricity rates to help protect against increases over time. Also, Shared Solar supports local renewable energy to reduce the customer's carbon footprint and helps MGE to achieve net-zero carbon electricity. It offers an easy and affordable way for customers to incorporate local solar energy directly for their use.

**Impact of engagement, including measures of success**

MGE's Shared Solar program has about 2,000 customers enrolled and an active waiting list of customers seeking participation.

**Type of engagement & Details of engagement**

Collaboration & innovation	Other, please specify (Renewable Energy Rider)
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**% of customers by number**

**% of customer - related Scope 3 emissions as reported in C6.5**

**Please explain the rationale for selecting this group of customers and scope of engagement**

MGE's Renewable Energy Rider program gives MGE and larger commercial/business customers who seek customized renewable energy solutions the opportunity to partner to grow locally generated renewable energy. The program 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. This service from MGE can provide renewable energy to power all or a portion of a business. MGE is the first utility in Wisconsin to offer this opportunity.

**Impact of engagement, including measures of success**

To date, MGE is partnering with the following customers through RER agreements: City of Fitchburg, Placon, Promega Corporation, Tribe 9 Foods, University of Wisconsin-Madison, Willy Street Co-op, Wisconsin Department of Administration, City of Middleton, Middleton-Cross Plains Area School District, City of Madison, Madison Metropolitan School District and Dane County. Currently, more than 40 MW of local solar serves customers under RER agreements.

**Type of engagement & Details of engagement**

Collaboration & innovation	Other, please specify (Green Power Tomorrow)
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**% of customers by number**

**% of customer - related Scope 3 emissions as reported in C6.5**

**Please explain the rationale for selecting this group of customers and scope of engagement**

MGE's Green Power Tomorrow (GPT) is the company's green pricing program. At a penny more per kilowatt-hour (kWh), GPT is a convenient and effective way for customers to support local and regional renewable energy from MGE and offset their greenhouse gas emissions. The GPT program is served by MGE's wind and solar resources in the region.

**Impact of engagement, including measures of success**

As of mid-2023, there are about 10,000 MGE customers enrolled in GPT; these customers support green power that's generated in our region.

**Type of engagement & Details of engagement**

Collaboration & innovation	Other, please specify (Community Shared Decarbonization Goals)
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**% of customers by number**

**% of customer - related Scope 3 emissions as reported in C6.5**

**Please explain the rationale for selecting this group of customers and scope of engagement**

MGE has ongoing collaborations with a number of communities it serves, including the cities of Fitchburg, Madison and Middleton. These partnerships serve to advance shared goals around renewable energy, electric vehicles (EVs), and energy efficiency and conservation. MGE also serves as a member of the Dane County Council on Climate Change, which 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. As MGE advances electrification as a decarbonization strategy, MGE works with customers, stakeholders such as municipalities and school districts, and other community partners to grow the use of electric vehicles (EVs) and to facilitate charging options throughout its service territory. MGE also helps to educate customers, businesses and communities at-large about the benefits of EVs. MGE experts have been and continue to be on hand at many community events with a variety of EVs to share information on driving and charging EVs. For example, each year, MGE sponsors the National Drive Electric Week event held in Madison to share information about EVs and EV charging.

**Impact of engagement, including measures of success**

The impact of our collaboration with municipalities and businesses and other community partners is detailed in our annual Corporate Responsibility and Sustainability Report at [mge.com/environment](http://mge.com/environment). We continue to build on these collaborations in many different ways. For example, the Connected Communities project is a Department of Energy-funded collaboration between MGE, the City of Madison and others to advance the adoption of Grid Interactive Energy Efficient Buildings (GEBs). The first phase of the project will include a GEB installation on a selection of City of Madison facilities. The second phase will take the knowledge learned in the demonstration phase to create an MGE GEBs Pilot Program.

**Type of engagement & Details of engagement**

Collaboration & innovation	Other, please specify (Water Heating Optimization)
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**% of customers by number**

**% of customer - related Scope 3 emissions as reported in C6.5**

**Please explain the rationale for selecting this group of customers and scope of engagement**

MGE partnered with residents at a local condominium and rental community to test technology that allows MGE to shift water heating without impacting customer comfort as part of ongoing grid optimization efforts. The installation of smart devices on the residents' water heaters helped MGE to shift heating to periods when renewable resources are generating the most electricity or to off-peak periods on the distribution grid.

**Impact of engagement, including measures of success**

MGE completed its Managed Electric Water Heater Demonstration Project in early 2023. The project successfully tested the optimization of managed controls to optimize both winter and summer time of use rates as well as solar sponging to maximize renewable energy use during summer middays (while also reducing load during potential peak hours).

**Type of engagement & Details of engagement**

Collaboration & innovation	Other, please specify (Charge@Home)
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**% of customers by number**

**% of customer - related Scope 3 emissions as reported in C6.5**

**Please explain the rationale for selecting this group of customers and scope of engagement**

Transportation is the leading contributor of greenhouse gas emissions in the U.S. The electrification of transportation is a key strategy for reducing carbon emissions. MGE is working with customers, stakeholders, municipalities and other community partners to grow the use of EVs and to facilitate charging options throughout our community, including at home, at work and on the go. MGE's public charging network is powered by 100% renewable energy. Charge@Home is MGE's home charging program. With Charge@Home, MGE owns, maintains and coordinates the installation of Level 2 charging stations at customers' homes. 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, including how grid management can help to lower costs for all MGE customers by optimizing our use of generation resources. In 2022, MGE received regulatory approval to expand this program to increase access to home charging. MGE also helps area employers of all sizes and multifamily developers who want to offer employees and residents charging, and MGE works with businesses interested in transitioning their fleets to EVs. We discuss options with customers and help them navigate the decision-making and implementation process. In 2023, MGE is introducing programs to offer EV charging and to manage EV charging remotely at multifamily housing, workplaces and at businesses with EV fleets.

**Impact of engagement, including measures of success**

At close of 2022, 178 customers were participating in Charge@Home. As of mid-2023, MGE has about 200 customers participating in Charge@Home.

C12.1d

**(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.**

The MGE Energy and MGE Board of Directors 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, practices, strategies and long-term direction and help leadership assess and address investors' emerging areas of interest, such as topics related to environmental, social and governance matters. 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 of shareholders; and inquiries taken through the company's investor site, board emails and in-house Shareholder Services staff. These efforts are in addition to the company's regular and ongoing investor relations engagement.

**C12.2**

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**(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?**

No, and we do not plan to introduce climate-related requirements within the next two years

**C12.3**

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**(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?**

Row 1

**External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate**

Yes, we engage directly with policy makers

Yes, our membership of/engagement with trade associations could influence policy, law, or regulation that may impact the climate

**Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?**

No, and we do not plan to have one in the next two years

**Attach commitment or position statement(s)**

<Not Applicable>

**Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan**

MGE advocates for customers, shareholders and employees by building and maintaining relationships with policymakers; by working collaboratively with internal and external stakeholders to identify and address matters that impact the industry, goals and corporate strategies; and, by building coalitions with stakeholders, trade associations, employees, customer groups, utility associations and others to pursue and achieve common goals. MGE's corporate strategies include the company's commitment to providing safe, reliable, affordable energy consistent with its carbon reduction and net-zero carbon goals. MGE employs registered lobbyists and utilizes external lobbyists to engage policymakers at the local, state and federal levels to monitor legislation and policy proposals and to advocate for positions that are in the best interest of MGE employees, customers and shareholders. Reports of the company's lobbying activities (MGE Energy and/or MGE) can be found at the federal, state and local levels. Wisconsin lobbying reports can be found at the Wisconsin Ethics Commission, [lobbying.wi.gov](http://lobbying.wi.gov). MGE typically does not incur lobbying expenses at the federal or local level that would trigger a lobbying report; however, if it does, those expenses can be found at [lda.senate.gov](http://lda.senate.gov) and [lobbyingdisclosure.house.gov](http://lobbyingdisclosure.house.gov) and at [cityofmadison.com/clerk/lobbyists](http://cityofmadison.com/clerk/lobbyists), respectively. MGE belongs to a number of trade organizations and coalitions that provide expertise, training and research concerning important industry topics. Some trade associations also participate in the political process, including participation in lobbying. MGE does not control the political activity of its member trade associations, and in fact, may sometimes disagree with political positions taken by them. Trade associations must identify the portion of association dues used for lobbying and political activities to comply with tax rules. MGE collaborates with local and regional entities such as municipalities and collaboratives to advance decarbonization strategies and clean energy goals.

**Primary reason for not engaging in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate**

<Not Applicable>

**Explain why your organization does not engage in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate**

<Not Applicable>

**C12.3a**

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**(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?**

**Specify the policy, law, or regulation on which your organization is engaging with policy makers**

In August 2019, Wisconsin Gov. Tony Evers signed an executive order to establish the Office of Sustainability and Clean Energy (OSCE). The order tasks the OSCE with, among other things, ensuring that the actions of the State of Wisconsin are aligned with the goals and recommendations of the Paris Agreement, verifying that electricity consumed by the State of Wisconsin is 100% carbon-free by 2050, and developing a comprehensive multi-sector clean energy plan for the state. In April 2022, the OSCE released Wisconsin's Clean Energy Plan. The plan includes a goal to achieve net-zero carbon by 2050. MGE is and has been engaged in this process by participating on a Stakeholder Advisory Team in a voluntary capacity. The plan creates a pathway to multi-sector deep decarbonization and a transition to a strong clean energy economy that prioritizes environmental justice, helps to ensure a diverse workforce and to advance technology innovation. MGE participated in the preparation of this plan via stakeholder engagement activities directed by the OSCE, providing essential perspectives and subject matter expertise to advise on key pathways and strategies. OSCE engaged stakeholders via public listening sessions, by participating in statewide events and collecting online written comments.

**Category of policy, law, or regulation that may impact the climate**

Climate change mitigation

**Focus area of policy, law, or regulation that may impact the climate**

Other, please specify (State Energy Goals)

**Policy, law, or regulation geographic coverage**

Regional

**Country/area/region the policy, law, or regulation applies to**

Other, please specify (State of Wisconsin, USA)

**Your organization's position on the policy, law, or regulation**

Support with no exceptions

**Description of engagement with policy makers**

MGE participated in the preparation of this plan via stakeholder engagement activities directed by the Wisconsin Office of Sustainability and Clean Energy (OSCE), providing essential perspectives and subject matter expertise to advise on key pathways and strategies. OSCE engaged stakeholders via public listening sessions, by participating in statewide events, and collecting online written comments.

In addition, President Biden signed an executive order in December 2021 that sets goals for federal government agencies and operations to have, among other things, 100% carbon-free electricity by 2030, acquisitions of vehicles to be 100% zero-emissions light-duty vehicles by 2027, and all vehicles by 2035, and net-zero emissions from federal operations by 2050. Efforts at the federal level are expected to spur the carbon-neutral economy in the private sector. In August 2022, the federal government enacted the Inflation Reduction Act (IRA). Included in the IRA are federal funds for investment in infrastructure, transportation, energy, and climate change. In September 2022, President Biden signed an executive order on the Implementation of the Energy and Infrastructure Act of 2022. The order directs agencies to implement the energy and infrastructure provisions of the 2022 IRA and directs agencies to take actions toward implementing U.S. climate change priorities to be in line with the Paris Agreement. The Paris Agreement includes progress towards achieving greenhouse gas reductions of 50-52% below 2005 levels in 2030, achieving a carbon pollution-free electricity sector by 2035, and achieving net-zero emissions no later than 2050. MGE is following the development of recommendations and plans developed by agencies as a result of IRA and executive orders, as well as other executive actions taken by the Biden administration, to determine their applicability to MGE's decarbonization plans and potential impact to our operations.

Reports of the company's lobbying activities (MGE Energy and/or MGE) can be found at the federal, state and local levels. Wisconsin lobbying reports can be found at the Wisconsin Ethics Commission, [lobbying.wi.gov](http://lobbying.wi.gov). MGE typically does not incur lobbying expenses at the federal or local level that would trigger a lobbying report; however, if it does, those expenses can be found at [lda.senate.gov](http://lda.senate.gov) and [lobbyingdisclosure.house.gov](http://lobbyingdisclosure.house.gov) and at [cityofmadison.com/clerk/lobbyists](http://cityofmadison.com/clerk/lobbyists), respectively.

**Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation**

<Not Applicable>

**Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

**Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?**

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C12.3b

**(C12.3b) Provide details of the trade associations your organization is a member of, or engages with, which are likely to take a position on any policy, law or regulation that may impact the climate.**

**Trade association**

Edison Electric Institute (EII)

**Is your organization's position on climate change policy consistent with theirs?**

Consistent

**Has your organization attempted to influence their position in the reporting year?**

No, we did not attempt to influence their position

**Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position**

EII's policy on clean energy and climate change can be found on its web site at <https://www.eei.org/en/issues-and-policy/clean-energy>. EII may participate in the political process, including participating in lobbying on issues related to climate. MGE does not attempt to control the political activity of EII, and in fact, may sometimes disagree with political positions taken by them. We attend meetings and discussions with EII regarding policy matters, including climate change, and provide input to ensure that the company's perspectives are considered.

**Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)**

360000

**Describe the aim of your organization's funding**

This represents the membership dues for EII

**Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?**

No, we have not evaluated

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**Trade association**

American Gas Association

**Is your organization's position on climate change policy consistent with theirs?**

Mixed

**Has your organization attempted to influence their position in the reporting year?**

No, we did not attempt to influence their position

**Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position**

AGA's position on environment and climate change can be found on its website at <https://www.aga.org/policy/Environment/>. AGA may participate in the political process, including participating in lobbying on issues related to climate. MGE does not attempt to control the political activity of AGA, and in fact, may sometimes disagree with political positions taken by AGA.

**Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)**

116000

**Describe the aim of your organization's funding**

This represents the membership dues for AGA

**Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?**

No, we have not evaluated

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## C12.4

**(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).**

**Publication**

In voluntary sustainability report

**Status**

Underway – previous year attached

**Attach the document**

**Page/Section reference**

<https://www.mgeenergy.com/en/esg/corporate-responsibility-sustainability-report>

**Content elements**

Governance  
Strategy  
Risks & opportunities  
Emissions figures  
Emission targets  
Other metrics

**Comment**

Madison Gas and Electric (MGE) publishes an annual Corporate Responsibility and Sustainability Report to share matters of sustainability performance and interest with stakeholders. MGE is committed to helping customers, investors and other stakeholders better understand our strategies, risks, challenges, and opportunities as we transition to a more sustainable future. The report features information about MGE's corporate strategy and climate-related matters; safety and operations; metrics and targets; customer and employee engagement; risk management; and governance and oversight. MGE also continues to participate in EII's ESG and sustainability reporting templates. EII, which represents all U.S. investor-owned electric companies, developed the voluntary, industry-specific templates to provide more uniform and consistent reporting of data and information from the electric sector. The templates include data related to MGE's portfolio (generation and capacity), emissions, capital expenditures, human and natural resources, and other matters. The EII disclosure information is available in MGE's online ESG Data Center, available at <https://www.mge.com/responsibility-and-sustainability/2022-corporate-report/esg-data-center>



C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization's role within each framework, initiative and/or commitment
Row 1	We are not a signatory/member of any collaborative framework, initiative and/or commitment related to environmental issues	<Not Applicable>

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity	Scope of board-level oversight
Row 1	Yes, executive management-level responsibility	The VP General Counsel and Secretary has executive oversight of the Safety, Sustainability and Environmental Affairs at MGE. Within this group biodiversity planning, strategy and compliance is managed.	<Not Applicable>

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments only	Commitment to respect legally designated protected areas Commitment to avoidance of negative impacts on threatened and protected species Other, please specify (We are a member of the Wisconsin Monarch Collaborative and evaluating participation in the Nationwide Candidate Conservation Agreement. We expect to clarify our direction on making a public commitment or endorsing initiatives within the next 2 years.)	<Not Applicable>

C15.3

(C15.3) Does your organization assess the impacts and dependencies of its value chain on biodiversity?

**Impacts on biodiversity**

**Indicate whether your organization undertakes this type of assessment**

No and we don't plan to within the next two years

**Value chain stage(s) covered**

<Not Applicable>

**Portfolio activity**

<Not Applicable>

**Tools and methods to assess impacts and/or dependencies on biodiversity**

<Not Applicable>

**Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)**

<Not Applicable>

**Dependencies on biodiversity**

**Indicate whether your organization undertakes this type of assessment**

No and we don't plan to within the next two years

**Value chain stage(s) covered**

<Not Applicable>

**Portfolio activity**

<Not Applicable>

**Tools and methods to assess impacts and/or dependencies on biodiversity**

<Not Applicable>

**Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)**

<Not Applicable>

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity- sensitive areas in the reporting year?

No

C15.5

(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water protection Land/water management Species management Education & awareness Other, please specify (An EMS goal is to determine current and increase pollinator-friendly habitat on our properties. We incorporate pollinator plants at solar sites, and review impacts from construction projects, including to endangered resources and habitat.)

C15.6

(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	No	Please select

C15.7

(C15.7) Have you published information about your organization’s response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments	Page 43 1624-00024795.pdf

C16. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Director Safety, Sustainability and Environmental Affairs	Other, please specify ((Environment/Sustainability Director))

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

**Please confirm below**

I have read and accept the applicable Terms