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SUSTAINABILITY REPORT  
**2020**

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# ENVIRONMENTAL STEWARDSHIP.

We are committed to doing our part  
to ensure a sustainable, low-carbon future.





# SAFE AND GREAT PLACE TO WORK.

We are committed to employees' health and safety, and a culture that values, respects and supports each employee.





# STRONG CORPORATE GOVERNANCE.

We are committed to preserving the trust our communities and stakeholders place in us to be a good corporate citizen.



# Letter to Stakeholders

MDU Resources is an essential infrastructure company that has been building the backbone of this great nation for nearly 100 years. Our corporation has a long, proud legacy of success anchored in ethical business practices. At MDU Resources, we believe it is our responsibility to preserve and strengthen this legacy by conducting ethical, profitable and sustainable business to ensure continued success and grow shareholder value over the long term. This requires consideration of, and regular engagement with, all stakeholders who are critical to our success, including shareholders, employees, customers, suppliers and the communities where we live and operate.

We understand the critical nature of our mission and the need to align our priorities with those of our key stakeholders. Today more than ever, stakeholders expect public companies to strategically integrate and disclose progress on environmental, social and governance (ESG) risks and opportunities.

We recognize the risks and opportunities associated with climate change and aspire to a future with net-zero carbon emissions. This will require technological advancements and sound public policies that protect the environment while ensuring a safe, reliable, affordable and resilient energy and transportation system.

Our vision, “With integrity, Building a Strong America® while being a great and safe place to work,” starts with a culture of doing what is right. MDU Resources’ “[Leading with Integrity Guide](#)” outlines our commitments to each of our key stakeholders and to conducting our business with integrity, within the law and ethically. This commitment is demonstrated through our expanding voluntary disclosures related to ESG topics in our sustainability reports and our proxy statements. We plan to publish our 2021 Sustainability Report in the third quarter of 2022.

As we continue to enhance our ESG reporting, we are pleased to provide our 2020 sustainability information, which previously was available throughout our website, combined in this PDF document. We have included information on some of the progress we have made in 2021 in regard to ESG reporting. We created an executive management Sustainability Committee that supports the execution of, and makes recommendations to advance, the corporation’s environmental and sustainability strategy, and establishes, maintains and enhances the processes, procedures and controls for related disclosures. We also have completed and provided our [climate-related scenario analysis](#) for our electric generation operations, which helps us understand and assess a range of potential future scenarios and pathways.

Our ESG-related initiatives and goals, as well as our practices and progress, are outlined within this report. We remain committed to continuing to provide information to our stakeholders that is valuable as they consider their investment in and support of MDU Resources while we continue Building a Strong America®.



David L. Goodin  
President and CEO  
MDU Resources Group, Inc.



# MDU RESOURCES GROUP, INC. ENVIRONMENTAL, SOCIAL AND GOVERNANCE INITIATIVES AND GOALS

## OUR COMMITMENT

MDU Resources Group manages its business with a long-term view toward sustainable operations, focusing on how economic, environmental and social impacts help the corporation continue Building a Strong America®.

We integrate sustainability efforts into our business strategy because these efforts directly affect long-term business viability and profitability. Our focus on sustainability makes our company a better corporate citizen while creating opportunities to increase revenues and profitability, create a competitive advantage, and attract a skilled and diverse workforce.

## Environment

A core value at MDU Resources is environmental stewardship. We are committed to doing our part to ensure a sustainable and low-carbon future. As part of this commitment, we continue to expand our disclosures and refine our environmental goals.

### MDU Resources Environmental Stewardship Goals

- **Know our carbon footprint.** A foundational step in continuing our journey is understanding our corporatewide carbon footprint. While we have reported carbon emissions from our electric generating fleet for many years, beginning January 1, 2022, we started tracking our Scope 1 and Scope 2 carbon emissions across MDU Resources. The company intends to have a corporatewide baseline of Scope 1 and Scope 2 carbon emissions for the year 2022, with reporting of that information in 2023.
- **Evaluate and establish corporatewide carbon emission intensity reduction goals.** With a baseline of Scope 1 and Scope 2 carbon emissions data established in 2022, we will in 2023 evaluate and establish corporatewide carbon emission intensity reduction goals, while maintaining safe, reliable and affordable service for our customers.

### Business Unit Environmental Goals

- **Achieve electric utility segment emission reduction targets.** We will continue working to achieve our electric generation target established in 2017 to reduce greenhouse gas emissions intensity by 45% by 2030 compared to 2005 levels. As of December 31, 2020, we had achieved an electric generation emissions reduction of 28% since 2005.
- **Collect methane emissions data.** We have been documenting all our natural gas utility distribution and pipeline businesses' methane emissions throughout 2021 and will report this data in our next sustainability report.
- **Establish a pipeline segment methane emission intensity reduction target.** With an emissions baseline established in 2021, the pipeline segment plans to establish a methane emission intensity reduction target that will be outlined in our next sustainability report.

### Ongoing Environmental Objectives

- Our electric utility segment will include renewables in our generation and fuel supply mix, balancing reliability and cost impacts to our customers.
- We support natural gas as a foundation fuel to provide a safe, reliable and resilient lower-carbon future.
- We will pursue the numerous opportunities in the clean energy infrastructure build-out for both our construction materials and services businesses.



## Social

MDU Resources is committed to employees' health and safety, and a culture that values, respects and supports each employee. We have a number of policies and practices that demonstrates our commitment to creating a safe and great place to work. Additionally, in 2020, we created the Diversity and Inclusion Taskforce to evaluate, educate and seek opportunities for continued improvement.

### MDU Resources Social Goals

- **Expand safety reporting.** We plan to expand our disclosures to include OSHA safety statistics for all business units in our next sustainability report.
- **Expand employee demographic data.** We began efforts in 2021 to ensure consistent data processes across our companies and expect this effort to continue into 2022. We plan to provide additional key employee demographics in our 2022 sustainability report.



## Details About This Report

In MDU Resources' sustainability reporting, the company uses the following guidelines:

- The Sustainability Accounting Standards Board's (SASB) Engineering & Construction Services framework for the company's construction services business.
- The Sustainability Accounting Standards Board's (SASB) Construction Materials framework for the company's construction materials and contracting business.
- The environmental, social, governance and sustainability reporting template developed by the Edison Electric Institute (EEI) and the American Gas Association (AGA) for the company's electric and natural gas utility business and its natural gas pipeline business, respectively.
- MDU Resources has begun incorporating Task Force on Climate-related Disclosures (TCFD) guidance into its reporting. An appendix of this report identifies information that is relevant to the TCFD guidance.

We intend over time to continue advancing our reporting efforts through frameworks relevant to our businesses and stakeholders or as directed by regulators.

Data contained in this report is as of December 31, 2020, unless otherwise indicated.

### Forward-Looking Statements

*Information contained in this report relating to environment, social and governance practices highlights key strategies, goals, projections and certain assumptions for the company and its subsidiaries. Some of these statements are "forward-looking statements" within the meaning of Section 21E of the Securities Exchange Act of 1934. Although the company believes that its expectations are based on reasonable assumptions, there is no assurance that the company's projections will in fact be achieved. Please refer to the various important factors listed in Part I, Item 1A - Risk Factors in the company's most recent Form 10-K and subsequent filings with the SEC. Changes in such factors could cause actual future results to differ materially from projections. All forward-looking statements are expressly qualified by such cautionary statements and by reference to the underlying assumptions. Undue reliance should not be placed on forward-looking statements, which speak only as of the date they are made. We do not undertake to update forward-looking statements, whether as a result of new information, future events or otherwise.*

*Inclusion of information in this report does not indicate the contents are necessarily material to investors or required to be disclosed in SEC filings.*



# COMPANY PROFILE

MDU Resources Group, Inc., a Fortune 500 company and a member of the S&P MidCap 400 and the S&P High-Yield Dividend Aristocrats indices, started as a small utility company in 1924, serving customers on the Montana-North Dakota border. Today, MDU Resources is Building a Strong America® across the country through our regulated energy delivery and construction materials and services businesses. Infrastructure is our business.

MDU Resources is headquartered in Bismarck, North Dakota, and as of December 31, 2020, employed 12,994 people. Employee numbers may reach more than 16,000 during peak construction season.

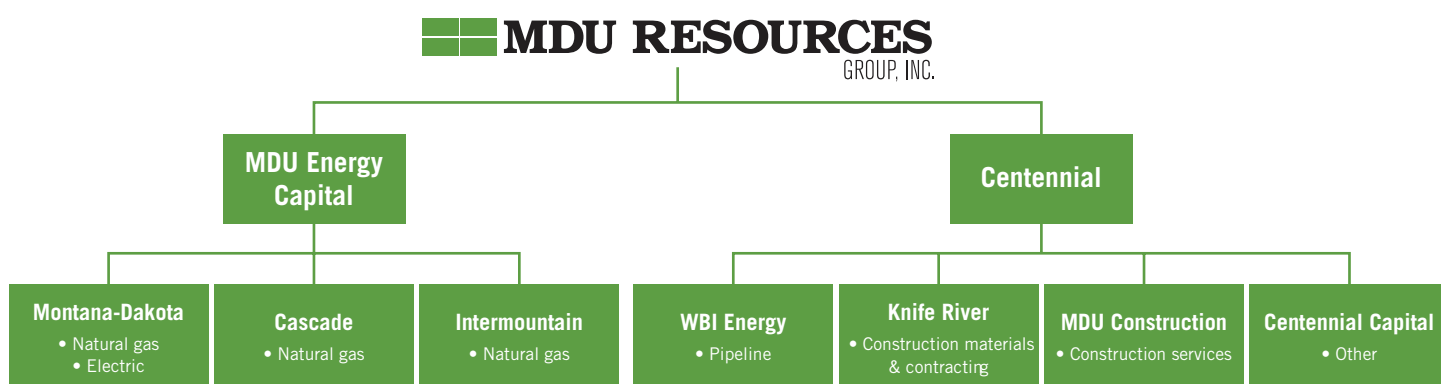
MDU Resources trades on the New York Stock Exchange under the symbol MDU. We began trading on the NYSE in 1948. As of December 31, 2020, there were 200.6 million weighted average common shares outstanding, diluted, and we had total assets of \$8.1 billion.

**Our Vision:** With integrity, Building a Strong America® while being a great and safe place to work.

**Our Mission:** Deliver superior value to stakeholders by providing essential infrastructure and services to America.

**Our Strategy:** Deliver superior value with a two-platform model of regulated energy delivery and construction materials and services, while pursuing organic growth opportunities and strategic acquisitions of well-managed companies and properties.

## Company Organizational Structure



*Depicts the segment structure of the corporation; not the legal organization.*

### MDU Resources' segments include:

- Electric and natural gas utilities operating under three brands: [Cascade Natural Gas Corporation](#), [Intermountain Gas Company](#) and [Montana-Dakota Utilities Co.](#)
- A natural gas pipeline and storage business with energy-related services, [WBI Energy, Inc.](#)
- A construction materials and contracting business, [Knife River Corporation](#).
- A construction services business, [MDU Construction Services Group, Inc.](#)
- Other.



## Utilities

The electric segment, Montana-Dakota Utilities, generates, transmits and distributes electricity in Montana, North Dakota, South Dakota and Wyoming. This segment served 143,782 customers at December 31, 2020.

The natural gas distribution segment includes Cascade Natural Gas, Intermountain Gas and Montana-Dakota Utilities, and distributes natural gas in Idaho, Minnesota, Montana, North Dakota, Oregon, South Dakota, Washington and Wyoming. These operations also supply related products and services. This segment served 997,146 customers at December 31, 2020.

Our companies:

[Cascade Natural Gas Corporation](#)

[Intermountain Gas Company](#)

[Montana-Dakota Utilities Co.](#)



## Pipeline

The pipeline segment, under WBI Energy, Inc., provides natural gas transportation through approximately 3,700 miles of regulated pipeline systems, mainly in the Rocky Mountain and northern Great Plains regions of the United States, as well as natural gas underground storage in Montana and Wyoming. This segment also includes a variety of other energy-related services such as cathodic protection and energy efficiency product sales and installation services. Volumes of natural gas transported through this segment's pipeline system have increased significantly over the past three years:

	2020	2019	2018
	(in thousand dekatherms)		
Natural Gas Volumes Transported	438,615	429,660	351,498

Our companies:

[WBI Energy, Inc.](#)

[WBI Energy Corrosion Services](#)

[WBI Energy Transmission, Inc.](#)





# Construction Materials and Contracting

The construction materials and contracting segment, [Knife River Corporation](#), with its subsidiaries, mines aggregates and markets crushed stone, sand, gravel and related construction materials, including ready-mixed concrete, cement, asphalt, liquid asphalt and other value-added products. It also performs integrated contracting services. Knife River operates in the central, southern and western United States and Alaska and Hawaii. Knife River has approximately 1.1 billion tons of aggregate reserves as of December 31, 2020.

Our operating companies include:

[Alaska Basic Industries, Inc.](#)

[Anchorage Sand & Gravel Company, Inc.](#)

[Baldwin Contracting Company, Inc. dba Knife River Construction](#)

[Concrete, Inc. dba Knife River](#)

[Connolly-Pacific Co.](#)

[DSS Company dba Knife River Construction](#)

[Fairbanks Materials, Inc.](#)

[Granite City Ready Mix, Inc. dba Knife River Materials](#)

[Hawaiian Cement](#)

[Jebro Incorporated](#)

[JTL Group, Inc. dba Knife River](#)

[Kent's Oil Service dba Pacific Northwest Oil](#)

[Knife River Corporation](#) — Midwest

[Knife River Corporation](#) — Mountain West

[Knife River Corporation](#) — Northwest

[Knife River Corporation](#) — North Central

[Knife River Corporation](#) — South

[LTM, Incorporated dba Knife River Materials](#)

[Northstar Materials, Inc. dba Knife River](#)

[Rail to Road, Inc.](#)

[Sweetman Construction Co. dba Concrete Materials](#)

[WHC, Ltd. dba West Hawaii Concrete](#)



## Construction Services

The construction services segment, MDU Construction Services Group, Inc., with its subsidiaries, provides a full spectrum of construction solutions, from transmission and distribution line construction to electrical, mechanical and fire suppression systems, as well as underground utilities and excavation.

Our operating companies include:

[Bell Electrical Contractors, Inc.](#)

[Bombard Electric, LLC](#)

[Bombard Mechanical, LLC](#)

[Capital Electric Construction Company, Inc.](#)

[Capital Electric Line Builders, Inc.](#)

[Desert Fire Protection, LLC](#)

[Duro Electric Company](#)

[E.S.I., Inc.](#)

[International Line Builders, Inc.](#)

[Lone Mountain Excavation & Utilities, LLC](#)

[Loy Clark Pipeline Co.](#)

[OEG, Inc.](#)

[PerLectric Inc.](#)

[Rocky Mountain Contractors, Inc.](#)

[USI Industrial Services, Inc.](#)

[Wagner-Smith Equipment Co.](#)

## Other

Centennial Holdings Capital insures various risks as a captive insurer for certain of MDU Resources' subsidiaries, and it owns certain real and personal property.





# GOVERNANCE

MDU Resources is committed to strong corporate governance practices. As outlined in our annual proxy statement, a stand-alone Environmental and Sustainability Committee of the Board of Directors was created in 2019. The Environmental and Sustainability Committee oversees and provides recommendations to the board with respect to the company's policies, strategies, public policy positions, programs and performance related to environmental, workplace health, safety, human capital and other social sustainability matters.

MDU Resources in 2021 created a Sustainability Committee, which is comprised of corporate and business unit senior executives. The Sustainability Committee supports execution of the company's environmental and sustainability strategy and establishes, maintains and enhances the processes, procedures and controls for the company's environmental and sustainability disclosures.

MDU Resources is Building a Strong America® by providing essential products and services to our customers with a long-term view toward sustainable operations. To ensure we can continue to provide these products and services in the communities where we do business, we recognize we must preserve the trust our communities place in us to be a good corporate citizen. We remain committed to pursuing responsible corporate environmental and sustainability practices and to maintaining the health and safety of the public and our employees.

For more detailed information about the company's governance practices and policies, please see our most recent annual proxy statement. These are highlights of our governance practices:

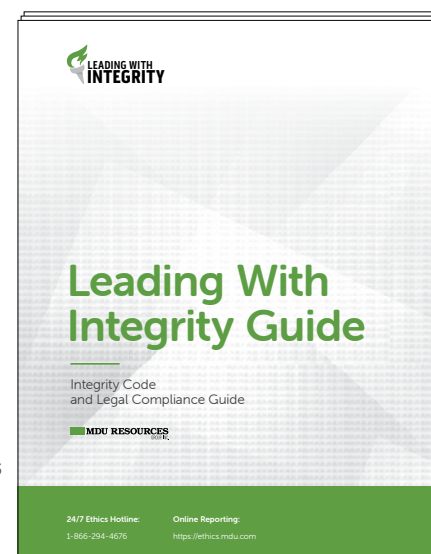
- Annual election of all directors.
- Majority voting for directors.
- Succession planning for executive officers.
- Separate board chair and CEO.
- Executive sessions of independent directors at every regularly scheduled board meeting.
- Annual board and committee self-evaluations.
- Risk oversight by full board and committees.
- All directors are independent, other than our CEO.
- "Proxy Access" allowing shareholders to nominate directors in accordance with the terms of our bylaws.
- Standing committees consist entirely of independent directors.
- Active investor outreach program.
- Stock ownership requirements for directors and executive officers.
- Anti-hedging and anti-pledging policies for directors and executive officers.
- No related-party transactions by our directors or executive officers.
- Compensation recovery/clawback policy.
- Annual advisory approval on executive compensation.
- Mandatory retirement for directors at age 76.
- Directors may not serve on more than three public boards, including our board.

## Integrity Code

MDU Resources' corporate code of conduct, or "Integrity Code," outlined in our ["Leading With Integrity Guide,"](#) provides a summary of the expected behaviors that guide our employees to perform all matters with integrity.

Through the Integrity Code, MDU Resources makes a commitment to:

- **Integrity** — Employees will conduct the corporation's business legally and ethically with their best skills and judgment.
- **Shareholders** — Employees will act in the best interests of the corporation and protect its assets.
- **Employees** — Employees will work together to provide a safe and positive workplace.
- **Customers, Suppliers and Competitors** — MDU Resources will compete in business only by lawful and ethical means.
- **Communities** — MDU Resources will be a responsible and valued corporate citizen.



## Board of Directors

MDU Resources' [Board of Directors](#) is made up of five men and four women. As of December 31, 2020, they range in age from 50 to 71.

Dennis W. Johnson is chair of MDU Resources' Board of Directors. Johnson has served on the board for 20 years.

MDU Resources has been recognized for gender diversity on the Board of Directors. 50/50 Women on Boards® recognized MDU Resources as a "3+" company for having three or more women on its board, and Women's Forum of New York recognized MDU Resources for accelerating gender parity in the boardroom.

MDU Resources' Board of Directors, as a whole and through its committees, has responsibility for oversight of the company's risk management. Management is responsible for identifying material risks, implementing appropriate risk management processes, and providing information regarding material risks and risk management to the board. The board has the responsibility to satisfy itself that the risk management processes designed and implemented by company management are adequate for identifying, assessing and managing risk. Management regularly provides risk assessment and mitigation reports to the Audit Committee or the full board. This provides opportunities for discussions about areas in which the company may have material exposure, steps taken to manage such exposure, and the company's risk tolerance relative to company strategy. For more information about risks MDU Resources faces, see the Risk Factor section of MDU Resources' most recent [10-K](#).



Dennis W. Johnson is chair of MDU Resources' Board of Directors

MDU Resources' board chair and the company's president and CEO meet monthly to discuss strategy and risks. Each quarter, the Board of Directors receives presentations on key risks our operating companies face. The board chair, chairs of the board committees and executive management meet throughout the year to identify and assess emerging, critical enterprise risks. The board receives updates on previously reported issues and company actions to mitigate the risks. The board also is apprised of ongoing activities through monthly financial and operational reports, as well as through quarterly meetings with the president and CEO that occur between regularly scheduled quarterly board meetings. These reports and meetings keep the board informed on operational performance, business development activity, financial performance, new initiatives, emerging issues and risks, and material litigation updates. Directors are encouraged to contact senior management with questions. Senior management annually presents an assessment to the board of critical enterprise risks that threaten the company's strategy and business model, including risks inherent in the key assumptions underlying the company's business strategy for value creation.



Periodically, the board receives presentations from external experts on matters of strategic importance. At least annually, the board holds strategic planning sessions with senior management to discuss strategies, key challenges, and risks and opportunities for the company.

While the board is ultimately responsible for risk oversight at MDU Resources, the four standing board committees assist in fulfilling oversight responsibilities in certain areas of risk.

- The [Audit Committee](#) assists the board in fulfilling its responsibilities with respect to risk management in a general manner and specifically in the areas of financial reporting, internal controls, cybersecurity, and compliance with legal and regulatory requirements. It also, in accordance with New York Stock Exchange requirements, discusses with the board the risk assessment and risk management policies and their adequacy and effectiveness. The Audit Committee receives regular reports on the company's compliance program, including reports received through the company's anonymous reporting hotline. It also receives reports and regularly meets with the company's external and internal auditors.
- The [Compensation Committee](#) assists the board in fulfilling its oversight of risks relative to company compensation policies and programs.
- The [Nominating and Governance Committee](#) assists the board in oversight of risks associated with board organization, membership and structure, succession planning for directors and executive officers, and corporate governance.
- The [Environmental and Sustainability Committee](#) assists the board with oversight of policies, strategies, public policy positions, programs and performance related to environmental, workplace health and safety, and other social sustainability matters and related laws, regulations and developments.

## Governance of Climate Risks and Opportunities

### Board of Directors Environmental and Sustainability Committee

The Environmental and Sustainability Committee of the Board of Directors helps fulfill the board's oversight risk management responsibilities for environmental, health, safety and other social sustainability matters that affect MDU Resources' business interests and long-term viability. The committee's responsibilities include reviewing significant risks and exposures to current and emerging environmental and social sustainability matters, including climate change, and discussing with management and overseeing actions taken in response. The committee also reviews MDU Resources' efforts to integrate social, environmental and economic principles, including climate change, greenhouse gas emissions management, energy, water, and waste management, product and service quality, reliability, customer care and satisfaction, public perception, and company reputation, into the company's strategy and operations.

### Executive Sustainability Committee

In 2021, MDU Resources established a Sustainability Committee. The committee is comprised of corporate and business unit senior executives. It supports execution of our environmental and sustainability strategy and establishes, maintains and enhances the processes, procedures, methods and controls for our environmental and sustainability disclosures.

### Company Officers

MDU Resources' corporate management team, referred to as the [Management Policy Committee](#), is made up of six men and four women who, at December 31, 2020, ranged in age from 42 to 65.

Officers of MDU Resources are elected by the Board of Directors and include a president, chief executive officer, vice presidents, treasurer, general counsel and secretary.

MDU Resources President and CEO David L. Goodin has been with the corporation for 38 years. He serves on the Board of Directors and as chair of the board of the corporation's major subsidiary companies. He was formerly the president and CEO of MDU Resources' utility companies.

### Compliance Program

MDU Resources has a robust program to promote a culture of legal and ethical compliance, consistent with the right tone at the top, to mitigate risk. The program includes training and adherence to our code of conduct and "[Leading With Integrity Guide](#)."

## Grievance Reporting

MDU Resources has a Compliance Reporting and Investigation Policy, which also covers whistleblower protection. Employees are encouraged to report if they have concerns that something may be unethical or illegal within the company. Employees can report concerns to their manager, human resources representative, a company executive or their compliance officer. We also have an [ethics hotline reporting tool](#) that provides anonymous reporting.

Our ethics hotline is a telephone- and internet-based third-party system. Employees, customers and other stakeholders can report confidentially and anonymously any concerns about possible unethical or illegal activities. Reports are carefully considered and investigated, with reports and investigative summaries provided to the Board of Directors. Anyone who wishes to file an anonymous report can call 1-866-294-4676 or visit <http://ethics.mdu.com>.

## Public Policy Participation

### Employee Participation in Politics

MDU Resources' corporate policy on Employee Participation in Political Affairs encourages employees to actively exercise their individual citizenship responsibilities, including voting, serving in civic bodies, keeping informed on political matters, volunteering time for political causes, contributing financially to the corporate political action committee, contributing financially to a political party or candidates, campaigning for a political party or public office, and holding a political party or public office.

The policy also says an employee engaging in political activity does so as a private citizen and not as a representative of the company. Also, to avoid potential job-related conflicts, an employee who wants to seek public office or serve in a civic body must consult with his or her manager prior to seeking such office or position.

### Communications and Public Affairs Department

MDU Resources' Communications and Public Affairs Department provides public affairs and lobbying services for MDU Resources and its companies. The department actively monitors, tracks and testifies on legislation affecting company and business interests, and spends approximately \$250,000 per year on lobbying efforts.

The department works closely with state and national trade associations, various state chambers and other industry groups that share the company's position on issues of interest.

Department staff members encourage MDU Resources' employees to stay informed on political activities.

### Good Government Fund PAC

The MDU Resources Good Government Fund is a political contributions program for eligible employees. It is a voluntary, not-for-profit political action committee organized to encourage the financial participation of eligible employees in state and federal election processes.

The purpose of the Good Government Fund is to receive personal contributions from eligible MDU Resources employees and directors and make contributions to candidates for local, state and federal office who support the private enterprise system and the interests of MDU Resources' constituencies.

Good Government Fund members have the opportunity to recommend contributions to candidates. The Good Government Fund board of directors reviews all contribution recommendations. The MDU Resources Board of Directors receives an annual report on the Good Government Fund contributions.

Whenever possible, Good Government Fund contributions are delivered in person, directly to the candidate, which gives MDU Resources employees an opportunity to describe firsthand the issues that are important to them. It supports deserving candidates from any political party whose voting record or beliefs support MDU Resources' interests.





# ENVIRONMENT

Because we know having a sound, stable environment is critical to continuing our businesses, MDU Resources Group operates in a way that minimizes impacts and promotes conservation while maximizing resource use in meeting our customers' needs.

Some of MDU Resources' efforts include engaging in wildlife protection practices, promoting emission reduction and fuel conservation, working with wildlife regulatory agencies, developing water enhancement practices, protecting water quality, controlling and preventing the spread of noxious weeds, reducing noise, and implementing programs to develop and enhance public spaces in the communities we serve.

MDU Resources operates with three primary environmental goals:

- Minimize waste and maximize resources.
- Be a good steward of the environment, while providing high-quality and reasonably priced products and services.
- Comply with or surpass all applicable environmental laws, regulations and permit requirements.

We recently expanded our environmental goals to include:

- **Know our carbon footprint.** A foundational step in continuing our journey is understanding our corporatewide carbon footprint. While we have reported carbon emissions from our electric generating fleet for many years, beginning January 1, 2022, we started tracking our Scope 1 and Scope 2 carbon emissions across MDU Resources. The company intends to have a corporatewide baseline of Scope 1 and Scope 2 carbon emissions for the year 2022, with reporting of that information in 2023.
- **Evaluate and establish corporatewide carbon emission intensity reduction goals.** With a baseline of Scope 1 and Scope 2 carbon emissions data established in 2022, we will in 2023 evaluate and establish corporatewide carbon emission intensity reduction goals, while maintaining safe, reliable and affordable service for our customers.
- **Collect methane emissions data.** We have been recording all our natural gas utility distribution and pipeline businesses' methane emissions throughout 2021 and will report this data in our next sustainability report.
- **Establish a pipeline segment methane emission intensity reduction target.** With an emissions baseline established in 2021, the pipeline segment plans to establish a methane emission intensity reduction target that will be outlined in our next sustainability report.

We continue making progress on our electric generation emissions reduction goal, established in 2017:

- **Reduce electric generation emissions.** Reduce greenhouse gas emissions intensity 45% by 2030 compared to 2005 levels. As of December 31, 2020, we had achieved an electric generation emissions reduction of 28% since 2005.

We strive to meet these goals through established operational practices and by leading or participating in a number of programs that help ensure a viable environment.

MDU Resources' pledge to operate in an environmentally responsible manner is reviewed and encouraged through several measures, including oversight by professional environmental staff with reporting and direct accountability to the CEOs at our business units, regular review by the Environmental and Sustainability Committee of the Board of Directors, through audits of operating activities and through property reviews during due diligence on potential acquisitions.

## Environmental Policy

MDU Resources' corporate policy addresses environmental practices. The [environmental policy](#), as adopted by the Board of Directors, directs that the corporation will operate efficiently to meet the needs of the present without compromising the ability of future generations to meet their needs.

Our company environmental leaders have responsibility for administering the environmental policy, and our company officers are responsible for compliance.





## Electric and Natural Gas Utilities

MDU Resources Group's utility companies serve approximately 1.14 million customers. [Cascade Natural Gas Corporation](#) distributes natural gas in Oregon and Washington. [Intermountain Gas Company](#) distributes natural gas in southern Idaho. [Montana-Dakota Utilities Co.](#), and its division [Great Plains Natural Gas Co.](#), distributes natural gas in Minnesota, Montana, North Dakota, South Dakota and Wyoming. Montana-Dakota Utilities also generates, transmits and distributes electricity in Montana, North Dakota, South Dakota and Wyoming. These operations also supply related value-added services.

MDU Resources' utility companies' customer base is expected to continue to grow at a rate of 1-2% per year. Our utility companies strive to maintain compliance and operate in an environmentally proactive manner, while taking into consideration reliability and the cost to customers.

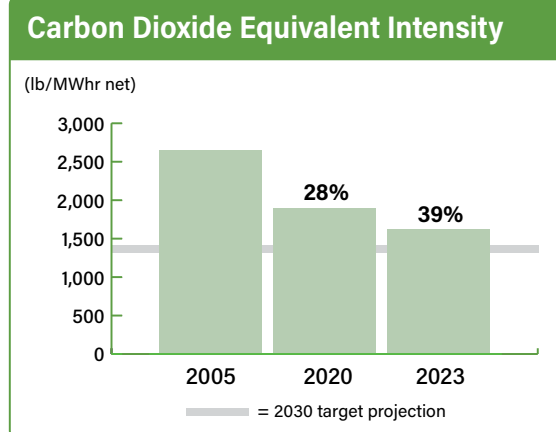
Montana-Dakota Utilities Co., a subsidiary of MDU Resources, in 2021 conducted a climate assessment according to Task Force on Climate-Related Financial Disclosures (TCFD) guidance specific to its electric generation operations. A summary of that assessment can be found in the Montana-Dakota Utilities Climate Assessment Report on MDU Resources' website at [www.MDU.com/sustainability](http://www.MDU.com/sustainability).

## Electric Operations

Montana-Dakota Utilities provides electric service at retail, serving 143,782 residential, commercial, industrial and municipal customers in 185 communities and adjacent rural areas in Montana, North Dakota, South Dakota and Wyoming as of December 31, 2020.

As of December 31, 2020, renewable resources comprised approximately 27% of Montana-Dakota Utilities' electric generation resource nameplate capacity. As its renewable generation resource capacity has increased, the carbon dioxide emission intensity of its electric generation resource fleet has been reduced by approximately 28% since 2005.

MDU Resources has a target, through its electric utility, to reduce greenhouse gas emissions intensity by 45% by 2030 compared to 2005 levels from its generating facilities. Montana-Dakota Utilities intends to achieve this target through continued diversity in its electric generating fleet, including through retirement of aging coal-fired generating units. The chart shows Montana-Dakota Utilities' progress, and anticipated progress resulting from the recent retirement of one coal-fired generating unit and the planned retirement of two additional coal-fired electric generating units, in reaching its intensity target.



The [principal properties owned by Montana-Dakota Utilities](#) as of April 1, 2021, for use in our electric operations include interests in 16 electric generating units at 11 facilities and two small portable diesel generators, approximately 3,400 miles of transmission lines and 4,900 miles of distribution lines, and 81 transmission and 298 distribution substations. At December 31, 2020, Montana-Dakota Utilities' net electric plant investment was \$1.5 billion and its rate base was \$1.3 billion.

Retail electric rates, service, accounting and certain security issuances are subject to regulation by the public service or public utility commission in each state where Montana-Dakota Utilities operates. The interstate transmission and wholesale electric power operations of Montana-Dakota Utilities also are subject to regulation by the Federal Energy Regulatory Commission under provisions of the Federal Power Act, as are interconnections with other utilities and power generators, the issuance of certain securities, accounting and other matters.

Through Midcontinent Independent System Operator Inc. (MISO), Montana-Dakota Utilities has access to wholesale energy, ancillary services and capacity markets for the company's interconnected system. MISO is a regional transmission organization responsible for operational control of the transmission systems of its members. MISO provides security center operations, tariff administration and operates day-ahead and real-time energy markets, ancillary services and capacity markets. As a member of MISO, Montana-Dakota Utilities' generation is sold into the MISO energy market and its energy needs are purchased from that market.

Through an interconnected electric system, Montana-Dakota Utilities serves markets in portions of western North Dakota, eastern Montana and northern South Dakota. These markets are highly seasonal and sales volumes depend largely on weather. Additionally, average customer consumption has tended to decline with higher use of energy-efficient lighting and appliances. The interconnected system consists of 15 electric generating units at 10 facilities and two small portable diesel generators, which had an aggregate nameplate rating in 2020 attributable to Montana-Dakota Utilities' interest of 750,318 kilowatts and total net zonal resource credits of 512.3. Zonal resource credits are a megawatt demand equivalent measure and are allocated to individual generators to meet planning reserve margin requirements within MISO. For 2020, Montana-Dakota Utilities' total zonal resource credits, including its firm purchase power contracts, were 553.2. Montana-Dakota Utilities' planning reserve margin requirement within MISO was 531.4 for 2020.

The maximum electric peak demand experienced to date attributable to Montana-Dakota Utilities' sales to retail customers on the interconnected system was 611,542 kilowatts in August 2015. Montana-Dakota Utilities' latest forecast for its interconnected system indicates that the annual peak will continue to occur during the summer and the sales growth rate through 2023 will be approximately 2% annually.

Montana-Dakota Utilities' interconnected system electric generating capability includes three steam-turbine generating units at three facilities using coal for fuel; four combustion turbine units that combust natural gas or fuel oil, depending on the unit and time of year, at three facilities; three wind electric generating facilities; two natural gas-fired reciprocating internal combustion engines at one facility; a heat recovery electric generating facility; and two small portable diesel generators.

Additional energy is purchased as needed, or in lieu of generation if more economical, from the MISO market. In 2020, Montana-Dakota Utilities purchased approximately 25% of its net kilowatt-hour needs through the MISO market.

Montana-Dakota Utilities also serves electricity to Sheridan, Wyoming, and neighboring communities in the Western Electricity Coordinating Council jurisdiction. The maximum peak demand experienced to date attributable to Montana-Dakota Utilities' sales to retail customers on that system was approximately 64,129 kilowatts in July 2020. Montana-Dakota Utilities has a power supply contract through December 31, 2023, with Black Hills Power Inc. to purchase up to 49,000 kilowatts of capacity annually. Montana-Dakota Utilities is a 25% co-owner of Wygen III, a coal-fired electric generating unit near Gillette, Wyoming, that serves a portion of the needs of its Sheridan-area customers.



## Retirement of Coal Facilities

In February 2019, Montana-Dakota Utilities announced the retirement of three aging coal-fired electric generating units. Lewis & Clark Station Unit 1 ceased operations March 31, 2021. The retirement of Units 1 and 2 at Heskett Station are expected to be complete in early 2022.

Montana-Dakota Utilities also announced its intent to construct a new 88-megawatt simple-cycle natural gas-fired combustion turbine peaking unit at the Heskett Station site in Mandan, North Dakota. On February 16, 2021, the company obtained a final Permit to Construct from the North Dakota Department of Environmental Quality. The new generation resource was selected as part of Montana-Dakota Utilities' 2019 Integrated Resource Plan process. Additional information about Montana-Dakota Utilities' electric load forecasting, demand and supply analysis, and risk analysis can be found in the Integrated Resource Plan at <https://www.montana-dakota.com/rates-services/electric-generation/>.



### Electric Environmental Matters

Montana-Dakota Utilities’ electric operations are subject to federal, state and local laws and regulations providing for air, water and solid waste pollution control; state facility-siting regulations; zoning and planning regulations of certain state and local authorities; federal health and safety regulations; and state hazard communication standards. Montana-Dakota Utilities believes it is in substantial compliance with these regulations.

Montana-Dakota Utilities’ electric generating facilities have Title V Operating Permits, under the federal Clean Air Act, issued by the states in which they operate. Each of these permits has a five-year life. Montana-Dakota Utilities submits renewal applications when these permits near their expiration. Permits continue in force beyond the expiration date, provided the application for renewal is submitted by the required date, usually six months prior to expiration.

State water discharge permits issued under the requirements of the federal Clean Water Act are maintained for power production facilities on the Yellowstone and Missouri rivers. Each of these permits has a five-year life. Montana-Dakota Utilities renews these permits as necessary prior to expiration. Other permits held by these facilities may include an initial siting permit, which is typically a one-time, preconstruction permit issued by the state; state permits to dispose of combustion byproducts; state authorizations to withdraw water for operations; and U.S. Army Corps of Engineers permits to construct water intake structures. Montana-Dakota Utilities’ Army Corps permits grant one-time permission to construct and do not require renewal. Other permit terms vary and the permits are renewed as necessary.

### Hazardous Waste

Montana-Dakota Utilities’ electric operations are very small-quantity generators of hazardous waste and subject only to minimum regulation under the Resource Conservation and Recovery Act.

### PCB Elimination

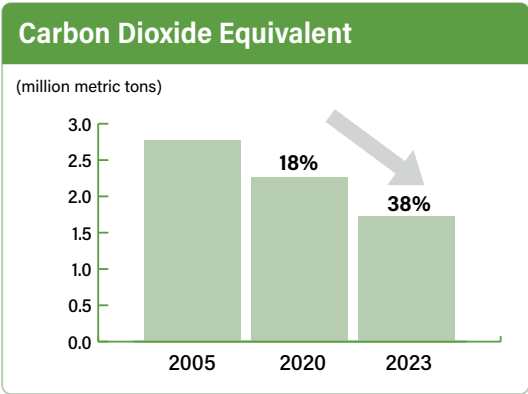
Montana-Dakota Utilities routinely handles polychlorinated biphenyls from its electric operations in accordance with federal requirements. It has a policy of proactively identifying and eliminating PCBs from company electric transmission and distribution system equipment.

In 2016, Montana-Dakota Utilities began a multiyear project to expedite removal of PCB-regulated distribution system transformers and continues to make annual progress on this effort. Through 2020, the project is nearly complete. Continuing efforts to remove these units from service helps avoid potential impacts to the environment from PCB spills and reduces company risk.

PCB storage areas are registered with the U.S. Environmental Protection Agency (EPA) as required.

### Electric Generation Emissions Reductions

Since 2005, Montana-Dakota Utilities has reduced greenhouse gas emissions from its electric generating facilities through a variety of efforts, including retiring older coal-fired generation plants. The following charts show its progress and anticipated progress resulting from the recent retirement of one coal-fired electric generating unit and the planned retirement of two coal-fired electric generating units.





### Coal Combustion Residuals Management

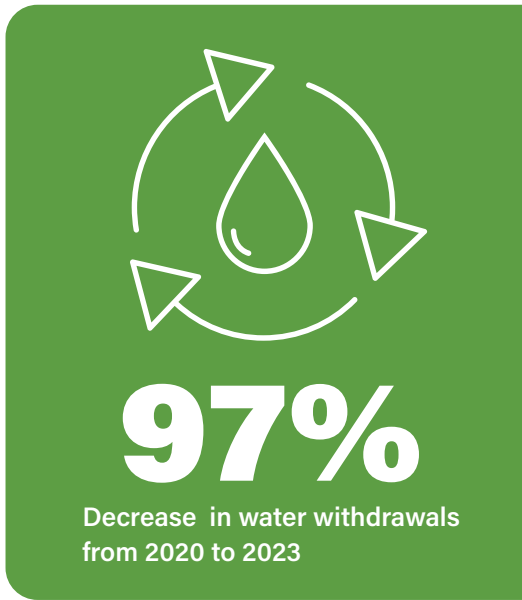
Montana-Dakota Utilities complies with Coal Combustion Residual rule requirements at its coal-fired electric generating facilities. The rule requires proper management of coal ash and groundwater monitoring and may require a facility to conduct corrective action for impoundments and landfills.

Several projects have been completed at Montana-Dakota Utilities’ owned and co-owned coal-fired electric generation resources for compliance with rule requirements. These projects include pond closures, temporary storage pad closures, a pond retrofit, and bottom ash handling system retrofits.

### Water Use

Montana-Dakota Utilities’ electric generating facilities use water from rivers, lakes and wells for various processes. The majority of water its facilities remove from water bodies is used for non-contact cooling purposes and is discharged back to the water bodies. Some facilities have once-through cooling, which requires water to be withdrawn and discharged continuously, and some plants use cooling towers and air-cooled condensers that require periodic withdrawals of water. Usually, no chemicals are added to water used for once-through cooling.

A smaller portion of water is withdrawn from a water body for use in an electric generating facility’s condenser, air emissions scrubbing process or in other smaller plant operations. Cooling water or process wastewater that is returned to surface waters is discharged in compliance with National Pollutant Discharge Elimination System permit requirements. Water withdrawals from the company's ownership in electric generating facilities have been and will continue to be significantly reduced starting in 2021 as Lewis & Clark Station Unit 1 ceased operations on March 31, 2021, and Heskett Station Units 1 and 2 are expected to be retired in early 2022. By 2023, as a result of retiring these generating units, water withdrawals are projected to decrease about 97% compared to 2020 levels.



Water Withdrawals (billion liters)	2023 (projected)	2020	2015	2005
Consumptive	2.2	2.4	1.8	3.9
Non-Consumptive	0.09	106	112	113.5



7.5-megawatt Glen Ullin Waste Heat electric generation facility near Glen Ullin, North Dakota, which uses waste heat from a pipeline compressor station to produce electricity.

## Renewable Energy

Montana-Dakota Utilities has been involved with renewable energy analysis and development for many years and has several renewable energy installations. The company has 205 megawatts of installed wind generation capacity at three locations, providing more than 25% of customers' electric energy requirements in 2020. Montana-Dakota Utilities also owns a 7.5-megawatt heat recovery facility in south-central North Dakota, which uses high-temperature exhaust gas as the primary heat source. Because waste heat is used to drive this generating facility, no additional fossil fuel is required and incremental emissions to generate electricity are negligible.

Montana-Dakota Utilities' owned renewable generation facilities include:

- 155-megawatt Thunder Spirit Wind farm near Hettinger, North Dakota.
- 30-megawatt Diamond Willow Wind farm near Baker, Montana.
- 19.5-megawatt Cedar Hills Wind farm near Rhame, North Dakota.
- 7.5-megawatt Glen Ullin Waste Heat electric generation facility near Glen Ullin, North Dakota, which uses waste heat from a pipeline compressor station to produce electricity.

## Carbon Sequestration Research

Montana-Dakota Utilities has been active in researching options for carbon dioxide capture, sequestration and beneficial uses. It has been a member of the Plains CO<sub>2</sub> Reduction Partnership since the partnership's inception in 2003. The partnership is led by the Energy and Environmental Research Center at the University of North Dakota and is one of seven regional partnerships across the United States. More information about the partnership and its achievements is available at [www.undeerc.org/pcor](http://www.undeerc.org/pcor).

Montana-Dakota Utilities also has been a member of the Partnership for CO<sub>2</sub> Capture project since 2014, which also is led by the Energy and Environmental Research Center. The Partnership for CO<sub>2</sub> Capture provides support of pilot-scale demonstrations and researches and evaluates promising CO<sub>2</sub> capture technologies that can enhance the cost and performance of CO<sub>2</sub> capture systems.

Montana-Dakota Utilities has actively participated in environmental workgroups of the North Dakota Lignite Energy Council, such as the Lignite Technology Development Workgroup and the Environmental Workgroup. In recent years, these workgroups have focused on CO<sub>2</sub>-related issues such as lignite gasification, oxyfuel combustion, pre- and post-combustion CO<sub>2</sub> capture technologies and beneficial uses of CO<sub>2</sub>.

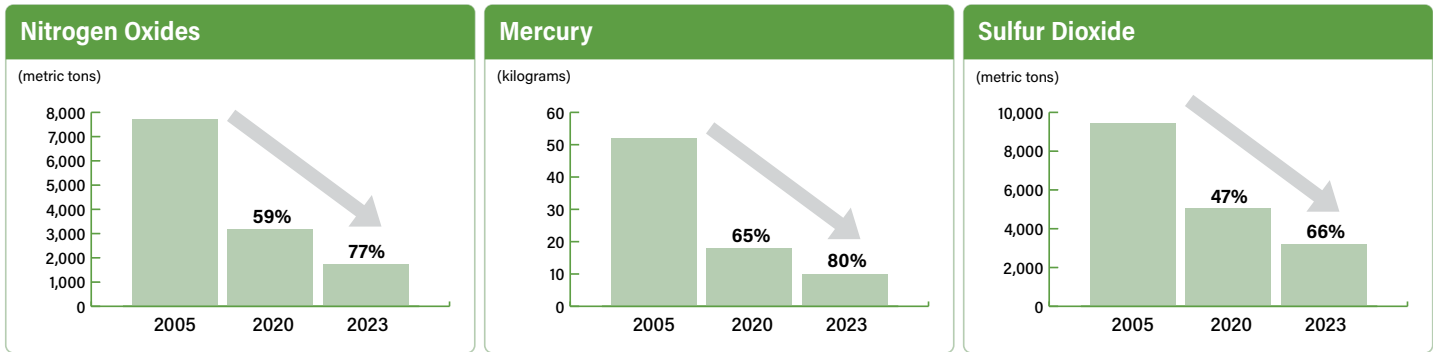


### Environmental-Related Investments

Montana-Dakota Utilities has invested approximately \$168 million in environmental emission control equipment and other pollution control improvement at its coal-fired electric generation plants since 2005. The investments have resulted in substantial reductions in mercury, SO2, NOX and filterable particulate from these plants.

In 2020, Montana-Dakota Utilities incurred \$800,000 of environmental capital expenditures for its electric operations, mainly for an embankment stabilization project at Lewis & Clark Station and coal ash management projects at Lewis & Clark Station and Coyote Station. Additional environmental capital expenditures are planned in the next three years for various environmental projects, including a coal ash impoundment closure project at Lewis & Clark Station and coal ash landfill closure project at Heskett Station, to coincide with retirement of Montana-Dakota Utilities’ coal-fired electric generating facilities.

Montana-Dakota Utilities’ capital and operational expenditures could be affected by future air emission regulations, such as regional haze emission reductions.



### Electric Utility Customer Energy Efficiency and Conservation Programs

Montana-Dakota Utilities actively pursues programs to increase energy efficiency and conservation for electric residential and commercial customers, and partners with local community action agencies in providing low-income assistance for utility customers. State regulatory agencies also set program requirements, in some circumstances, to which our utility companies must adhere. The total kilowatt-hour savings from electric energy efficiency and conservation programs completed in 2020 was about 1.42 million kilowatt hours, equating to a reduction of more than 1,000 metric tons of CO2 equivalent.

Montana-Dakota Utilities has residential and commercial incentive programs in Montana that promote installation of energy-efficient electric equipment. It also has commercial demand-response programs in its electric service areas in Montana, North Dakota and South Dakota. These programs include interruptible rates and an electric demand-response program in which customers can enroll.

Also, in 2017, Montana-Dakota Utilities started an LED conversion program for company-owned public street lighting and private lighting services throughout its service territory to reduce energy usage and thus help reduce emissions. The project concluded in early 2021 with more than 25,585 energy-saving LED lights installed, resulting in approximately 17.6 million kilowatt hours in annual energy savings, which is the equivalent of approximately 13,775 metric tons of CO2 emissions reduced annually.

## Natural Gas Distribution Operations

MDU Resources' natural gas distribution operations consist of Montana-Dakota Utilities, Cascade Natural Gas and Intermountain Gas, which sell natural gas at retail, serving 997,146 residential, commercial and industrial customers in 340 communities and adjacent rural areas across eight states as of December 31, 2020, and provide natural gas transportation services to certain customers on the company's systems.

These services are provided through distribution systems aggregating approximately 20,600 miles. At December 31, 2020, the natural gas distribution operations' net natural gas distribution plant investment was \$2.0 billion and rate base was \$1.3 billion.

These companies are subject to regulation regarding retail sales, service, accounting and certain security issuances by the state public service or public utility commission in each state where they operate.

Montana-Dakota Utilities, Cascade Natural Gas and Intermountain Gas and various distribution transportation customers obtain their natural gas directly from natural gas producers, processors and marketers. Demand for natural gas, which is a widely traded commodity, has historically been sensitive to seasonal heating and industrial load requirements as well as changes in market price. Our companies believe that, based on current and projected domestic and regional supplies of natural gas and the pipeline transmission network currently available through their suppliers and pipeline service providers, supplies are adequate to meet system natural gas requirements for at least the next decade.

## Utility Pipeline Management Programs

The U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA) required utilities to have a Distribution Integrity Management Program (DIMP), effective February 12, 2010. Operators were given until August 2, 2011, to write and implement a DIMP that demonstrates an understanding of the distribution system design and material characteristics; describes the operating conditions and environment; provides the maintenance and operating history; identifies existing and potential threats; evaluates and ranks risks; identifies and implements measures to address risks; measures program performance; monitors results; evaluates effectiveness; and periodically assesses and improves the plan. Threats that are identified and evaluated in the DIMP include: corrosion, natural forces, excavation damage, other outside force damage, material, weld or joint failure, equipment failure, incorrect operation, missing data and "other" (forces unique to a particular area on the system).

PHMSA rules required creation and implementation of a Transmission Integrity Management Plan (TIMP) by December 17, 2004. The purpose of TIMP is to identify, prioritize, assess, evaluate, repair and validate the integrity of transmission pipelines that could, in the event of a leak or failure, affect High Consequence Areas. The threats that are identified and evaluated in the TIMP include: corrosion (external, internal, stress corrosion cracking), material, construction, equipment, excavation damage, incorrect operations, vandalism, weather and outside forces, and cyclical fatigue.

As part of the utility companies' DIMP and TIMP plans, a risk analysis was created and is maintained. Information collected as part of the DIMP and TIMP are input into the risk analysis to find areas of concern and trends. This allows the utility companies to quantify the risk associated with each pipeline and identify pipelines that should be addressed. When replacement locations are identified, specific projects within these areas are planned and prioritized. This helps ensure the replacement of pipeline segments with an elevated risk within the identified areas. The utility companies continuously obtain new information for their DIMP and TIMP risk analysis and Pipeline Replacement Plan (PRP) through the following methods:

- Observing trends. DIMP and TIMP are analyzed on an annual basis. The analysis includes reviewing leak information, failure analysis and system condition data to identify trends. The analysis provides insight into the risks associated with pipe identified as having an elevated risk of failure that are included in the PRP plan.
- New information related to the physical attributes or operation and maintenance is gathered through normal activities using forms or other methods. This information is integrated into the DIMP and TIMP.
- Subject matter expert panel meetings. These meetings are held on a periodic basis. Information from the meetings is used to validate the DIMP and TIMP risk analysis and new information is input into the DIMP and TIMP risk analysis.

- Annual updates of the DIMP and TIMP risk analysis. Results of the risk analysis are used to prioritize pipeline replacement projects.
- Continuous improvement. The assessment, prioritization and mitigation of system risks continue to be refined as new and additional risk knowledge is incorporated into DIMP and TIMP through normal activities. Activities related to DIMP and TIMP could include gathering data, conducting targeted inspections and assessments, and completing remediation and replacement work associated with integrity management programs.

## Utility Pipeline Safety Management System

The utility companies also have a pipeline safety management system that is a comprehensive, continuous-improvement program designed to promote a safety culture dedicated to employee protection, public safety and environmental protection while identifying and reducing operational risk. The safety management system uses a risk-based, data-driven approach applied to all aspects of the natural gas and electric distribution and transmission operations.

An operations steering committee with representatives from all stakeholders assists senior utility company leadership with ensuring routine processes are in place to foster communication, risk reduction and continuous improvement that are necessary to develop and maintain a mature safety management system. The safety management system was rolled out in October 2018 and reached Level 3 maturity in December 2020, meaning the program has been planned, developed and implemented. The utility companies are working on the sustainment and improvement phases of safety management system maturity.

## Natural Gas Distribution Environmental Matters

Montana-Dakota Utilities, Cascade Natural Gas and Intermountain Gas are subject to federal, state and local environmental, facility-siting, zoning and planning laws and regulations. Our companies believe they are in substantial compliance with the regulations.

These operations are very small-quantity generators of hazardous waste, and subject only to minimum regulation under the Resource Conservation and Recovery Act. A Washington state rule defines Cascade Natural Gas as a small-quantity generator but regulation under that rule is similar to the Resource Conservation and Recovery Act regulation as a very small-quantity generator.

Certain of our companies' locations routinely handle polychlorinated biphenyls from their natural gas operations in accordance with federal requirements. PCB storage areas are registered with the EPA as required.

Capital and operational expenditures for natural gas distribution operations could be affected in a variety of ways by potential new greenhouse gas legislation or regulation. In particular, such legislation or regulation would likely increase capital expenditures for energy efficiency and conservation programs, and operational costs associated with greenhouse gas emissions compliance. Montana-Dakota Utilities, Cascade Natural Gas and Intermountain Gas expect to recover operational and capital expenditures for greenhouse gas regulatory compliance in rates consistent with the recovery of other reasonable costs of complying with environmental laws and regulations.

Montana-Dakota Utilities, Cascade Natural Gas and Intermountain Gas did not incur any material environmental expenditures in 2020. Except as to what may be ultimately determined with regard to the issues described in regard to historic manufactured gas plants, our natural gas distribution operations do not expect to incur any material capital expenditures related to environmental compliance with current laws and regulations through 2023.

Montana-Dakota Utilities has ties to six and Cascade Natural Gas has ties to nine historic manufactured gas plants as a successor corporation or through direct ownership of the plant. Montana-Dakota Utilities and Cascade Natural Gas are investigating possible soil and groundwater impacts from the operation of two and one, respectively, of these sites. To the extent not covered by insurance, our companies may seek recovery in natural gas rates charged to customers for certain investigation and remediation costs incurred for these sites. More information about these manufactured gas plant sites can be found in MDU Resources' most recent [10-K](#).



## Natural Gas Utility Customer Energy Efficiency and Conservation Programs

MDU Resources' utility companies actively pursue programs to increase energy efficiency and conservation for natural gas residential and commercial customers. State regulatory agencies also set program requirements, in some circumstances, to which our utility companies must adhere. The total savings in 2020 from our natural gas utility company programs was approximately 2.25 million therms, equating to a reduction of nearly 12,000 metric tons of CO<sub>2</sub> equivalents.

Montana-Dakota Utilities has residential and commercial incentive programs in Montana and South Dakota that promote installation of energy-efficient natural gas equipment. Great Plains Natural Gas, offers residential and commercial incentive programs in Minnesota to promote installation of energy-efficient natural gas equipment.

Intermountain Gas' Energy Efficiency Program promotes home-energy efficiency by offering rebates for installation of high-efficiency natural gas appliances and incenting new home construction incorporating energy-efficient design. Intermountain Gas' program received an Energy Star Certified Home Market Leader Award from the EPA for three consecutive years for outstanding commitment to energy-efficient new homes. Intermountain Gas also partners with organizations throughout its service territory to inform and raise awareness about energy efficiency and its program.

Intermountain Gas also is a member company of the Gas Technology Institute, which is a national leader in natural gas research. GTI's Utilization Technology Development group creates and advances products, systems and technologies to save consumers money, save energy, integrate renewable energy with natural gas, and achieve safe, reliable, resilient end-user operation with superior environmental performance. To ensure the advanced products developed through GTI are accepted in the marketplace, Intermountain Gas also has joined the North American Gas Heat Pump Collaborative. This group works to encourage early adoption of new highly efficient technologies.

Intermountain Gas recently signed on to participate in the newly formed Low-Carbon Resources Initiative. A joint venture of GTI and the Electric Power Research Institute, LCRI is a unique, international collaboration spanning the natural gas and electric sectors that will help advance global, deep decarbonization of all segments of the economy. The goal of the five-year initiative is to accelerate the development and demonstration of low-carbon energy technologies. The LCRI is targeting advancements in low-carbon electric generation technologies and low-carbon energy carriers, such as hydrogen, ammonia, synthetic fuels and biofuels.

Cascade Natural Gas actively partners with communities in Oregon and Washington to promote efficient and sustainable use of natural gas for residential, commercial, industrial and low-income customers. In its Oregon service territory, Cascade Natural Gas offers rebate programs for energy-efficiency upgrades and weatherization through the Energy Trust of Oregon to its residential, commercial and industrial customers. Weatherization services also are offered in partnership with low-income assistance agencies.

In Washington, Cascade Natural Gas manages and offers rebates through its long-standing Conservation Incentive Program, which encourages customers to install high-efficiency appliances and use efficiency measures. The rebates are available to residential, commercial and industrial customers. Cascade Natural Gas also offers rebates to qualified agencies for delivery of weatherization services to income-qualified natural gas customers. The company presents its proposed program in a Conservation Plan submitted annually by December 1 to the Washington Utilities and Transportation Commission. Results of the program are reported annually by June 1 in the company's Annual Conservation Report to the commission.

In addition to its rebate program, Cascade Natural Gas supports innovations in energy efficiency efforts and regularly works with local partners to encourage community-focused cooperative reduction efforts. Some other programs Cascade Natural Gas continues to support include Built Green® Certifications, Sustainable Connections, the Sustainable Living Center, Community Action agencies and the Northwest Clean Air Agency, as well as collaborating with Western Washington University on energy policy, mentoring and efficiency-related education through the Energy Institute.

In 2015, Cascade Natural Gas joined the Northwest Energy Efficiency Alliance Natural Gas Market Transformation Collaborative. This five-year effort, with a combined \$18.3 million commitment from participants, was focused on advancing development and market adoption of energy-efficient natural gas products, practices and services in the Pacific Northwest. In 2019, Cascade Natural Gas renewed its membership in the alliance through 2024, obtained a director position on the collaborative's board, and started funding the NW Power Council's Regional Technical Forum to support regionally vetted and reviewed energy savings estimates for efficient natural gas technologies.

MDU Resources' utility companies all partner with local community action agencies in providing low-income assistance for utility customers.

## Methane Emission Reductions

Our utility companies have a public awareness and damage prevention manager and three coordinators who assist in providing public outreach that focuses on damage prevention and further reducing potential releases of methane from excavation damages. The public awareness and damage prevention department and local utility management and staff also engage directly with contractors and excavators with face-to-face interactions in the field, and through meetings and training events. By proactively engaging with these third parties, in certain jurisdictions our companies have experienced a decreasing trend in overall excavation damages and excavation damage rates, as well as an increase in line location requests.

Our utility companies conduct investigations when damages occur to company natural gas distribution pipeline and infrastructure. Key information, such as location, root cause, type of excavator, type of equipment used and type of work performed, is collected to analyze and trend on a quarterly basis. This data is used to assess ways to mitigate risks associated with excavation and, along with effectiveness surveys, helps our utilities assess the success of their programs, outreach strategies and messaging.

Some examples of our utility companies' outreach efforts include annual direct mailers to public officials, emergency response organizations, excavators, customers, schools and individuals who live along our distribution lines; participation in a variety of general public outreach events; development of materials that deliver multifaceted education campaigns, including campaigns via television, radio, online, newspapers, magazines, social media and billboards. Our utility companies provide publications in up to eight languages to align with the demographics of their jurisdictions. Our companies also sponsor community events, such as golf tournaments, chamber of commerce events, county fairs and rodeos, and sporting events, where pipeline safety and Call 811 information is displayed and distributed to attendees. Our utilities also provide excavation safety and emergency response training upon request.

Each of our utility companies actively participates in 811, Common Ground Alliance, and damage complaint programs, and our companies continually explore other voluntary actions that could reduce methane emissions from excavation damage.

Programs have been established at the federal level to provide platforms to encourage utility companies to voluntarily commit to reducing greenhouse gas emissions, including the EPA's Natural Gas Star Methane Challenge Program. The EPA established the Methane Challenge Program in collaboration with oil and natural gas companies, and MDU Resources' natural gas distribution companies participated as founding partners of the program in March 2016.

As founding partners, our utility companies participated in the program under the Best Management Practice Commitment – Excavation Damages within the natural gas distribution sector. The commitment includes companywide implementation of best management practices to reduce methane emissions. The program also provides a forum for companies to share knowledge on successfully implementing practices and reducing methane emissions.

In 2020, the state of Washington enacted HB 2518, the Natural Gas Transmission bill, requiring natural gas transmission and distribution companies to expedite mitigation of hazardous leaks and reduce as practicable nonhazardous leaks, and providing utilities rate recovery to mitigate these leaks. Cascade Natural Gas collaborated with other Washington natural gas distribution companies on implementing the methodology for compiling data and estimating emissions. Cascade Natural Gas submitted its first report in March 2021 to the Washington Utilities and Transportation Commission and is evaluating the potential to further address nonhazardous leaks in the future.

Along with the commitment to reduce methane emissions from excavation damages, our companies have completed operational and infrastructure changes to comply with federal requirements that lower methane emissions. A significant area of focus has been replacing older pipelines with pipelines made of newer materials, such as those made with polyethylene and steel. Our utility companies replaced 79.3 miles of distribution system lines in 2020 and approximately 90 miles in 2021. Our utility companies have no unprotected steel pipeline and no leak-prone cast iron pipe in their systems.



# 169.3

Miles of distribution system  
lines replaced in 2020-21

## Local Greenhouse Gas Reduction Goals

Cascade Natural Gas engages with communities on their goals to reduce greenhouse gas emissions, including partnerships on the integration of renewable natural gas, potential future hydrogen opportunities, energy efficiency and possible carbon offset programs.

## Renewable Natural Gas

Renewable natural gas (RNG) is biogas that is produced from a number of non-geologic sources, upgraded to biomethane by removing contaminants and increasing the heating value, and processed to meet natural gas pipeline-quality standards. RNG comes from a variety of sources, including municipal solid waste landfills, digesters at water resource recovery facilities (wastewater treatment plants), livestock farms, food production facilities and organic waste management operations. RNG can provide benefits such as energy diversity, economic revenues or savings, improved air quality and greenhouse gas emission reductions. RNG development has the potential to mitigate the carbon footprint associated with traditionally sourced natural gas.

MDU Resources' natural gas utilities actively review, evaluate and pursue potential RNG development opportunities. Our companies review regional, state and federal guidelines and studies that involve RNG, and engage in developing standards for acceptable delivery of RNG in natural gas distribution systems.



Billings, MT, Regional Landfill

Montana-Dakota Utilities produces RNG from the Billings Regional Landfill in Montana. The project came online at the end of 2010 and has produced approximately 1.36 million dekatherms of RNG through year-end 2020. The RNG is supplied to the vehicle fuel market generating renewable identification numbers and low-carbon fuel standard credits in California and Oregon. In 2020, the Billings Landfill Plant produced approximately 1.53 million renewable identification numbers and 1,547 low-carbon fuel standard credits.

In Idaho, Intermountain Gas supports development of RNG projects and to date has provided pipeline services for three dairy digesters to transport and sell RNG. The first dairy digester project on which Intermountain Gas assisted began delivering RNG into Intermountain Gas' distribution system in mid-October 2019. The two additional dairy digesters began injecting RNG into Intermountain Gas' system in August 2020 and September 2020. As of April 2021, the three producers had injected more than 480,000 dekatherms of RNG into Intermountain Gas' system. Intermountain Gas signed an agreement with a fourth dairy RNG project and is evaluating feasibility studies for four additional potential RNG projects.

Washington and Oregon have enacted policies allowing natural gas distribution utilities to supply RNG to customers. Cascade Natural Gas is committed to developing RNG programs for its customers under these policies and rules. It also is committed to exploring opportunities to help communities meet their greenhouse gas reduction goals, including through RNG or potential future opportunities for hydrogen. Cascade Natural Gas has met with various entities regarding RNG projects involving municipalities, wastewater treatment plants, biodigesters and landfills. The company also has developed a cost-effectiveness methodology for evaluating RNG opportunities.

MDU Resources' natural gas utility companies continue reviewing opportunities in their service areas for RNG development and exploring options to partner with developers and customers on RNG projects.



# 1.36

Million dekatherms of RNG  
produced from 2010-20 from  
Billings, MT, Regional Landfill



## Environmental Recognition

Cascade Natural Gas ranked at the top of the list of 31 utilities named as 2021 Environmental Champions on Earth Day. The national survey was conducted by Escalent, a top human behavior and analytics firm.

The results were based on a 1,000-point index scale and included 140 of the largest utility companies in the United States. Surveyed consumers cited significant improvements on utility support for environmental causes and dedication to clean energy. The average index score was 688. Cascade topped the list with a score of 751.

Escalent's Cogent Syndicated 2021 Utility Trusted Brand & Customer Engagement Residential study was based on surveys among 74,224 residential electric, natural gas and combination utility customers of the 140 largest utility companies, based on residential customer counts.

Intermountain Gas received the 2021 ENERGY STAR® Market Leader Award for its efforts to promote energy-efficient residential construction and help homebuyers and residents experience the quality, comfort and value that come with living in an ENERGY STAR-certified home or apartment.

Each year, the ENERGY STAR Residential New Construction program presents Market Leader Awards to outstanding partners who have made important contributions to energy-efficient construction and environmental protection by building or verifying a significant number of ENERGY STAR-certified homes and apartments, or by sponsoring a local program that supported these activities during the previous year. More than 120,000 ENERGY STAR-certified single-family homes and multifamily units were built in 2020, for a total exceeding 2 million homes since 1995.

Intermountain Gas had 1,536 ENERGY STAR-certified homes and apartments in its territory in 2020.

More information about recognition our utility companies have received can be found on the individual company websites.

## Additional Information

Read more about environmental matters related to the electric and natural gas utilities in MDU Resources' most recent [10-K](#).

## Pipeline

[WBI Energy](#), through its subsidiaries WBI Energy Transmission and WBI Energy Midstream, conducts both regulated and non-regulated services, including natural gas transmission pipeline, natural gas storage and related operations. WBI Energy Transmission, the regulated business, owns and operates approximately 3,700 miles of natural gas transmission and storage lines in Minnesota, Montana, North Dakota, South Dakota and Wyoming. WBI Energy Transmission's underground storage fields provide storage services to local distribution companies, industrial customers, natural gas marketers and others, and serve to enhance system reliability. WBI Energy's system is strategically located near four natural gas-producing basins, making natural gas supplies available to its transportation and storage customers. The system has 13 interconnecting points with other pipeline facilities, allowing for the receipt or delivery of natural gas to and from other regions of the country and from Canada. Under the Natural Gas Act, WBI Energy Transmission is subject to the jurisdiction of the Federal Energy Regulatory Commission regarding certificate, rate, service and accounting matters and, at December 31, 2020, its net plant investment was \$548.3 million.

WBI Energy's non-regulated business, WBI Energy Midstream, provides a variety of energy-related services, including cathodic protection and energy efficiency product sales and installation services to large end-users.

A majority of WBI Energy's business is transacted in the northern Great Plains and Rocky Mountain regions of the United States.

### Environmental Matters

WBI Energy's operations are subject to federal, state and local environmental, facility-siting, zoning and planning laws and regulations. WBI Energy believes it is in substantial compliance with these regulations.

Ongoing operations are subject to the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act and other federal and state regulations. Administration of many provisions of these laws has been delegated to the states where WBI Energy operates. Permit terms vary and all permits carry operational and compliance conditions. WBI Energy believes all required permits are in place and it is in substantial compliance with all permit terms.

Environmental review of construction, abandonment and maintenance projects on WBI Energy Transmission's natural gas transmission pipeline, compressor stations and storage facilities are conducted in accordance with FERC's National Environmental Policy Act regulations. Detailed environmental assessments or environmental impact statements, as required by the National Environmental Policy Act, are included in the FERC's environmental review process.

## Reducing Greenhouse Gas Emissions and Fugitive Methane Emissions

Addressing climate change requires us to recognize how best to reduce emissions while meeting the growing energy needs of our communities and the nation in an affordable, reliable and resilient manner. Natural gas is and will remain a foundational fuel in the effort to build a cleaner energy future. Natural gas empowers critical energy services vital to our nation's economy and serves as a foundational energy source for daily life.

WBI Energy recognizes the importance of reducing operational greenhouse emissions, particularly fugitive methane emissions. Along with the other member companies of the Interstate Natural Gas Association of America, WBI Energy has committed to reducing its methane emissions intensity, to providing transparent methane emissions data, to working with key stakeholders on solutions and investing in responsible environmental stewardship. WBI Energy is committed to reporting 100% of its methane emissions and will establish a methane emission intensity reduction goal to be published in our next sustainability report.

WBI Energy is committed to continuously improving practices to minimize methane emissions by implementing best practices at its facilities. These practices include conducting leak surveys at compressor stations and well sites, repairing leaks in a timely manner, evaluating best practices to limit emissions from "blowing down" lines for planned maintenance, routinely measuring compressor-related leaks and proactively replacing components that minimize leaks, reporting emissions as required, and continuing to evaluate emissions data and identify opportunities for methane emission reductions.

Additionally, WBI Energy is working toward participation in the EPA's Natural Gas STAR — Methane Challenge Program. Voluntary partnerships such as the Methane Challenge Program encourage companies to adopt cost-effective technologies and practices to reduce methane emissions and to establish and track progress toward a specific methane emission intensity reduction goal. To prepare for participation in the program, WBI Energy is developing a plan to implement methane control technologies and quantify methane emission reductions from these efforts.

## Reducing Carbon Dioxide Emissions

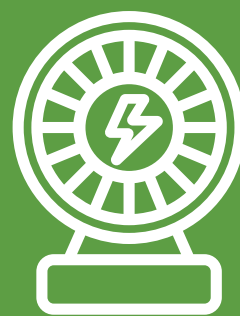
WBI Energy continually evaluates the efficiency and effectiveness of its operating facilities, and proactively maintains a program to replace existing facilities with newer, more fuel-efficient and lower-emitting equipment. More recent replacement projects include:

- 2011 — Replaced five natural gas-fired compressor engines with one natural gas fired engine subject to New Source Performance Standards.
- 2012 — Replaced five natural gas-fired compressor engines with one electric driven compressor unit.
- 2014 — Replaced two natural gas-fired compressor engines with one natural gas-fired engine subject to New Source Performance Standards.
- 2019 — Replaced three natural gas-fired compressor engines with one natural gas-fired engine with emission controls.

Together, these projects have reduced the amount of potential natural gas consumed by more than 250 million cubic feet per year.

Additionally, when designing and building new facilities, WBI Energy installs electric compression where feasible. For example, the company's Tioga Compressor Station constructed in 2017 and the Mapleton Compressor Station constructed in 2018 are electric-driven compressors, saving approximately 195 million cubic feet per year of natural gas fuel from being burned.

WBI Energy's efforts to replace legacy facilities with lower-emitting equipment and install electric-driven compression where feasible at new facilities have resulted in reductions and savings of potential greenhouse gas emissions at these facilities of approximately 14,000 and 10,500 metric tons of carbon dioxide equivalent, respectively. These projects also reduced nitrogen oxide emissions by more than 800 tons per year.



# 195

Million cubic feet saved per year  
using electric compressors at Tioga  
and Mapleton, ND.



## Minimizing Construction Impacts

WBI Energy understands the importance of protecting environmental resources when developing plans to expand or replace its pipeline system. When developing routes for pipeline rights-of-way, extensive studies relating to cultural resources, wetlands and waterbodies, endangered species, and other sensitive resources are conducted. WBI Energy puts significant effort into routing lines to the extent possible to avoid sensitive environmental resources. When resources are crossed by a pipeline or exist adjacent to a construction corridor, WBI Energy works closely with subject matter experts and resource management agencies to develop plans to reduce or mitigate impacts.

Third-party environmental inspectors closely monitor construction activities to ensure adequate protection of resources. Work adheres to applicable regulations and permits as well as company-developed, project-specific plans for dust mitigation, protection of unanticipated discoveries of cultural resources, spill prevention, and noxious weed management, as examples.

WBI Energy recognizes that the land crossed by its pipeline system belongs to other stakeholders, whether privately held or public lands, and it is critical to return construction workspaces to their original condition or better. WBI Energy works closely with landowners and land managing agencies to reclaim pipeline right-of-way and continuously monitors reclamation activities until they are complete.

## Environmental Fines and Costs

WBI Energy did not incur any fines related to environmental compliance in 2018-20. Additionally, WBI Energy companies did not incur any material environmental capital expenditures related to environmental compliance with current laws and regulations in 2018-20 and do not expect to incur any material capital expenditures related to environmental compliance with current laws and regulations through 2022. Expenditures related to environmental impact management are primarily annual operating expenses.

## Pipeline Integrity Management Program

WBI Energy's pipeline integrity management program provides guidelines for the continual evaluation of its pipeline system using risk-based criteria that allows the company to take proactive measures to ensure public safety and protect the environment. WBI Energy developed the pipeline integrity management program in 2004 in response to U.S. Pipeline and Hazardous Materials Safety Administration rules requiring additional measures to ensure the safe operation of pipeline facilities in densely populated areas.

WBI Energy uses a prescriptive-based approach to integrity management that incorporates mandatory and non-mandatory information into the program to ensure it operates a safe and effective pipeline system. This integrity management program is intended to meet the requirements of the U.S. Department of Transportation Integrity Management Plan Rule, which specifies regulations to assess, evaluate, repair and validate the integrity of natural gas transmission lines that, in the event of a leak or failure, could affect high-consequence areas. These DOT regulations are included in Rule 49 CFR Part 192 Subpart O "Gas Transmission Pipeline Integrity Management."

As part of the company's integrity management program, WBI Energy uses risk-based software to model its pipeline system and predict potential areas of concern. The risk intelligence platform is a data-driven integration and analysis tool that incorporates data from various company sources to assign risk to all segments of our pipeline system. The risk assessment helps WBI Energy prioritize replacement and restoration projects relative to areas of consequence.

Additional measures WBI Energy has taken with its integrity management program include strength testing, direct assessments, in-line inspections and incorporating thicker-wall pipe into designs that traverse densely populated areas.

## Pipeline Safety Management System

WBI Energy's pipeline safety management system is a comprehensive, continuous improvement program designed to promote a culture dedicated to employee and public safety and environmental protection while maintaining the safety and reliability of its natural gas transmission and storage facilities. WBI Energy's pipeline safety management system uses a risk-based, data-driven approach across all aspects of WBI Energy's operations. A team of representatives from various work groups within the company reviews all operational, safety and environmental events and uses the findings or key performance indicators to measure performance and provide guidance for strengthening the overall safety and reliability of company facilities.

## Additional Information

Read more about environmental matters related to WBI Energy in MDU Resources' most recent [10-K](#).



## Construction Materials

[Knife River](#) Corporation is the sixth-largest sand and gravel producer in the United States. With approximately 1.1 billion tons of aggregate reserves, Knife River mines aggregates and markets crushed stone, sand, gravel and related construction materials, including ready-mixed concrete, cement, asphalt, liquid asphalt and other value-added products, to public and private-sector clients. The company also specializes in related services, such as concrete accessories sales, precast concrete structures, rock and landscaping products, underground utility work and more.

Knife River has operations in the central, western and southern United States, plus Alaska and Hawaii. It maintains physical locations in 14 states and performs work in 15 states. The company's operations include approximately 60 hot-mix asphalt sites, 100 ready-mix sites, seven cement terminals, several hundred aggregate sites, five liquid-asphalt terminal sites, and several used-petroleum-product collection points.

Material Sales	2020	2019	2018
Aggregates (thousand tons)	30,949	32,314	29,795
Asphalt (thousand tons)	7,202	6,707	6,838
Ready-Mixed Concrete (thousand cubic yards)	4,087	4,123	3,518

## Environmental-Related Investments

As part of its capital investment planning, Knife River annually assesses continual investment in environmental impact mitigation efforts in its operations, particularly in regard to meeting or exceeding permit requirements and environmental regulations. Up to 20% of Knife River's annual capital budget is allocated to replacing or upgrading equipment and plants, which helps comply with various environmental objectives and requirements. Examples include:

- In Oregon, Knife River has installed additional emissions capture equipment, such as wet scrubbers on asphalt plants, to meet or exceed air quality requirements.
- Knife River operates a soil reclamation business to handle contaminated soils for customers. Alaska Soil Recycling pioneered the first thermal remediation service in Alaska to treat contaminated soil and operates its facility under permits issued and enforced by the Alaska Department of Environmental Conservation.
- Depending on the climate of particular geographic areas, Knife River has implemented additional measures in response to local conditions. For instance, in arid regions such as California and Texas, Knife River has implemented more stringent measures for dust control at its plants and job sites. In areas with high precipitation, such as Oregon, Knife River uses enhanced water containment controls to handle potential storm runoff.
- Knife River budgets a number of automated power washing systems each year for ready-mix locations. These systems allow a ready-mix truck to be washed after loading without the driver exiting the vehicle, which reduces driver hazards while reducing the average water used per truck by half.
- Knife River has invested in Blue Planet Systems Corp. to pursue the use of synthetic aggregates in ready-mix concrete. Blue Planet is testing methods of creating synthetic limestone, using carbon dioxide captured from existing sources. The synthetic limestone could then be used as a component of concrete. In addition to sequestering carbon dioxide through this process, the use of synthetic limestone would prolong the life of natural aggregate sources.



## Vehicle Emission Reduction Efforts

Knife River continually evaluates fleet vehicles to ensure the appropriate-size vehicle is purchased for specific needs. The company buys smaller, more fuel-efficient vehicles to mitigate fuel costs and help reduce emissions whenever feasible.

As Knife River updates its equipment and vehicles, its fuel usage and fleet emissions are reduced because of manufacturers' advancements in motor efficiency. As of December 31, 2020, the average model year of Knife River's on-road trucking fleet was 2011. The average model year of Knife River's construction equipment was 2010.

Knife River has implemented fuel conservation programs that educate employees and promote fuel conservation measures. Training sessions encourage employees to efficiently use resources and inform employees of the proper procedures for shutting down diesel-fueled engines.

Knife River has an engine idling policy. The policy establishes a companywide diesel and gasoline engine idling limit and institutionalizes the company's Shut Down & Save fuel conservation program.

Knife River installs automatic shutdown systems on heavy-haul construction trucks, which helps reduce emissions. These systems can automatically shut off a vehicle's engine after five minutes of idling. Knife River also installs equipment on haul vehicles that lets the company monitor operating times, idle times and emissions, which can be used to evaluate performance.

In California, off-road and on-road diesel fleet requirements are more stringent than other areas where Knife River operates. On-road diesel fleets must meet or exceed a 2010 emissions standard via fleet replacement targets affecting on-highway trucks that are greater than 14,000 pounds in gross vehicle weight. In 2020, Knife River replaced all vehicles in its California fleet that were 17 years or older. In 2023, the company projects it will have no vehicles in its California fleet that are older than a 2010 model, putting Knife River on track to meet the regulation two years ahead of schedule. Off-road diesel construction and mining equipment fleets must meet a target based on the combined total horsepower and emissions factors of all engines in the fleet, with compliance targets that began in 2009 and go through 2024. Knife River has been proactive in meeting early targets and anticipates meeting the 2024 target.

## Renewable Diesel

In 2021, a number of Knife River's West Coast operations piloted renewable diesel fuel in their on-road and off-road fleets. Engine performance, engine maintenance and fuel efficiency results were positive during the pilot, and Knife River is beginning to utilize renewable diesel in more locations where available. Knife River used an estimated 1.7 million gallons of renewable diesel in 2021 and estimates using 4.2 million gallons in 2022, which is expected to be approximately 20% of Knife River's total diesel consumption for the year.



# 2 Years

Ahead of California's vehicle regulation requirements.

## Reducing the Use of On-Road Trucks

According to the Association of American Railroads, freight railroads are 3-4 times more fuel efficient than trucks. Knife River utilizes rail to deliver aggregate products from a number of its quarries. In 2020, approximately 17,000 rail cars were used to ship 1.8 million tons of aggregate material between Knife River locations in Alaska, Oregon and South Dakota.

Knife River uses a barge to transport aggregate materials between quarries and ready-mix and asphalt sites in the Portland, Oregon, metro area. In 2020, approximately 650,000 tons of aggregate products were shipped via barge, eliminating approximately 21,300 truck deliveries in the congested metropolitan area.

## Water Management

Knife River uses water to produce aggregates and concrete, and uses water for dust control across all product lines. The majority of water usage is in the washing of aggregate materials. All water recovered while washing materials is captured and reused in the washing process. In an engineering study of water usage at a recently permitted Knife River quarry in Texas, it was estimated that 79% of all water used would be recycled. While water recycle rates will vary by location and aggregate reserve quality, Knife River strives to reuse as much captured wash water and storm water as feasible.

## Toxic Release Reporting

Knife River provides toxic release inventory reporting to the EPA for nitrate compounds released with process wastewater from ready-mix concrete operations and polycyclic aromatic compounds emitted during the handling and processing of liquid asphalt oils and binders.

The TRI data for reporting facilities can be accessed at [www.epa.gov](http://www.epa.gov).

## Land Impacts

Knife River uses mine planning to manage aggregate reserves and aggregate mine sites in an environmentally sound manner. The company works regularly with government agencies, landowners and other stakeholders to develop reclamation plans that return mined land to viable and productive use. In some cases, land that may not have been useful before mining has been made into wetlands or other wildlife habitat.







Recycling

Knife River continues its long-standing practice of recycling and reusing building materials. Recycling conserves natural resources, uses less energy, reduces waste disposal at local landfills and ultimately costs less for our customers. Knife River recycles or reuses asphalt pavement, pre-consumer asphalt shingles, refined fuel oil, demolition concrete, returned concrete at ready-mix plants, fly ash, slag, silica fume and other cement-replacement materials, and dimension stone reject material.

	2020	2019	2018
Recycled Asphalt Pavement Used in Asphalt Production (tons in thousands)	946	840	765

Jebro Inc., a Knife River company in Sioux City, Iowa, has recycled used oil since 1989 and used oil filters since 2006. After being emptied of oil, used oil filters are turned into No. 1-grade recycled steel that are shipped to smelters in the United States. Recovered oil is recycled and used. Jebro’s service area includes parts of Colorado, Illinois, Iowa, Kansas, Minnesota, Missouri, Montana, Nebraska, South Dakota and Wyoming.

	2020	2019	2018
Jebro Recycled Oil (million gallons)	3.5	3.2	2.9
Jebro Recycled Steel (tons)	376	314	320



## Environmentally Friendlier Asphalts

Knife River is experienced in producing and placing warm-mix asphalt and rubberized asphalt.

In applications where warm-mix asphalt is allowed, the product enables conservation. Warm-mix asphalt is produced at cooler temperatures than traditional hot-mix asphalt, which reduces the amount of fuel needed in the production process, thereby reducing emissions and fumes.

Knife River, where allowed by the applicable government entity, also uses ground-up tire rubber blended with asphalt to beneficially modify the properties of asphalt in highway construction. The EPA says asphalt rubber is the largest single market for ground rubber. It provides a beneficial use for an estimated 220 million pounds, or approximately 12 million scrap tires, annually. Asphalt rubber also provides longer-lasting road surfaces, reduces road maintenance, is more cost effective over the long term and lowers road noise. Asphalt rubber is being used in greater amounts by state Departments of Transportation.

	2020	2019	2018
Produced Warm-Mix Asphalt (tons in thousands)	999	646	591

## Spills

No EPA-reportable or National Response Center-reportable spills occurred within Knife River's operations in 2018-20. A number of minor spills were documented internally, some of which were reported to state and local agencies based on their reporting requirements.

## Fines for Noncompliance

Knife River is committed to fully complying with all environmental rules and regulations. Regrettably, it has not always achieved full compliance.

	2020	2019	2018
Fines paid	\$25,680	\$27,950	\$1,600
Number of violations	7	12	7

## Impacts of Regulations and Laws

Knife River is reliant on federal and state infrastructure-funding mechanisms. Long-term funding mechanisms established at the state and federal levels help ensure road, highway and bridge construction projects, which provide opportunities for Knife River. The absence of long-term funding mechanisms can negatively impact workloads.

Additionally, certain regulatory efforts may impact Knife River's operations. For instance, carbon pricing programs being implemented in the states of Oregon and Washington are expected to add to Knife River's costs of operations.

California emission reductions and regulatory compliance are more stringent than other Knife River operating areas. The California Air Resources Board in the past 15 years has implemented several regulations around air quality standards. These regulations are based on source categories, several of which impact Knife River. The three categories having the most impact to Knife River's California operations are:

- Off-road diesel particulate and oxides of nitrogen. This regulation affects construction and mining equipment with greater than 25 horsepower. The regulation requires each fleet to meet an emissions target based on the combined total horsepower and emissions factors of all engines in the fleet. Compliance targets began in 2009 and go through 2024. To better comply with this regulation, Knife River combined all its California assets into one fleet pool. This gives Knife River the flexibility to upgrade machines in locations with better utilization. Knife River was proactive in meeting the early targets, which provided early action credits. These credits allow Knife River to better time its capital investments. With its fleet management program, Knife River anticipates meeting the 2024 target.
- On-road diesel particulate and oxides of nitrogen. This regulation requires fleets to meet or exceed a 2010 emissions standard via fleet replacement targets affecting on-highway trucks that are greater than 14,000 pounds in gross vehicle weight. Knife River is meeting this regulation by replacing all vehicles older than 20 years. In 2020, the company replaced all vehicles that were 17 years or older. In 2023, Knife River projects it will have no vehicles in its California fleet that are older than a 2010 model. Knife River is on track to meet the regulation two years ahead of schedule.
- Harbor craft diesel particulate and oxides of nitrogen. This regulation pertains to Knife River's marine construction equipment and boats but varies based on local air districts and ports superseding compliance targets. To comply, Knife River repowered its equipment in 2008-09 to meet the highest regulation. The company is in the process of repowering its equipment again, where practicable, to meet newer standards. Knife River continuously works with its equipment manufacturers on these upgrades.

## Potential Impacts of Climate Change

Based on predictions by the scientific community about potential impacts of climate change, Knife River may benefit from longer construction seasons in certain areas where it operates and from opportunities presented when infrastructure repairs are needed after storms and natural disasters impact an area. However, the company's construction activities may be negatively impacted by greater volatility in weather patterns.

## Additional Information

More information about environmental matters related to Knife River is available in MDU Resources' most recent [10-K](#).

## Construction Services

[MDU Construction Services Group, Inc.](#) and its subsidiary operating companies, collectively referred to as MDU Construction Services Group, provide electrical and mechanical and transmission and distribution specialty contracting services.

- Its electrical and mechanical services include construction and maintenance of electrical and communication wiring infrastructure, fire suppression systems and mechanical piping services.
- Its transmission and distribution services include construction and maintenance of overhead and underground electrical, gas and communication infrastructure, as well as manufacturing and distribution of transmission line construction equipment and tools.

MDU Construction Services Group serves customers in the utility, manufacturing, transportation, commercial, industrial, institutional, renewable and government markets.

MDU Construction Services Group operates a fleet of owned and leased trucks and trailers, support vehicles and specialty construction equipment, such as backhoes, excavators, trenchers, generators, boring machines and cranes.

As of December 31, 2020, MDU Construction Services owned or leased facilities in 17 states. This space is used for offices, equipment yards, manufacturing, warehousing, storage and vehicle shops.

More information about MDU Construction Services Group's workforce is available on the company's website at [www.MDUCSG.com](http://www.MDUCSG.com).

## Environmental Regulations

MDU Construction Services Group's operations are subject to federal, state and local regulations that are customary for the industry. The company believes it is in substantial compliance with these regulations.

Few environmental permits are required for the type of work MDU Construction Services Group performs. In several locations, MDU Construction Services Group uses petroleum storage tanks for operational convenience. Where used, these tanks are permitted under state programs authorized by the EPA. MDU Construction Services Group has no ongoing remediation related to releases from petroleum storage tanks.

Federal permits for specific construction and maintenance jobs that may require these permits are typically obtained by the hiring entity, and not by MDU Construction Services Group.



## Vehicle Emission Reduction Efforts

MDU Construction Services Group continually evaluates fleet vehicles to ensure the appropriate size vehicle is purchased for specific needs. The company buys smaller, more fuel efficient vehicles to mitigate fuel costs and help reduce emissions whenever feasible.

As MDU Construction Services Group updates its equipment and vehicles, its fuel usage and fleet emissions are reduced because of manufacturers' advancements in motor efficiency.

In California, off-road and on-road diesel fleet requirements are more stringent than other areas where MDU Construction Services Group operates. On-road diesel fleets must meet or exceed a 2010 emissions standard via fleet replacement targets affecting on-highway trucks that are greater than 14,000 pounds in gross vehicle weight. MDU Construction Services Group has been proactive in meeting the targets and anticipates meeting the 2024 target. Off-road diesel construction fleets must meet a target based on the combined total horsepower and emissions factors of all engines in the fleet, with compliance targets that began in 2009 and go through 2024. MDU Construction Services Group has been proactive in meeting the targets and anticipates meeting the 2024 target.

## Waste Management

MDU Construction Services Group's operations are conditionally exempt small-quantity waste generators, subject to minimal regulation under the Resource Conservation and Recovery Act. MDU Construction Services Group believes it is in compliance with regulations under the act.

## Environmental-Related Expenses

MDU Construction Services Group did not incur any material environmental-related expenditures in 2020 and does not expect to incur any material capital expenditures related to environmental compliance with current laws and regulations through 2023.

## Renewable Energy Service Providers

MDU Construction Services Group provides power line, substation and system installation construction services for wind, solar, combined heat and power, and other renewable electric projects. The company has helped construct more than 1,000 megawatts of solar electric facilities throughout its service area. The national interest in renewable electric generation sources provides growth opportunities and MDU Construction Services Group continues to expand renewable installation offerings, including battery energy storage systems, electric vehicle charging infrastructure, microgrids and renewable natural gas/hydrogen-fueled electric generating units.

## Additional Information

More information about environmental matters related to MDU Construction Services Group is available in MDU Resources' most recent [10-K](#).



# SOCIAL

MDU Resources Group knows that it operates at the discretion of various stakeholders, including customers, shareholders, employees, regulators, lawmakers and the communities where we do business. It is these stakeholders who allow us to conduct our business and are vital to our success. MDU Resources remains committed to maintaining the trust of these stakeholders by operating with integrity and being a good corporate citizen.

## Positive Community Impact

### Safety and Health

MDU Resources is committed to safety and health in the workplace and in the communities where we do business. We promote safety and health through a variety of means. We subscribe to the principle that all injuries can be prevented. Safety metrics for our businesses can be found in the appendices of this report.

### Safe Natural Gas Pipeline Operation

Operating a safe natural gas pipeline system requires diligence and the proper tools. This is a sample of the precautions taken at our companies:

- **Cathodic protection.** This applies an electric current along a steel pipeline to protect against corrosion.
- **Rectifier inspection.** We inspect corrosion rectifiers every two months to ensure they are adequately protecting the steel pipeline system. All aboveground facilities are checked for atmospheric corrosion every three years.
- **Patrol.** We patrol pipeline facilities to look for changes to exposed piping, as well as areas where excavation activity may have taken place.
- **Leak survey.** We use highly sensitive instruments to check annually for leaks on distribution lines in business districts and every four years in non-business districts. We conduct leak surveys on transmission lines annually and instrument leak surveys in populated (Class 3) and high-consequence areas twice a year.
- **Pipeline marker survey and inspection.** This survey ensures that pipeline markers are in place to notify the public of a pipeline in the area.
- **Integrity management.** We conduct indirect surveys on transmission pipelines in high-consequence areas. Based on findings, we conduct direct examinations in areas where there are indications of potential issues.
- **Contractor education.** We send a letter annually to contractors to remind them about digging safely and calling for line locates. Local offices also provide training for contractors on digging around natural gas facilities.
- **Operator qualifications.** All employees who perform work on our natural gas system undergo training and testing to ensure they are qualified to perform tasks associated with their jobs.
- **Continual surveillance.** Our employees continuously watch for anything that should be addressed, and they either fix the problem or report it to the appropriate department for resolution.



## Electrical and Transmission Distribution Lineworker Safety

MDU Construction Services Group is a founding and active member of the [OSHA Electrical Transmission & Distribution Partnership](#). Since the partnership's inception in 2004, members of MDU Construction Services Group's management team have been involved with it in a number of areas, including the executive, steering and various task teams. The partnership is a formal collaboration of industry stakeholders, working together to improve safety for workers in the electric line industry. It is one of only a few national partnerships between employers and OSHA. Electrical Transmission & Distribution Partnership goals include:

- Analyze accident and incident data to identify common causes for fatalities, injuries and illnesses suffered by lineworkers, apprentices and other appropriate job classifications.
- Develop recommended best practices for each identified cause.
- Develop implementation strategies for each best practice and promote these strategies among the partners.
- Identify training criteria for foremen, general foremen, supervisors, lineworkers and apprentices, including training to create industry culture change to place value on safety and health.

## Economic and Volunteer Impacts

MDU Resources makes a positive economic impact in a number of ways in the communities where it does business, including the compensation it pays to employees; the federal, state and local taxes it pays; the charitable donations it provides; and the infrastructure and equipment investments it makes.

MDU Resources also supports and encourages the innumerable contributions our employees make in their communities, from organizing, volunteering at, participating in and fundraising for charitable organizations to fixing up an in-need neighbor's home.



## Charitable Giving Through the MDU Resources Foundation

MDU Resources is proud of its record of supporting qualified organizations that enhance quality of life. Its philanthropic goal is to be a “neighbor of choice.” The [MDU Resources Foundation](#) was incorporated in 1983 to support the corporation’s charitable efforts and has contributed more than \$38 million to worthwhile organizations.

In addition to foundation donations, MDU Resources’ companies contribute directly to charitable organizations through various donations and in-kind contributions.

The MDU Resources Foundation is funded annually by contributions from each of MDU Resources’ business units based on the profitability of the companies. In all instances, the contributions are made only from stockholder funds.

The foundation contributes only to institutions, organizations and programs recognized by the Internal Revenue Service as qualified recipients of foundation contributions. Generally, contributions are restricted to organizations qualified as tax exempt under Section 501(c)(3) of the Internal Revenue Code. We also contribute to tax-exempt organizations such as cities and their political subdivisions, such as park districts.

Primary consideration is given to charitable institutions, organizations and programs within the geographic areas where MDU Resources’ companies conduct business. Generally, the foundation does not consider donations to private individuals or to athletic, labor, fraternal, political or lobbying organizations, or to regional or national organizations without local affiliation.

The foundation supports the “one gift for all” concept in fundraising campaigns such as those conducted by the United Way or similar umbrella organizations. Participation by a charity in a United Way or other federated fundraising campaign does not necessarily preclude consideration of funding from the foundation.

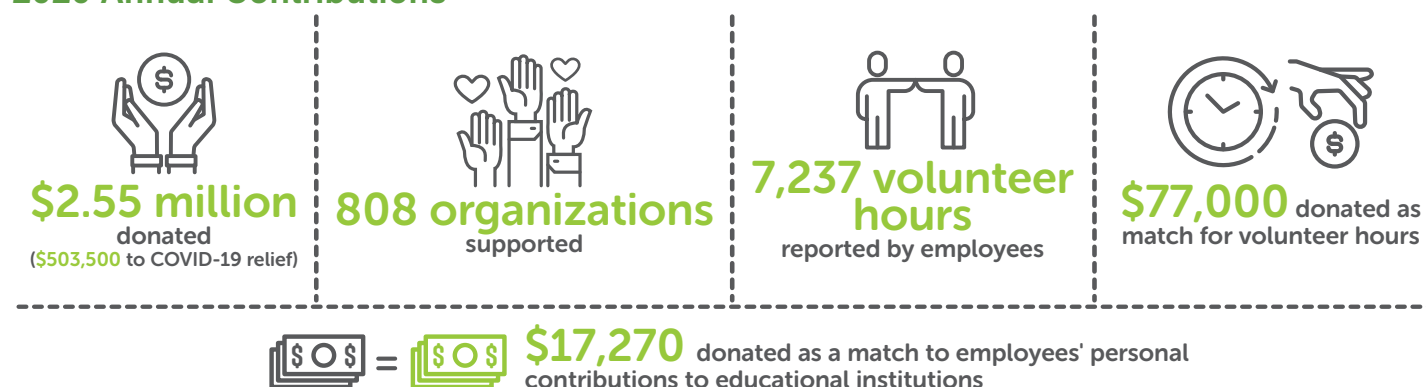


The foundation has primary responsibility on behalf of MDU Resources for contributions to local, state, regional or national organizations, specific employee recognition and matching grant programs, scholarship programs, most United Way contributions, and contributions to entities within MDU Resources' corporate headquarters region.



Post-secondary education is a high priority for the foundation, which maintains two separate scholarship programs. One program is exclusively for dependents, grandchildren and spouses of eligible MDU Resources employees. The other program consists of scholarships established at numerous institutions of higher education. In all instances, the foundation's sole responsibility is funding the scholarships. No company personnel are involved in determining scholarship recipients under either program.

## 2020 Annual Contributions



The foundation also matches employees' and corporate directors' personal contributions to educational institutions with a contribution equal to 100% of their contributions between \$50 and \$750. In 2020, employees contributed \$29,300 to qualified education institutions, and the MDU Resources Foundation's match was \$17,270. Since the program began, educational institutions throughout the United States have received \$929,451.

The foundation provides matching gifts for employee volunteerism, providing a grant of \$750 to charitable organizations at which an employee volunteers 25 hours or more. In 2020, employees reported volunteering 7,237 hours. The foundation contributed \$77,000 to charitable organizations as a result of employees' volunteer efforts. Since the program began, charitable organizations throughout the United States have received \$336,000.

The MDU Resources Foundation also generally funds these areas of corporate philanthropy:

- **Civic and community activities.** The foundation funds programs that create opportunities and meet the needs of local communities.
- **Culture and arts.** The foundation has had a long-standing interest in culture and the arts. It seeks to promote positive youth development through contributions to art funds and councils, museums, theaters, libraries and cultural centers.
- **Education.** Given the importance of education in building strong individuals, families and communities, the foundation supports private secondary and higher education institutions, education development foundations, economic education programs and scholarships.
- **Environment.** The foundation funds organizations that promote the wise use of resources without compromising the ability of future generations to meet their own needs.
- **Health and human services.** Recognizing the critical role of quality and accessible health care and human services, the foundation supports national and local health and human services agencies, hospitals, youth agencies and senior citizen organizations.

Additional information about the MDU Resources Foundation, including more details about contributions, can be found at [www.mdu.com/about-us/community/](http://www.mdu.com/about-us/community/).

## Pandemic Response Support

The MDU Resources Foundation in 2020 made more than \$500,000 in special contributions, beyond its normal donations, to a variety of organizations to support coronavirus relief efforts. The foundation made contributions to 215 organizations that were involved in supporting their communities as COVID-19 infections were beginning to rise in early 2020.

## Company Donations

In addition to charitable contributions made through the MDU Resources Foundation, MDU Resources' business units and companies regularly make charitable donations and donations to the communities where they do business. Examples of these efforts include donating equipment and employees' time for various community projects; donating used equipment to rural fire departments; donating products and materials for park construction projects; and much more. Some MDU Resources companies also allow employees to take up to eight hours of paid time off for volunteer efforts.

## Our Commitment to Customers

MDU Resources is committed to competing in business by lawful and ethical means. Our long-term success can be achieved through fair, honest and intelligent decisions in dealing with customers.

## Customer Service

MDU Resources' successful relationships with customers requires that we provide quality products and services competently and efficiently and treat customers with courtesy. The corporation makes many commitments to customers about the availability, quality and price of our products and services. Each employee is expected to ensure that MDU Resources lives up to these promises, including maintaining open communication with customers and responding promptly to inquiries, requests and complaints.

MDU Resources' utility companies consistently rank high for customer satisfaction. In the J.D. Power 2021 Gas Utility Residential Customer Satisfaction Study, Intermountain Gas earned a score of 796 and Cascade Natural Gas earned a score of 778, which were the first- and second-highest scores among midsize natural gas utilities in the West Region. Montana-Dakota Utilities ranked fourth with a score of 768. The average score for the West Region was 764.

In its 20th year, the study surveys customer satisfaction across six factors: safety and reliability, billing and payment, price, corporate citizenship, communications, and customer care.

## Relationships With Customers and Suppliers

MDU Resources' supplier relationships are based on a commitment to open and fair dealings. We select suppliers of goods and services based on quality, service, cost-benefit considerations, performance capacity and adequacy of supply.

MDU Resources has a [Gift Policy](#) regarding giving or receiving gifts from others in the course of business. In general, the policy prohibits an employee or members of an employee's family from requesting or accepting anything that could be construed as an attempt to influence the performance of the employee's duties or to favor one supplier or customer over another. The policy prohibits employees from accepting from current or prospective suppliers or customers any gift of cash, gift certificate, or travel or lodging without approval of the employee's supervisor, or any other gift valued at more than \$200 without approval from the employee's company president. Employees may only accept such gifts of lesser value with his or her supervisor's approval. No gifts of any value may ever be solicited for personal use.



## Customer Privacy

MDU Resources understands the importance of protecting the privacy of all information provided by customers and has a [Sensitive Information Policy](#). We collect information about customers in furnishing certain services, to prevent fraud, and to meet legal and regulatory requirements. Depending on the nature of the services being provided, collected information may include:

- Applications and other forms, which include information such as name, address and Social Security number.
- Business relationships and transactions with the company and others, including information such as energy service and usage, creditworthiness, account balance and payment history.

MDU Resources strictly restricts access to customer information to employees who need to know the information to support provision of services, and to address safety concerns and unsatisfactory conditions with a customer's facility or equipment. The company maintains physical, electronic and procedural safeguards that comply with applicable industry standards and federal regulations, including the Fair and Accurate Credit Transactions Act, to protect nonpublic personal information from unauthorized disclosure.

MDU Resources may disclose information to select employees at company subsidiaries, and a limited number of contract-bound, third-party program contractors and evaluators who are required to protect the confidentiality of the information. This helps us provide customer service, maintain customer accounts, manage safety concerns, address unsatisfactory conditions with a customer's account, facility or equipment, and offer services to customers.

The company only shares information outside the company under the following conditions:

- When the customer has authorized us to do so in writing.
- When we are responding to a subpoena or other legal process.
- When we are reporting to a credit bureau for credit reporting purposes.
- When there is an unsafe condition and we are communicating with a person who has a viable interest in the condition.
- When shared with contract-bound third parties as previously described.

## Our Commitment to Employees

Key to Building a Strong America® is Building a Strong Workforce. At MDU Resources, this means building a strong team of employees with a focus on integrity and safety and a commitment to diversity, equity and inclusion.

MDU Resources has a long history of focusing on a respectful workplace for all team members, providing development opportunities for our employees at all levels of the organization and balancing pay equity across our entities. In recent years, we have increased visibility into our diversity, equity and inclusion programs and remain focused on ensuring our culture aligns with and recognizes these efforts. This has included:

- Increased communications across our company focused on diversity, equity, inclusion and respect.
- Building a human capital dashboard to provide additional metrics and information to our Board of Directors.
- Developing consistent communication tools so employees more readily recognize activities specific to diversity, equity and inclusion.
- Expanding partnerships and recruitment efforts with diverse groups through additional sponsorships, career fairs and hiring practices.
- Additional questions in our employee survey specific to diversity, equity and inclusion.
- Enhancing training and education efforts across our companies relating to diversity, equity and inclusion.

## Employment Philosophies

MDU Resources' corporate policies address [human rights](#), [Equal Employment Opportunity](#) and [Affirmative Action Plan](#) practices, as well as other areas that provide our team members with information about the corporation's employment philosophies.

MDU Resources and its business units hire employees because they have the skills, abilities and motivation to achieve the results needed for their jobs. Each job is important and part of a coordinated effort to accomplish our objectives. MDU Resources has six general philosophies that guide employees' actions:

- **Teamwork and cooperation.** A positive work environment is dependent on willing cooperation by everyone. Every employee is expected to be a positive and productive member of the work group, and to cooperate with co-workers.
- **Open communication.** An effective and responsive organization relies on knowledgeable and informed individuals. All employees are responsible for seeking out the information they need to perform their work responsibilities, and for willingly providing information to others in a positive and open manner. Communication must be open and two-way. Managers are expected to be good listeners and must provide easy access to information. Employees also must be good listeners and must provide managers and co-workers easy access to information.
- **Mutual trust.** Effective teamwork and cooperation, as well as open and honest communication, is based on developing and maintaining trusting relationships. Managers must provide a work environment that encourages and supports trusting relationships. All employees must guard against prejudging, jumping to conclusions or questioning another person's motives or actions.
- **Increasing standards.** Employee skills and abilities must be continually improved upon and expanded to meet changing job requirements and maintain business competitiveness. Managers must stimulate positive change by providing clear performance expectations, resources for self-development, and by maintaining high standards in the selection of individuals for hire, promotion, transfer or reassignment. Employees must continually develop their skills and abilities to be able to meet ever-changing job requirements.
- **Individual responsibility.** Managers are responsible for providing a positive and supportive work environment that encourages individual responsibility and initiative. Employees are responsible for taking advantage of the opportunities available to them, and for working toward positive change when they have a better idea.
- **Balance.** Human resources philosophies, when properly applied to the various programs and practices, will assist in attaining an appropriate balance between the various needs and interests of employees, customers and shareholders. These philosophies work together to help maintain a positive and productive work environment.

## Diversity, Equity and Inclusion

MDU Resources is committed to an [inclusive environment](#) that respects the differences and embraces the strengths of our diverse employees to further our corporate vision. Essential to the corporation's success is its ability to attract, retain and engage the best people from a broad range of backgrounds and build an inclusive culture where all employees feel valued and contribute their best. We seek an environment that attracts and retains the best talent and recognizes the value of diversity and promotes equity in our workforce.

We view diversity through a broad lens. Diversity is who we are as individuals, including the differences that make each employee unique. Those differences go beyond gender and race. Diversity also includes education, background, work function, union affiliation, management status, seniority, sexual orientation, physical ability and all the other factors that make us who we are. By valuing, respecting and rewarding individuals and groups free from prejudice and fostering a workplace climate where equity and mutual respect are intrinsic, we create a cooperative, success-oriented workforce.

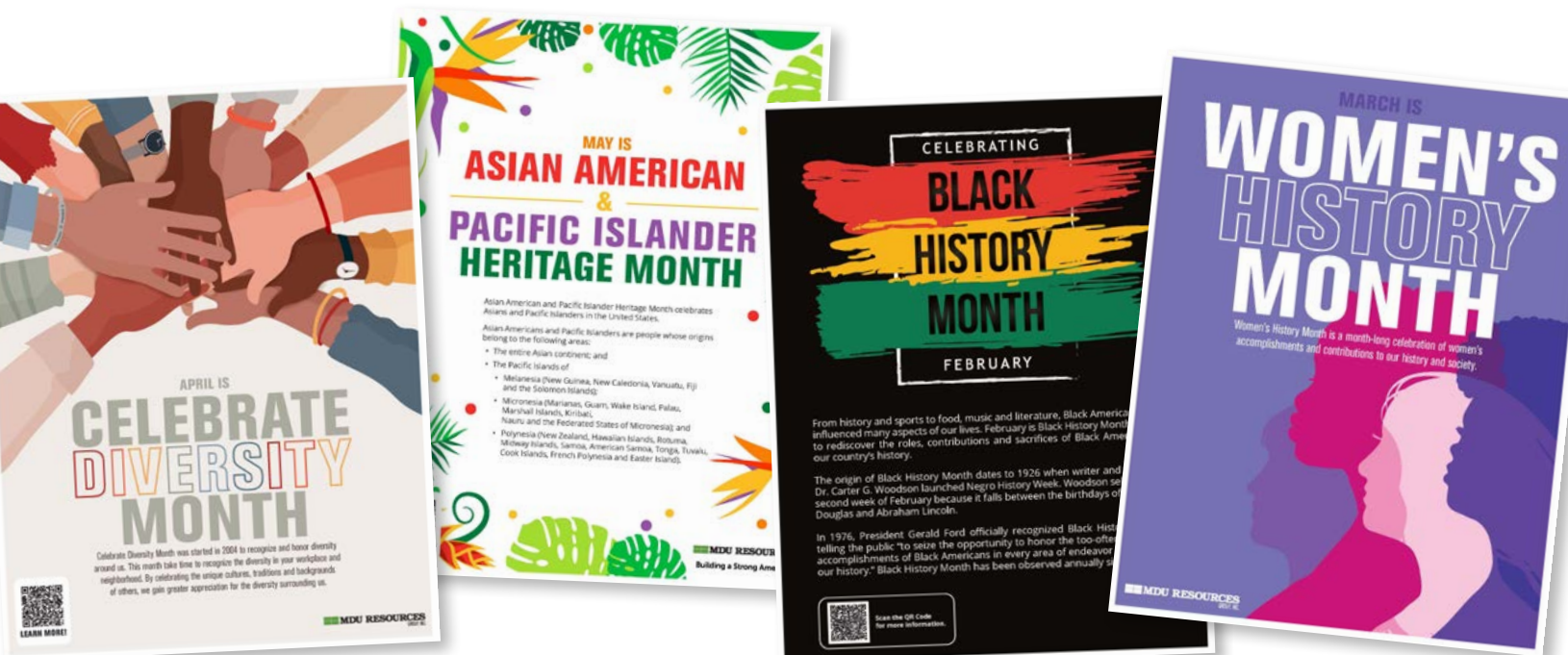
It is important to the corporation that all employees can contribute to their full potential to help achieve our strategic objectives. Inclusion ensures that employees of all backgrounds have an opportunity to belong, contribute and achieve in a workforce where they feel valued and respected, have a connection with one another and the organization, and feel empowered to do their best.

MDU Resources has three strategic goals related to diversity and inclusion:

- To enhance collaboration efforts. An inclusive work environment allows employees to increase collaboration and cooperation, and to share best practices and ideas within our companies and across our enterprise. It also allows employees to work together to develop new ways to meet individual, customer and shareholder needs.
- To maintain our culture of integrity, respect and safety. Respecting the individuality and wide-ranging skills and expertise of our employees is parallel to our core cultural values. Ensuring employees understand that integrity, respect and safety are essential values will contribute to our growth and success.
- To increase productivity and profitability. An inclusive work environment values all employees' perspectives and methods of how to accomplish work and drives more innovative ideas that will help us solve issues effectively. An inclusive environment removes barriers to new ideas and advances integration efforts.



## Diversity. Equity. Inclusion.





To help accomplish our commitment to an inclusive environment that respects the differences and embraces the strengths of our diverse employees, MDU Resources has a diversity officer at our corporate office and at each of our business units. The officers serve as a conduit for diversity-related issues, giving a voice to all employees.

MDU Resources also provides the following to help promote an inclusive environment:

- Benefits for same-sex partners who have a legally recognized marriage certificate or as otherwise directed by state laws and regulations.
- A guideline on gender transition for employees.
- Annual training to employees on diversity and respectful workplace practices, including EEO, workplace harassment, respect and unconscious bias.
- Education for employees on disabilities and how to report their disability status.

Each year, MDU Resources requires employees to participate in our "[Leading With Integrity](#)" program training, which covers our code of conduct as well as additional topics such as diversity and inclusion in the workplace. The corporation requires 100% participation and completion of training on these important topics. MDU Resources also recently began providing training on the topic of unconscious bias.

## Affirmative Action and Equal Employment Opportunity

To be the employer of choice for the broadest pool of talent and skill, MDU Resources is committed to equal employment opportunity and affirmative action and is dedicated to the achievement of equality of opportunity for all employees and applicants for employment. MDU Resources is committed to meeting or exceeding all EEO and affirmative action laws, directives and legislation. [Our EEO/Affirmative Action Policy](#) ensures employees are not discriminated against based on sexual orientation or gender identity, in addition to other characteristic protections. We will:

- Recruit, hire, train, promote, discipline and discharge persons in all job classifications without regard to age, race, color, religion, gender, sexual orientation, gender identity, national origin, disability, veteran status or any other personal characteristic determined to be a protected category under applicable state law.
  - Ensure that employment-related decisions are made in accordance with the principles of equal employment opportunity by imposing only job-related requirements for employment opportunities.
  - Ensure that all personnel actions, such as compensation, performance reviews, transfers, layoffs, returns from layoff, company-sponsored training, education, tuition assistance and social and recreational programs, are administered without regard to age, race, color, religion, gender, sexual orientation, gender identity, national origin, disability, veteran status or any other personal characteristic determined to be a protected category under applicable state law.
- MDU Resources and each of its business units has an assigned EEO coordinator. The corporation's most recent EEO Employer Information Report-Type 2 can be found on our [website](#). MDU Resources' corporate office, business units and operating companies, as applicable, prepare annual Affirmative Action plans.

## Demographics

To better understand MDU Resources' employees and their needs, we review our employee demographics on a quarterly basis. The number of employees fluctuates during the year due to work seasonality and the number and size of construction projects. At December 31, 2020, the company's workforce consisted of 12,994 employees.

Business Segment	Total Employees	Union		Non-Union		Male		Female	
MDU Resources Group, Inc.	250	—	—%	250	100%	148	59%	102	41%
Utility Companies	1,592	655	41%	937	59%	1,139	72%	453	28%
MDU Construction Services	7,247	5,927	82%	1,320	18%	6,691	92%	556	8%
Knife River Corporation	3,582	555	15%	3,027	85%	3,163	88%	419	12%
WBI Holdings, Inc.	323	67	21%	256	79%	260	80%	63	20%
Total Employees	12,994	7,204	55%	5,790	45%	11,401	88%	1,593	12%

Collective Bargaining

MDU Resources and our business units respect the rights of our employees to join, form or not to join a labor union, consistent with applicable organizing laws, without fear of reprisal, intimidation or harassment. Where employees are represented by a legally recognized union, MDU Resources is committed to establishing a constructive dialogue with their freely chosen representative and bargaining in good faith.

Team members covered by collective bargaining agreements have the ability to file with the corporation and through MDU Resources’ anonymous reporting hotline any grievances or concerns they may have about the workplace.

In total, about 55% of MDU Resources’ employees at December 31, 2020, were represented by collective bargaining agreements.

Business Segment	Collective Bargaining Unit	Number of Employees	Agreement Status
Montana-Dakota Utilities	IBEW	336	Effective through April 30, 2024
Intermountain Gas	UA	129	Effective through March 31, 2023
Cascade Natural Gas	ICWU	190	Effective through March 31, 2024
Total Utility Companies		655	
WBI Energy Transmission	IBEW	67	Effective through March 31, 2022
Knife River	39 various	555	2 agreements in negotiation
MDU Construction Services	103 various	5,927	2 agreements in negotiation

IBEW = International Brotherhood of Electrical Workers - System Council U-13  
UA = International Chemical Workers Union - Local 121-C  
ICWU = United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the United States and Canada

Montana-Dakota Utilities maintains a registered joint apprenticeship program that focuses on the company and the bargaining unit working together to advance employees from apprentice to journeyman status in our company. This program allows Montana-Dakota Utilities to hire entry-level employees, working with and training them for growth and opportunities in highly skilled positions. This program was started in the early 1970s and registered with the U.S. Department of Labor in 1979. Company records indicate that more than 600 bargaining unit team members have advanced to journeyman status through this program as of December 31, 2020.



## Compensation and Pay Equity

Equity in the workplace includes pay equity, regardless of an employee's gender, race or other individual attributes. MDU Resources and its companies annually analyze gender pay equity. If concerns are identified, corrective action is taken, such as making necessary pay adjustments.

## Benefits

Employee benefits are an important part of MDU Resources' total compensation program. Our philosophy is to provide and maintain competitive, cost-effective and flexible benefit programs that attract and retain top talent; support business needs and the changing workforce; foster shared responsibility and encourage wise consumerism; and are easy to understand and administer.

Benefits provided to our employees include:

- **Vacation.** New full-time employees typically earn two weeks of vacation during their first year of employment. Vacation hours vary depending on the employee's years of service with the company and their business segment.
  - Unused vacation can be carried over to the next year to a maximum amount outlined in the vacation policy.
  - Employees are strongly encouraged to take time away from work to refresh, but we offer a vacation sell program that allows employees to sell back vacation time for cash as outlined in the vacation policy.
- **Sick leave.** Sick leave is available to employees who are experiencing illness or need to care for a family member.
  - Family medical leave also is available when an employee must be away from work for an extended period of time such as for a serious medical condition, child birth, adoption or care of a family member.
- **Holidays.** Full-time employees receive compensation on various holidays observed by our companies.
- **Health and welfare benefits.**
  - Health insurance, including medical, dental and vision coverages, are offered to employees. Medical and dental premiums are shared between the employee and the company, with the company paying the majority of the premium.
  - Employees experiencing mental health issues have access to an Employee Assistance Program providing them with counseling.
  - Additional programs available to assist employees with health care needs include:
    - Grand Rounds Health — a health care advocacy program that assists employees with finding medical practitioners.
    - Doctor on Demand — allows employees to virtually meet with a doctor at any time to address medical needs.
    - Learn to Live — offers online programs and clinical assessments to address stress, depression, social anxiety, insomnia or substance abuse.
    - Omada — offers personalized health care for employees and family members at risk for Type 2 diabetes or heart disease.
- **401(k) plan.** Employees can contribute compensation, tax free, up to statutory limits, with the company matching employee deferrals at rates specified in the plan.
  - Certain business segments and operating companies have profit sharing features as part of their plan, allowing for additional company contributions upon the achievement of specified goals.
  - Employees may receive additional company contributions of 5% to 11% depending on their date of hire and age.
- **Annual incentive compensation.** Employees may receive additional compensation upon the achievement of goals set by each business unit or operating company.
- **Telecommuting.** In 2020, MDU Resources established a [Telecommuting Policy](#) that allows employees, if approved by management, to work at home or other off-site location for all or part of their regularly scheduled workweek. During the COVID-19 pandemic in 2020 and 2021, the company also has been providing flexible work arrangements for employees impacted by family emergencies, school closures or other complications.



## Employee Recruitment

Building a Strong Workforce begins with employee recruitment. MDU Resources uses a variety of means to recruit new employees for open positions:

- **Website.** MDU Resources' website contains postings of all positions within the corporation that are available to external applicants. Anyone with internet access can view and apply for available positions.
- **Social media.** Available positions are posted through various social media tools, such as Facebook, LinkedIn and Twitter.
- **Job service organizations.** Job opportunities are posted through various state job service organizations and our companies use CIRCA to ensure postings are distributed to diverse agencies across our operating footprint.
- **Associations.** Partnerships with disability, veteran, female, LGBTQ and minority professional associations are used in sourcing job candidates.
- **Colleges.** Partnerships and relationships with colleges and technical schools are developed to hire students and promote knowledge of the corporation. Company representatives meet with career placement personnel, department heads and student clubs.
- **Career fairs.** Company representatives attend career fairs to promote the company and seek applicants for open positions.
- **Advertising.** Ads for open positions are posted online and placed in print media, including magazines and city newspapers.
- **Employee referrals.** For hard-to-fill positions, the company offers a referral program through which employees may receive a bonus upon the new hire's successful completion of an introductory period.



## Employee Development

Building a Strong Workforce requires developing employees in their current positions and for future advancement opportunities. MDU Resources provides opportunities for employees to advance in their career through job mobility, succession planning and promotions both within and between business segments.

Key to employee development is open communication between employees and their supervisors to provide ongoing feedback regarding employee performance and opportunities. MDU Resources encourages supervisors to conduct regular performance reviews with employees. During the review process, the employee and supervisor have the opportunity to talk about job performance and to clarify the supervisor's expectations of the employee. It also gives the employee a chance to express

concerns about his or her job and to discuss areas of support that would help him or her do the job better. Formal written performance reviews are done annually by the majority of our business units, and frequent, informal discussions between supervisors and employees are encouraged to seek information and provide feedback in a positive, open manner.

While labor challenges continue to impact many construction companies, Knife River is actively engaged in attracting, training and retaining the next generation of employees to the construction industry. The company recently finished building a training center on a 270-acre tract of property in the Pacific Northwest that is designed to enhance the skills of current employees as well as to recruit and teach skills to new employees. The Knife River Training Center features an 80,000-square-foot heated indoor arena for training on trucks and heavy equipment and an attached 16,000-square-foot office, classroom and lab facility. The center conducts classes that help students build skills through both classroom education and hands-on experience. In addition to developing participants' talents, the center helps showcase construction as a career of choice.



## Mentoring

MDU Resources realizes the value in connecting individuals to share knowledge and experiences through mentoring and has established formal and informal mentoring relationships to develop employees and expose them to different people and experiences.

In 2003, MDU Resources kicked off its first formalized mentoring and job shadow program. The annual program, through an application process, pairs mentees with an appropriate mentor based on the mentee's desired outcomes and exposure. This results in a structured and monitored relationship spanning one year. The mentoring program is part of MDU Resources' development opportunities for employees at all levels in the organization.

## Internships

An opportunity to develop individuals even before they are regular, full-time employees of MDU Resources is through our internship programs. We offer students an opportunity to explore their chosen majors and careers alongside professionals working in the industry while gaining on-the-job experience. Students benefit by developing key competencies, skills and work characteristics, and the corporation benefits by identifying potential candidates for future regular employment. Internship opportunities typically are posted on MDU Resources' website as well as through various college campuses.

## Workforce Restructuring

MDU Resources does not have a formalized workforce restructuring policy. However, at the time of facility closures, changes in business models or similar impactful changes, the company creates a project plan. In these plans, we consider separation programs, retraining programs, relocation services, deferred job awards and outplacement services.

## Required Training

MDU Resources requires employees to complete training on a variety of topics. The company uses a third-party vendor to help administer the training programs. Required training includes:

- **Diversity.** Training helps clarify the concept of diversity and differentiate it from affirmative action, identifies the different characteristics that make people diverse, addresses stereotyping and provides steps to address diversity challenges.
- **Effective leadership.** Curriculum emphasizes key tenets of effective leadership, such as communication, performance standards and expectations, feedback, commitment to success and employee development.
- **Sexual harassment.** Helps supervisory employees recognize and prevent sexual harassment, discrimination and retaliation.
- **Workplace harassment.** Helps employees understand workplace harassment, how it happens and how to avoid engaging in harassing behavior.
- **Code of Conduct.** Annual training on the company's code of conduct, the "Leading With Integrity Guide."

## Employee Communication

MDU Resources encourages open communication among employees and uses a number of communication tools to keep employees informed of company activities and efforts. Such tools include electronic newsletters, the corporate intranet, applications for mobile devices and various other employee-related informational brochures and video programs. Other communication efforts include websites, social media tools and presentations. Various strategic materials also support communication efforts, including the corporation's Annual Report and news releases.

## Employee Surveys

While MDU Resources endeavors to keep employees informed of company accomplishments and activities, we also need to hear from employees to gauge their opinion on issues such as fairness, camaraderie and pride within the workplace. This is done through an employee survey process conducted corporatewide at least every two years.

Survey results are compiled at various levels throughout the company — by region, by business unit and corporatewide — to evaluate results. Results are used to develop action plans that address areas of concern identified by employees.

Beginning in 2021, the survey included additional, focused questions relative to diversity, equity and inclusion.

Results of the survey and associated action plans are provided to the Environmental and Sustainability Committee of MDU Resources' board.

## Ethics Reporting

MDU Resources' employees are encouraged to ask questions or report concerns to their supervisor. However, if employees have concerns that something may be unethical or illegal within the company, they are encouraged to report their concerns to a human resources representative, a company executive or their compliance officer.

For those wishing to remain anonymous, MDU Resources also has an anonymous reporting hotline. Employees, customers and other stakeholders can report confidentially and anonymously through this third-party telephone- and internet-based reporting system any concerns about possible unethical or illegal activities. Reports are carefully considered and investigated. Summaries of the reports and investigative results are provided to the Audit Committee of the Board of Directors.

Anyone who wishes to file an anonymous report can call 1-866-294-4676 or visit <http://ethics.mdu.com>.



## Policies

MDU Resources and its business segments have policies, procedures and practices in place that help communicate our corporate vision and values and guide our employees' actions. While certain policies apply to all MDU Resources and its business units, other policies are business-unit specific to accommodate particular needs within the organization. Some business units also have employee handbooks that address workplace expectations.

## Key Policies and Covered Business Segments

	MDUR	MDU UG	WBI	KRC	CSG
<b>Leading with Integrity Program</b> To assure each employee is aware of and understands the Leading with Integrity Guide (Code of Conduct)	<a href="#">MDUR 81.7</a>	<a href="#">MDUR 81.7</a>	<a href="#">MDUR 81.7</a>	<a href="#">MDUR 81.7</a>	<a href="#">MDUR 81.7</a>
<b>Compliance Program, Reporting and Investigation</b> Provides a process for the receipt, retention, and treatment of reports regarding areas accounting, internal controls, auditing matters, legal, ethical, human resources, and safety.	<a href="#">MDUR 86.2</a>	<a href="#">MDUR 86.2</a>	<a href="#">MDUR 86.2</a>	<a href="#">MDUR 86.2</a>	<a href="#">MDUR 86.2</a>
<b>Insider Trading</b> Provides guidance on prohibited actions to ensure compliance with insider trading laws.	<a href="#">MDUR 87.0</a>	<a href="#">MDUR 87.0</a>	<a href="#">MDUR 87.0</a>	<a href="#">MDUR 87.0</a>	<a href="#">MDUR 87.0</a>
<b>Human Rights</b> Affirms the company's commitment salient human rights	<a href="#">MDUR 88.0</a>	<a href="#">MDUR 88.0</a>	<a href="#">MDUR 88.0</a>	<a href="#">MDUR 88.0</a>	<a href="#">MDUR 88.0</a>
<b>EEO/Affirmative Action</b> Affirms the company's commitment to the philosophy of Equal Employment Opportunity and Affirmative Action to the achievement of equality of opportunity for all employees and applicants for employment.	<a href="#">MDUR 104.7</a>	<a href="#">MDUR 104.7</a>	<a href="#">MDUR 104.7</a>	<a href="#">MDUR 104.7</a>	<a href="#">MDUR 104.7</a>
<b>Harassment</b> To provide all employees a positive work environment, free from all forms of harassment, including sexual harassment.	<a href="#">MDUR 105.6</a>	<a href="#">MDUR 105.6</a>	<a href="#">MDUR 105.6</a>	<a href="#">MDUR 105.6</a>	<a href="#">MDUR 105.6</a>
<b>HIPAA Privacy &amp; Security</b> To ensure compliance with the Health Insurance Portability and Accountability Act protecting any and all forms of protected health information.	<a href="#">MDUR 159.2</a>	<a href="#">MDUR 159.2</a>	<a href="#">MDUR 159.2</a>	<a href="#">MDUR 159.2</a>	<a href="#">MDUR 159.2</a>
<b>Telecommuting</b> Allows employees to work at home for all or part of their work schedule as an option to provide flexibility to the employee.	<a href="#">MDUR 160.0</a>	<a href="#">MDUR 160.0</a>	<a href="#">MDUR 160.0</a>	<a href="#">MDUR 160.0</a>	<a href="#">MDUR 160.0</a>
<b>Alcohol &amp; Drug Free Workplace</b> Affirms the company's commitment to a safe workplace free of alcohol and drugs.	<a href="#">HR 100</a>	<a href="#">HR 100</a>	<a href="#">HR 100</a>	KRC 200.2	CSG 100
<b>Disciplinary Action</b> Establishes standards the administration of discipline and a process to appeal disciplinary actions taken.	<a href="#">HR 106</a>	<a href="#">HR 106</a>	<a href="#">HR 106</a>	KRC 102	CSG 103
<b>Preventing Violence in the Workplace</b> Provides guidance to ensure a safe and secure working environment.	<a href="#">HR 107</a>	<a href="#">HR 107</a>	<a href="#">HR 107</a>	KRC 117	CSG 71
<b>Smoke Free &amp; Tobacco Free Work Environments</b> Provides a healthy work environment which also complies with state laws regarding tobacco restrictions.	<a href="#">HR 120</a>	<a href="#">HR 120</a>	<a href="#">HR 120</a>	KRC 118.1	CSG 70
<b>Request for Customer and Employee Information</b> Establishes standards for the release of information regarding customers and current or former employees to managers, employees, organizations or individuals outside the company.	<a href="#">HR 160</a>	<a href="#">HR 160</a>	<a href="#">HR 160</a>	KRC 107 & 113	CSG 160

	MDUR	MDU UG	WBI	KRC	CSG
<b>Employee Performance Appraisals</b> Ensures employees are kept informed of their performance and assist supervisors in appraising employee of their progress and potential or areas which need to be strengthened.	<a href="#">HR 161.0</a>	<a href="#">HR 161.0</a>	<a href="#">HR 161.0</a>	KRC 104	N/A
<b>Transgender Guideline</b> Provides an inclusive environment that allows employees to be honest and open about who they are and to identify human resource guidelines for addressing the needs and issues that arise in the workplace when a person transitions between genders.	<a href="#">Guideline 101</a>	<a href="#">Guideline 101</a>	<a href="#">Guideline 101</a>	<a href="#">Guideline 101</a>	N/A

## Safety

MDU Resources is committed to safety and health in the workplace. We adhere to seven key principles regarding safety:

- All injuries can be prevented.
- Working safely is a condition of employment for all employees.
- Management must demonstrate leadership in preventing injuries by providing a safe work environment, adequate resources, performance incentives and appropriate follow-up on any unsafe conditions or actions.
- All employees are responsible for preventing injuries to themselves and others.
- All operating exposures can be safeguarded or controlled.
- Training employees to work safely is essential.
- Preventing personal injuries and property damage is good business.

MDU Resources has a Safety Leadership Council that meets quarterly, reviewing information and identifying best management practices to prevent occupationally induced injuries and illness. The council membership is comprised of MDU Resources' general counsel, MDU Resources' risk management director and the safety directors for each of the company's business units.

Among its responsibilities, the council reviews each business unit's safety performance, oversees and assists the safety directors and operating companies in identifying best management practices in preventing workplace injuries and environmental health hazards, monitors the effectiveness of MDU Resources' safety and environmental health programs, critically reviews reports or incidents of significant property damage or personal injury, and discusses corrective actions that will facilitate a safe and healthy work environment.

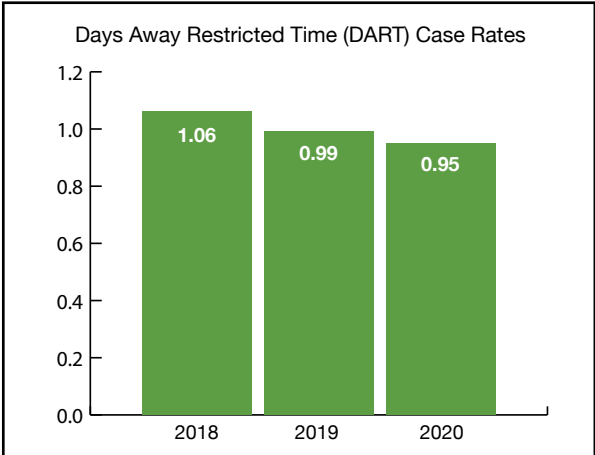
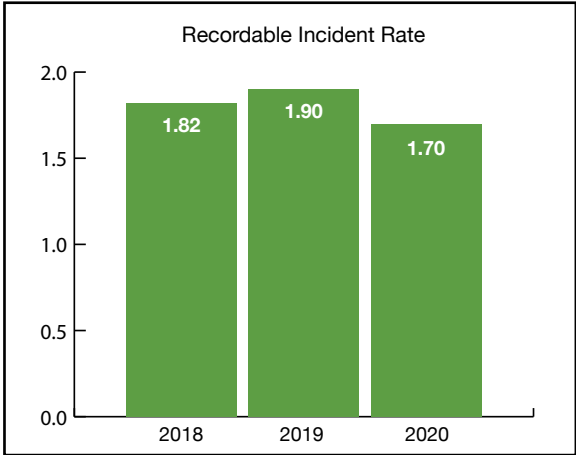
MDU Resources provides continual safety training to meet the needs of our business units and employees. The Environmental and Sustainability Committee of our Board of Directors reviews safety metrics at each of its regular quarterly meetings.

## Safety Policies

	MDUR	MDU UG	WBI	KRC	CSG
<b>Employee Safety</b> Affirms the company's commitment to the establishment of a healthy and safe workplace and integration of health and safety into all workplace activities.	<a href="#">MDUR 24.4</a>	<a href="#">MDUR 24.4</a>	<a href="#">MDUR 24.4</a>	<a href="#">MDUR 24.4</a>	<a href="#">MDUR 24.4</a>
<b>Accident and Incident Reporting/Investigation</b> Provides guidance on the reporting of accidents and incidents as well as their investigation.	<a href="#">MDUR 25.5</a>	<a href="#">MDUR 25.5</a>	<a href="#">MDUR 25.5</a>	<a href="#">MDUR 25.5</a>	<a href="#">MDUR 25.5</a>
<b>Motor Vehicle Safety</b> Provides guidance on the safe operation of company-owned, leased or rented vehicles and the use of personal vehicles for company business.	<a href="#">MDUR 26</a>	<a href="#">MDUR 26</a>	<a href="#">MDUR 26</a>	<a href="#">MDUR 26</a>	<a href="#">MDUR 26</a>

### Recordable Incidences and DART Cases

MDU Resources' goal is to have zero injuries or incidents among our employees.



### Contractor Safety

At MDU Resources' construction operations, subcontractors are requested annually to provide information about their safety programs and recordable and lost-time incidence rates. If our companies deem a subcontractor's programs to be inadequate, the subcontractor is provided with our company safety policies and training for their personnel. Our goal is to ensure safe operations by our subcontractors for the protection of employees and the public.





## Our Commitment to Shareholders

MDU Resources Group's management is committed to acting in the best interest of the corporation, protecting its assets, and serving the long-term interests of the corporation's shareholders. This includes protecting our tangible interests, such as property and equipment, as well as intangible assets, such as our reputation, information and intellectual property.

### Accounting and Financial Reporting

Every employee is responsible for protecting MDU Resources' financial and physical assets, and management is responsible for establishing and maintaining appropriate internal controls to ensure the protection of our assets and to ensure accurate and timely financial reporting. Every employee is responsible for abiding by management's internal controls for protecting the corporation's assets.

The corporation maintains accurate accounting records, which include all assets, liabilities, revenues, expenses and financial transactions, in accordance with Generally Accepted Accounting Principles (GAAP).

All material off-balance-sheet transactions, arrangements and obligations, contingent or otherwise, and other relationships of MDU Resources or its operating companies with unconsolidated entities or other persons that may have material current or future effects on the financial condition, changes in financial condition, results of operations, liquidity, capital expenditures, capital resources or significant components of revenues or expenses are disclosed to the Audit Committee of the Board of Directors and to the corporation's independent auditors.

No employee or director may interfere with or seek to improperly influence, directly or indirectly, the auditing of MDU Resources' financial records.

MDU Resources' policies require employees who become aware of any improper transaction or accounting practice to report the matter immediately to their supervisor, the general counsel, the corporation's internal auditing director, or a member of the Audit Committee. An employee also may file a confidential, anonymous report through the company's ethics hotline. There will be no retaliation against employees who disclose, in good faith, questionable accounting or auditing matters.

### Protection of Property

All employees are responsible for the proper use of company property, which includes physical resources and proprietary and confidential information. Employees must provide reasonable care for the use and maintenance of property and take adequate precautions to protect assets from misuse, theft, vandalism and accidental loss. Property may not be used for the personal benefit of employees or anyone else, including community or charitable organizations, without prior management approval.

Sensitive information, including Social Security numbers and banking information, are required to be handled according to MDU Resources' [Sensitive Information Policy](#).

### Trademarks, Service Marks and Copyrights

Trademarks and service marks — words, slogans, symbols, logos or other devices used to identify a particular source of goods or services — are important business tools and valuable assets that require care in their use and treatment. MDU Resources' trademarks, service marks and logos are governed by the corporation's [Logo Protocol Policy](#).

## Inside Information

Employees may not trade in or even recommend corporate stock based on inside information. "Insider trading" is the purchase or sale of a publicly traded security while in possession of material non-public information about the issuer of the security. Such information includes non-public information on, for example, corporate earnings, significant gains or losses of business, or the hiring, firing or resignation of a director or officer of the corporation. Insider trading is prohibited by securities laws. So is "tipping," which is communicating such information to anyone who might use it to purchase or sell securities.

Officers and directors of the corporation are prohibited from trading in corporate stock during a "Blackout Period," as described in the corporation's [Insider Trading Policy](#).

## Conflicts of Interest

MDU Resources' code of conduct, the "[Leading With Integrity Guide](#)," requires directors, officers and employees to conduct themselves in such a way that there is no conflict — or even the appearance of a conflict — between their personal interests and the corporation's interests. Employees and non-executive officers who recognize a conflict of interest must report it to their supervisor, the human resources department, the general counsel or the internal audit director. Directors and executive officers must report to the general counsel all proposed or existing transactions between them or their immediate family members and the corporation.

## Personal Financial Interests

MDU Resources' [Related Party Transactions Policy](#) requires an employee to disclose and obtain approval of a transaction in which the corporation is a participant and the employee or an immediate family member has or will have a direct or indirect material interest.

## Significant Relationships

MDU Resources employees are required to disclose "significant relationships," meaning a family, business or personal relationship that causes or appears to cause an inability on the part of an employee to objectively and impartially perform his or her responsibilities.

These might include:

- A family, business or personal relationship with another employee with whom a reporting relationship exists. This applies whether the relationship is direct or indirect and whether it is superior-to-subordinate or subordinate-to-superior.
- A relationship with an officer of any MDU Resources company.
- A relationship with another corporate employee whose career or terms and conditions of employment may be affected by the reporting employee.



## Electric Company ESG/Sustainability Quantitative Information

Parent Company: MDU Resources

Operating Company(s): Cascade Natural Gas Corp (CNG), Intermountain Gas Co. (IGC), Great Plains Natural Gas Co. (GPNG), and Montana-Dakota Utilities Co. (Montana-Dakota)

Business Type(s): Montana-Dakota- Electric Generation, Transmission and Distribution and Natural Gas Local Distribution; CNG, IGC, and GPNG- Natural Gas Local Distribution Company

State(s) of Operation: Idaho, Oregon, Montana, Minnesota, North Dakota, South Dakota, Washington, and Wyoming

State(s) with RPS Programs:

Regulatory Environment: Regulated

Report Date: 2020

Ref. No.	Refer to the 'EEI Definitions' pages for more information on each metric	2005	2018	2019	2020	2030	Comments, Links, Additional Information, and Notes
<b>Portfolio</b>							
1	Owned Nameplate Generation Capacity at end of year (MW)						Only for Montana-Dakota Utilities Co. has electric generation, transmission and distribution operations
1.1	Coal	381	356	356	356		
1.2	Natural Gas	117	206	206	206		Dual fuel natural gas/diesel turbines account for approximately 98MW.
1.3	Nuclear	0	0	0	0		
1.4	Petroleum	2	4	4	4		Portable Generators
1.5	Total Renewable Energy Resources						
1.5.1	Biomass/Biogas						
1.5.2	Geothermal						
1.5.3	Hydroelectric						
1.5.4	Solar						
1.5.5	Wind		205	205	205		
1.6	Other		8	8	8		Heat recovery
2	Net Generation for the data year (MWh)						Owned generation data as reported to EIA on Form 923 Schedule 3 and align purchased power data with the Federal Energy Regulatory Commission (FERC) Form 1 Purchased Power Schedule, Reference Pages numbers 326-327.
2.1	Coal	2,316,751	2,228,907	2,038,738	1,849,692		
2.2	Natural Gas	10,086	11,327	4,002	565		
2.3	Nuclear	0	0	0	0		
2.4	Petroleum	458	370	282	-31		Petroleum units use more KWh of energy than was produced in 2020
2.5	Total Renewable Energy Resources	0	543,260	694,236	754,413		
2.5.1	Biomass/Biogas						
2.5.2	Geothermal						
2.5.3	Hydroelectric						
2.5.4	Solar						
2.5.5	Wind		543,260	694,236	754,413		The sum of wind this data
2.6	Other	902,020	882,988	941,165	928,072		The sum of Owned and Purchased Net Generation, see 2.6i, 2.6.1ii and 2.6.2ii



Ref. No.	Refer to the 'EEI Definitions' pages for more information on each metric	2005	2018	2019	2020	2030	Comments, Links, Additional Information, and Notes
2.i	Owned Net Generation for the data year (MWh)						
2.1.i	Coal	2,316,751	2,228,907	2,038,738	1,849,692		
2.2.i	Natural Gas	10,086	11,327	4,002	565		
2.3.i	Nuclear						
2.4.i	Petroleum	458	370	282	-31		
2.5.i	Total Renewable Energy Resources						
2.5.1.i	Biomass/Biogas						
2.5.2.i	Geothermal						
2.5.3.i	Hydroelectric						
2.5.4.i	Solar						
2.5.5.i	Wind		543,260	694,236	754,413		
2.6.i	Other		51,947	49,566	38,018		Heat recovery and TDF
2.ii	Purchased Net Generation for the data year (MWh)	902,020	831,041	891,599	890,054		Total Purchased Net Generation, resource types that are unknown for market purchases, see 2.6.1ii and 2.6.2ii.
2.1.ii	Coal						
2.2.ii	Natural Gas						
2.3.ii	Nuclear						
2.4.ii	Petroleum						
2.5.ii	Total Renewable Energy Resources						
2.5.1.ii	Biomass/Biogas						
2.5.2.ii	Geothermal						
2.5.3.ii	Hydroelectric						
2.5.4.ii	Solar						
2.5.5.ii	Wind						
2.6.ii	Other						
2.6.1.ii	Other - Blackhills	261,465	84,373	109,388	89,272		
2.6.2.ii	Other - MISO	640,555	746,668	782,211	800,782		
3	Investing in the Future: Capital Expenditures, Energy Efficiency (EE), and Smart Meters						
3.1	Total Annual Capital Expenditures (nominal dollars)	\$27,036,000	\$186,105,000	\$99,449,000	\$114,676,000		
3.2	Incremental Annual Electricity Savings from EE Measures (MWh)						
3.3	Incremental Annual Investment in Electric EE Programs (nominal dollars)						
3.4	Percent of Total Electric Customers with Smart Meters (at end of year)						

Ref. No.	Refer to the 'EEI Definitions' pages for more information on each metric	2005	2018	2019	2020	2030	Comments, Links, Additional Information, and Notes
4	Retail Electric Customer Count (at end of year)	118,367	143,022	143,346	143,782		For information on retail customers classes served, see the Company Annual reports.
4.1	Commercial						
4.2	Industrial						
4.3	Residential						
<b>Emissions</b>							
5	GHG Emissions: Carbon Dioxide (CO <sub>2</sub> ) and Carbon Dioxide Equivalent (CO <sub>2</sub> e)						
	Note: The alternatives available below are intended to provide flexibility in reporting						
	GHG emissions, and should be used to the extent appropriate for each company.						
5.1	Owned Generation (1) (2) (3)						
5.1.1	Carbon Dioxide (CO <sub>2</sub> )						
5.1.1.1	Total Owned Generation CO <sub>2</sub> Emissions (MT)	2,771,874	2,631,213	2,353,494	2,259,252		
5.1.1.2	Total Owned Generation CO <sub>2</sub> Emissions Intensity (MT/Net MWh)	1.191	0.928	0.845	0.855		
5.1.2	Carbon Dioxide Equivalent (CO <sub>2</sub> e)						
5.1.2.1	Total Owned Generation CO <sub>2</sub> e Emissions (MT)	2,789,942	2,396,521	2,369,949	2,274,960		
5.1.2.2	Total Owned Generation CO <sub>2</sub> e Emissions Intensity (MT/Net MWh)	1.199	0.845	0.850	0.861	0.658	
5.1.2.3	Preliminary Total Owned Generation CO <sub>2</sub> e Emissions Intensity from PROXY (MT/Net MWh)				0.853		Preliminary Total Owned Generation CO <sub>2</sub> e Emissions Intensity from PROXY (PROXY information is not part of within the EEI ESG template)
5.2	Purchased Power (4)						
5.2.1	Carbon Dioxide (CO <sub>2</sub> )						
5.2.1.1	Total Purchased Generation CO <sub>2</sub> Emissions (MT)	752,675	468,663	503,103	449,275		
5.2.1.2	Total Purchased Generation CO <sub>2</sub> Emissions Intensity (MT/Net MWh)	0.8344	0.564	0.564	0.505		

Ref. No.	Refer to the 'EEI Definitions' pages for more information on each metric	2005	2018	2019	2020	2030	Comments, Links, Additional Information, and Notes
5.2.2	Carbon Dioxide Equivalent (CO <sub>2</sub> e)						
5.2.2.1	Total Purchased Generation CO <sub>2</sub> e Emissions (MT)	756,622	472,173	506,861	452,519		
5.2.2.2	Total Purchased Generation CO <sub>2</sub> e Emissions Intensity (MT/Net MWh)	0.839	0.568	0.568	0.508		
5.3	Owned Generation + Purchased Power						
5.3.1	Carbon Dioxide (CO <sub>2</sub> )						
5.3.1.1	Total Owned + Purchased Generation CO <sub>2</sub> Emissions (MT)	3,524,549	3,099,875	2,856,597	2,708,527		
5.3.1.2	Total Owned + Purchased Generation CO <sub>2</sub> Emissions Intensity (MT/Net MWh)	1.091	0.845	0.777	0.767		
5.3.2	Carbon Dioxide Equivalent (CO <sub>2</sub> e)						
5.3.2.1	Total Owned + Purchased Generation CO <sub>2</sub> e Emissions (MT)	3,546,564	2,868,694	2,876,809	2,727,480		
5.3.2.2	Total Owned + Purchased Generation CO <sub>2</sub> e Emissions Intensity (MT/Net MWh)	1.093	0.782	0.782	0.772		
5.4	Non-Generation CO <sub>2</sub> e Emissions						
5.4.1	Fugitive CO <sub>2</sub> e emissions of sulfur hexafluoride (MT) (5)	17,218	1,295	1,301	155		Baseline for sulfur hexafluoride is 2004 and for electric system only. Represented in metric tons.
5.4.2	Fugitive CO <sub>2</sub> e emissions from natural gas distribution (MT) (6)						See AGA Metrics for Cascade Natural Gas and Intermountain Gas Company
6	Nitrogen Oxide (NO <sub>x</sub> ), Sulfur Dioxide (SO <sub>2</sub> ), Mercury (Hg)						
6.1	Generation basis for calculation (7)	FOSSIL					Section 6 represents emissions from owned and co-owned fossil generation facilities.
6.2	Nitrogen Oxide (NO <sub>x</sub> )						
6.2.1	Total NO <sub>x</sub> Emissions (MT)	7,708	3,685	3,168	3,186		
6.2.2	Total NO <sub>x</sub> Emissions Intensity (MT/Net MWh)	0.0033	0.0016	0.0015	0.0017		



Ref. No.	Refer to the 'EI Definitions' pages for more information on each metric	2005	2018	2019	2020	2030	Comments, Links, Additional Information, and Notes
6.3	Sulfur Dioxide (SO <sub>2</sub> )						
6.3.1	Total SO <sub>2</sub> Emissions (MT)	9,461	5,651	4,487	5,044		
6.3.2	Total SO <sub>2</sub> Emissions Intensity (MT/Net MWh)	0.0041	0.0025	0.0022	0.0027		
6.4	Mercury (Hg)						
6.4.1	Total Hg Emissions (kg)	52.2	22.0	17.3	18.2		
6.4.2	Total Hg Emissions Intensity (kg/Net MWh)	0.000022	0.000010	0.000008	0.000010		

**Key**

MT = metric tons  
 1 lb. = 453.59 grams  
 1 tonne = 1,000,000.00 grams  
 1 metric ton = 1.1023 short tons  
 Total output-based emissions factor = (insert emissions factor and source)

**Notes**

- (1) Generation and emissions are adjusted for equity ownership share to reflect the percentage of output owned by reporting entity.
- (2) CO<sub>2</sub> and CO<sub>2</sub>e emissions intensity should be reported using total system generation (net MWh) based on GHG worksheet.
- (3) As reported to EPA under the mandatory GHG Reporting Protocols (40 CFR Part 98, Subparts C and D).
- (4) Purchased power emissions should be calculated using the most relevant and accurate of the following methods:  
 For direct purchases, such as PPAs, use the direct emissions data as reported to EPA.  
 For market purchases where emissions are unknown, use applicable regional or national emissions rate:  
 - ISO/RTO-level emission factors  
 - Climate Registry emission factors  
 - E-Grid emission factors
- (5) As reported to EPA under the mandatory GHG Reporting Protocols (40 CFR Part 98, Subpart DD).
- (6) As reported to EPA under the mandatory GHG Reporting Protocols (40 CFR Part 98, Subpart W).
- (7) Indicate the generation basis for calculating SO<sub>2</sub>, NO<sub>x</sub>, and Hg emissions and intensity.  
 Fossil: Fossil Fuel Generation Only  
 Total: Total System Generation  
 Other: Other (please specify in comment section)

Total CO<sub>2</sub>e is calculated using the following global warming potentials from the IPCC Fourth Assessment Report:

CO<sub>2</sub> = 1  
 CH<sub>4</sub> = 25  
 N<sub>2</sub>O = 298  
 SF<sub>6</sub> = 22,800

Ref. No.	Refer to the 'EEI Definitions' pages for more information on each metric	2005	2018	2019	2020	2030	Comments, Links, Additional Information, and Notes
<b>Resources</b>							
7	Human Resources						
71	Total Number of Employees	973	1,584	1,578	1,592		This is for the Utility Group which includes: Cascade Natural Gas Corp (CNG), Intermountain Gas Co. (IGC), Great Plains Natural Gas Co. (GPNG), and Montana-Dakota Utilities Co. (Montana-Dakota)
72	Total Number on Board of Directors/Trustees	11	11	9	10		
73	Total Women on Board of Directors/Trustees	3	2	3	3		
74	Total Minorities on Board of Directors/Trustees	0	0	1	1		
75	Employee Safety Metrics						
75.1	Recordable Incident Rate	4.74	1.68	1.96	1.55		Safety data for the year 2005 is for Montana-Dakota/GPNG only and pulled from archived safety spreadsheet
75.2	Lost-time Case Rate	1.29	0.61	0.61	0.47		Safety data for the years 2017, 2018, and 2019 are for the Utility Group (Montana-Dakota, GPNG, CNG, and IGC) and pulled from executive rollout stats per year
75.3	Days Away, Restricted, and Transfer (DART) Rate	0.75	0.81	0.94	0.81		
75.4	Work-related Fatalities	0	0	0	0		
8	Fresh Water Resources						
8.1	Water Withdrawals - Consumptive (Billions of Liters/Net MWh)	0.0000017	0.0000009	0.0000008	0.0000009		
8.2	Water Withdrawals - Non-Consumptive (Billions of Liters/Net MWh)	0.000049	0.000037	0.000038	0.00004		
9	Waste Products						2005 data was not available for hazardous waste disposal.
9.1	Amount of Hazardous Waste Manifested for Disposal		45	481	958		Data is from multiple locations throughout Montana-Dakota electric and gas operations service territory where Montana-Dakota or GPNG is listed as the Generator. (units pounds)
9.2	Percent of Coal Combustion Products Beneficially Used	17%	10%	9%	15%		



## Gas Company ESG/Sustainability Quantitative Information

Parent Company:	MDU Resources
Operating Company(s):	Cascade Natural Gas Corp, Intermountain Gas Co., Great Plains Natural Gas Co., and Montana-Dakota Utilities Co. (Utility Group)
Business Type(s):	
State(s) of Operation:	Idaho, Oregon, Montana, Minnesota, North Dakota, South Dakota, Washington, and Wyoming
Regulatory Environment:	Regulated
Report Date:	2020

Ref. No.	Refer to the "Definitions" pages for more information on each metric.	Last Year 2019	Current Year 2020	Definitions
Natural Gas Distribution				
				All methane leak sources per 98.232 (i) (1-6) are included for Distribution. Combustion sources are excluded. CO2 is excluded. Only Cascade Natural Gas Corporation for Washington and Oregon and Intermountain Gas Co for Idaho are included here as those states meet the requirements to report Subpart W. Under OAR 340-215-0115, beginning RY 2020 CNGC-OR is required to report Subpart W to the ODEQ. These emissions will now be added to this report.
1	METHANE EMISSIONS AND MITIGATION FROM DISTRIBUTION MAINS			
1.1	Number of Gas Distribution Customers	978,206	999,112	This metric includes all gas distribution customers for the Utility Group
1.2	Distribution Mains in Service			These metrics include all local distribution companies (LDCs) held by the Parent Company that are above the LDC Facility reporting threshold for EPA's 40 C.F.R. 98, Subpart W reporting rule. Only Cascade Natural Gas Corporation Washington and Intermountain Gas Co. are required to report Subpart W.
1.2.1	Plastic (miles)	6,399	7,478	
1.2.2	Cathodically Protected Steel - Bare & Coated (miles)	4,971	5,770	
1.2.3	Unprotected Steel - Bare & Coated (miles)	0	0	
1.2.4	Cast Iron / Wrought Iron - without upgrades (miles)	0	0	
1.3	Plan/Commitment to Replace / Upgrade Remaining Miles of Distribution Mains (# years to complete)		0	
1.3.1	Unprotected Steel (Bare & Coated) (# years to complete)	0	0	
1.3.2	Cast Iron / Wrought Iron (# years to complete)	0	0	
2	Distribution CO2e Fugitive Emissions			
2.1	CO2e Fugitive Methane Emissions from Gas Distribution Operations (metric tons)	54,977	63,242	Fugitive methane emissions (not CO2 combustion emissions) stated as CO2e, as reported to EPA under 40 CFR 98, Subpart W, sections 98.236(q)(3)(ix)(D), 98.236(r)(1)(v), and 98.236(r)(2)(v)(B) - i.e., this is Subpart W methane emissions as input in row 2.2.1 below and converted to CO2e here. This metric includes fugitive methane emissions above the reporting threshold for all natural gas local distribution companies (LDCs) held by the Parent Company that are above the LDC Facility reporting threshold for EPA's 40 C.F.R. 98, Subpart W reporting rule. Calculated value based on mt CH4 input in the 2.2.1 (below).
2.2	CH4 Fugitive Methane Emissions from Gas Distribution Operations (metric tons)	2,199	2,530	INPUT VALUE (total mt CH4) as explained in definition above. Subpart W input is CH4 (mt).
2.2.1	CH4 Fugitive Methane Emissions from Gas Distribution Operations (MMSCF/year)	115	132	
2.3	Annual Natural Gas Throughput from Gas Distribution Operations in thousands of standard cubic feet (Mscf/year)	175,892,311	202,389,307	This metric provides gas throughput from distribution (quantity of natural gas delivered to end users) reported under Subpart W, 40 C.F.R. 98.236(aa)(9)(iv), as reported on the Subpart W e-GRRT integrated reporting form in the "Facility Overview" worksheet Excel form, Quantity of natural gas delivered to end users (column 4).
2.3.1	Annual Methane Gas Throughput from Gas Distribution Operations in millions of standard cubic feet (MMscf/year)	167,098	192,270	
2.4	Fugitive Methane Emissions Rate (MMscf of Methane Emissions per MMscf of Methane Throughput)	0.07%	0.07%	$\frac{E_{\text{F}}}{TR} = \frac{\text{tonnes CH}_4}{\text{MMscf gas}} \times \frac{10^6 \text{ g CH}_4}{\text{tonne CH}_4} \times \frac{0 \text{ mole CH}_4}{16 \text{ g CH}_4} \times \frac{\text{gmol NorGas}}{0.95 \text{ gmol CH}_4} \times \frac{\text{scf gas}}{1.198 \text{ gmol gas}} \times \frac{\text{MMscf gas emissions}}{10^6 \text{ scf gas}} = \frac{\text{MMscf gas emissions}}{\text{MMscf gas throughput}} = 96$
Natural Gas Transmission and Storage				
				All methane leak sources per 98.232 (e) (1-8), (f)(1-8), and (m) are included for Transmission and Storage. Combustion sources are excluded. CO2 and N2O are excluded.
1	Onshore Natural Gas Transmission Compression Methane Emissions	NA	NA	Fugitive Methane emissions as defined in 40 CFR 98 Sub W Section 232 (e) (1-8), CO2 and N2O emissions are excluded from this section.
1.1.1	Pneumatic Device Venting (metric tons/year)			Value reported using calculation in 40 CFR 98 Sub W Section 236(b)(4)
1.1.2	Blowdown Vent Stacks (metric tons/year)			Value reported using calculation in 40 CFR 98 Sub W Section 236(i)(1)(iii)



Ref. No.	Refer to the "Definitions" pages for more information on each metric.	Last Year 2019	Current Year 2020	Definitions
1.1.3	Transmission Storage Tanks (metric tons/year)			Value reported using calculation in 40 CFR 98 Sub W Section 236(k)(2)(v)
1.1.4	Flare Stack Emissions (metric tons/year)			Value reported using calculation in 40 CFR 98 Sub W Section 236(n)(11)
1.1.5	Centrifugal Compressor Venting (metric tons/year)			Value reported using calculation in 40 CFR 98 Sub W Section 236(o)(2)(ii)(D)(2)
1.1.6	Reciprocating Compressor Venting (metric tons/year)			Value reported using calculation in 40 CFR 98 Sub W Section 236(p)(2)(ii)(D)(2)
1.1.7	Equipment leaks from valves, connectors, open ended lines, pressure relief valves, and meters (metric tons/year)			Value reported using calculation in 40 CFR 98 Sub W Section 236(q)(2)(v)
1.1.8	Other Leaks (metric tons/year)			Value reported using calculation in 40 CFR 98 Sub W Section 236(q)(2)(v)
1.2	Total Transmission Compression Methane Emissions (metric tons/year)			
1.3	Total Transmission Compression Methane Emissions (CO <sub>2</sub> e/year)			
1.4	Total Transmission Compression Methane Emissions (MSCF/year)			Density of Methane = 0.0192 kg/ft <sup>3</sup> per 40 CFR Sub W EQ. W-36
2	Underground Natural Gas Storage Methane Emissions	NA	NA	Fugitive Methane emissions as defined in 40 CFR 98 Sub W Section 232 (f) (1-8), CO <sub>2</sub> and N <sub>2</sub> O emissions are excluded from this section.
2.1.1	Pneumatic Device Venting (metric tons/year)			Value reported using calculation in 40 CFR 98 Sub W Section 236(b)(4)
2.1.2	Flare Stack Emissions (metric tons/year)			Value reported using calculation in 40 CFR 98 Sub W Section 236(n)(11)
2.1.3	Centrifugal Compressor Venting (metric tons/year)			Value reported using calculation in 40 CFR 98 Sub W Section 236(o)(2)(ii)(D)(2)
2.1.4	Reciprocating Compressor Venting (metric tons/year)			Value reported using calculation in 40 CFR 98 Sub W Section 236(p)(2)(ii)(D)(2)
2.1.5	Equipment leaks from valves, connectors, open ended lines, pressure relief valves, and meters (metric tons/year)			Value reported using calculation in 40 CFR 98 Sub W Section 236(q)(2)(v)
2.1.6	Other Equipment Leaks (metric tons/year)			Value reported using calculation in 40 CFR 98 Sub W Section 236(q)(2)(v)
2.1.7	Equipment leaks from valves, connectors, open-ended lines, and pressure relief valves associated with storage wellheads (metric tons/year)			Value reported using calculation in 40 CFR 98 Sub W Section 236(q)(2)(v)
2.1.8	Other equipment leaks from components associated with storage wellheads (metric tons/year)			Value reported using calculation in 40 CFR 98 Sub W Section 232(q)(2)(v)
2.2	Total Storage Compression Methane Emissions (metric tons/year)			
2.3	Total Storage Compression Methane Emissions (CO <sub>2</sub> e/year)			
2.4	Total Storage Compression Methane Emissions (MSCF/year)			Density of Methane = 0.0192 kg/ft <sup>3</sup> per 40 CFR Sub W EQ. W-36
3	Onshore Natural Gas Transmission Pipeline Blowdowns	NA	NA	Blowdown vent stacks for onshore transmission pipeline as defined in 40 CFR 98 Sub W Section 232 (m), CO <sub>2</sub> and N <sub>2</sub> O emissions are excluded from this section.
3.1	Transmission Pipeline Blowdown Vent Stacks (metric tons/year)			Value reported using calculation in 40 CFR 98 Sub W Section 232(i)(3)(ii)
3.2	Transmission Pipeline Blowdown Vent Stacks (CO <sub>2</sub> e/year)			
3.3	Transmission Pipeline Blowdown Vent Stacks (MSCF/year)			
4	Other Non-Sub W Emissions Data	NA	NA	Additional sources required by ONE Future include dehydrator vents, storage station venting transmission pipeline leaks, and storage tank methane.
4.1	Total Methane Emissions from additional sources not recognized by 40 CFR 98 Subpart W (metric tons/year)			
4.2	Total Methane Emissions from additional sources not recognized by 40 CFR 98 Subpart W (CO <sub>2</sub> e/year)			
4.3	Total Methane Emissions from additional sources not recognized by 40 CFR 98 Subpart W (MSCF/year)			
5	Summary and Metrics	NA	NA	
5.1	Total Transmission and Storage Methane Emissions (MMSCF/year)			
5.2	Annual Natural Gas Throughput from Gas Transmission and Storage Operations (MSCF/year)			EIA 176 throughput or other reference for other throughput selected
5.2.1	Annual Methane Gas Throughput from Gas Transmission and Storage Operations (MMSCF/year)			Methane content in natural gas equals 95% based on 40 CFR 98 Sub W 233(u)(2)(vii)
5.3	Fugitive Methane Emissions Rate (MMscf of Methane Emissions per MMscf of Methane Throughput)			
Natural Gas Gathering and Boosting				
1	METHANE EMISSIONS	NA	NA	
1.1	Gathering and Boosting Pipelines, Blow Down Volumes, and Emissions			
1.1.1	Total Miles of Gathering Pipeline Operated by gas utility (miles)			

Ref. No.	Refer to the "Definitions" pages for more information on each metric.	Last Year 2019	Current Year 2020	Definitions
1.1.2	Volume of Gathering Pipeline Blow Down Emissions (scf)			This metric is collected to support calculations under EPA 40 CFR 98, Subpart W.
1.1.4	Gathering Pipeline Blow-Down Emissions outside storage and compression facilities (metric tons CO <sub>2</sub> e)			
2	CO <sub>2</sub> e COMBUSTION EMISSIONS FOR GATHERING & BOOSTING COMPRESSION			
2.1	CO <sub>2</sub> e Emissions for Gathering & Boosting Compression Stations (metric tons)			CO <sub>2</sub> combustion emissions as reported to EPA under 40 CFR 98, Subpart C, as directed in Subpart W, 98.232(k).
3	CONVENTIONAL COMBUSTION EMISSIONS FROM GATHERING & BOOSTING COMPRESSION			
3.1	Emissions reported for all permitted sources (minor or major)			The number of permitted sources for conventional emissions may not be the same number of sources reporting under the EPA GHG reporting rule. Companies may wish to describe which, or how many, sources are included in the conventional pollutants data and whether the CO <sub>2</sub> e data reported includes all of these sources.
3.1.1	NO <sub>x</sub> (metric tons per year)			
3.1.2	VOC (metric tons per year)			

## Definitions for Electric Company ESG/Sustainability Metrics

Ref. No.	Metric Name	Definition	Units Reported in	Time Period (if applicable)	Reference to Source (if applicable)
	Portfolio				
1	Owned Nameplate Generation Capacity at end of year (MW)	Provide generation capacity data that is consistent with other external reporting by your company. The alternative default is to use the summation of the nameplate capacity of installed owned generation in the company portfolio, as reported to the U.S. Energy Information Administration (EIA) on Form 860 Generator Information. Note that data should be provided in terms of equity ownership for shared facilities. Nameplate capacity is defined as the maximum rated output of a generator, prime mover, or other electric power production equipment under specific conditions designated by the manufacturer. Installed generator nameplate capacity is commonly expressed in megawatts (MW) and is usually indicated on a nameplate physically attached to the generator.	Megawatt (MW): One million watts of electricity.	End of Year	U.S. Energy Information Administration, Online Glossary, <a href="https://www.eia.gov/tools/glossary/">https://www.eia.gov/tools/glossary/</a> . Form 860 instructions available at: <a href="http://www.eia.gov/survey/form/eia_860/instructions.pdf">www.eia.gov/survey/form/eia_860/instructions.pdf</a> .
1.1	Coal	Nameplate capacity of generation resources that produce electricity through the combustion of coal (a readily combustible black or brownish-black rock whose composition, including inherent moisture, consists of more than 50 percent by weight and more than 70 percent by volume of carbonaceous material. It is formed from plant remains that have been compacted, hardened, chemically altered, and metamorphosed by heat and pressure over geologic time).	MW	End of Year	U.S. Energy Information Administration, Online Glossary, <a href="https://www.eia.gov/tools/glossary/">https://www.eia.gov/tools/glossary/</a> .
1.2	Natural Gas	Nameplate capacity of generation resources that produce electricity through the combustion of natural gas (a gaseous mixture of hydrocarbon compounds, the primary one being methane).	MW	End of Year	U.S. Energy Information Administration, Online Glossary, <a href="https://www.eia.gov/tools/glossary/">https://www.eia.gov/tools/glossary/</a> .
1.3	Nuclear	Nameplate capacity of generation resources that produce electricity through the use of thermal energy released from the fission of nuclear fuel in a reactor.	MW	End of Year	U.S. Energy Information Administration, Online Glossary, <a href="https://www.eia.gov/tools/glossary/">https://www.eia.gov/tools/glossary/</a> .
1.4	Petroleum	Nameplate capacity of generation resources that produce electricity through the combustion of petroleum (a broadly defined class of liquid hydrocarbon mixtures. Included are crude oil, lease condensate, unfinished oils, refined products obtained from the processing of crude oil, and natural gas plant liquids).	MW	End of Year	U.S. Energy Information Administration, Online Glossary, <a href="https://www.eia.gov/tools/glossary/">https://www.eia.gov/tools/glossary/</a> .
1.5	Total Renewable Energy Resources	Energy resources that are naturally replenishing but flow-limited. They are virtually inexhaustible in duration but limited in the amount of energy that is available per unit of time. Renewable energy resources include biomass, hydro, geothermal, solar, wind, ocean thermal, wave action, and tidal action.	MW	End of Year	U.S. Energy Information Administration, Online Glossary, <a href="https://www.eia.gov/tools/glossary/">https://www.eia.gov/tools/glossary/</a> .
1.5.1	Biomass/Biogas	Nameplate capacity of generation resources that produce electricity through the combustion of biomass (an organic nonfossil material of biological origin constituting a renewable energy source).	MW	End of Year	U.S. Energy Information Administration, Online Glossary, <a href="https://www.eia.gov/tools/glossary/">https://www.eia.gov/tools/glossary/</a> .
1.5.2	Geothermal	Nameplate capacity of generation resources that produce electricity through the use of thermal energy released from hot water or steam extracted from geothermal reservoirs in the earth's crust.	MW	End of Year	U.S. Energy Information Administration, Online Glossary, <a href="https://www.eia.gov/tools/glossary/">https://www.eia.gov/tools/glossary/</a> .
1.5.3	Hydroelectric	Nameplate capacity of generation resources that produce electricity through the use of flowing water.	MW	End of Year	U.S. Energy Information Administration, Online Glossary, <a href="https://www.eia.gov/tools/glossary/">https://www.eia.gov/tools/glossary/</a> .
1.5.4	Solar	Nameplate capacity of generation resources that produce electricity through the use of the radiant energy of the sun, which can be converted into other forms of energy, such as heat or electricity.	MW	End of Year	U.S. Energy Information Administration, Online Glossary, <a href="https://www.eia.gov/tools/glossary/">https://www.eia.gov/tools/glossary/</a> .
1.5.5	Wind	Nameplate capacity of generation resources that produce electricity through the use of kinetic energy present in wind motion that can be converted to mechanical energy for driving pumps, mills, and electric power generators.	MW	End of Year	U.S. Energy Information Administration, Online Glossary, <a href="https://www.eia.gov/tools/glossary/">https://www.eia.gov/tools/glossary/</a> .
1.6	Other	Nameplate capacity of generation resources that are not defined above.	MW	End of Year	
2	Net Generation for the data year (MWh)	Net generation is defined as the summation of the amount of gross generation less the electrical energy consumed at the generating station(s) for station service or auxiliaries. Data can be provided in terms of total, owned, and/or purchased, depending on how the company prefers to disseminate data in this template. Provide net generation data that is consistent with other external reporting by your company. The alternative default is to provide owned generation data as reported to EIA on Form 923 Schedule 3 and align purchased power data with the Federal Energy Regulatory Commission (FERC) Form 1 Purchased Power Schedule, Reference Pages numbers 326-327. Note: Electricity required for pumping at pumped-storage plants is regarded as electricity for station service and is deducted from gross generation.	Megawatt hour (MWh): One thousand kilowatt-hours or one million watt-hours.	Annual	U.S. Energy Information Administration, Online Glossary, <a href="https://www.eia.gov/tools/glossary/">https://www.eia.gov/tools/glossary/</a> . Form 923 instructions available at: <a href="http://www.eia.gov/survey/form/eia_923/instructions.pdf">www.eia.gov/survey/form/eia_923/instructions.pdf</a> .
2.1	Coal	Net electricity generated by the combustion of coal (a readily combustible black or brownish-black rock whose composition, including inherent moisture, consists of more than 50 percent by weight and more than 70 percent by volume of carbonaceous material. It is formed from plant remains that have been compacted, hardened, chemically altered, and metamorphosed by heat and pressure over geologic time).	MWh	Annual	U.S. Energy Information Administration, Online Glossary, <a href="https://www.eia.gov/tools/glossary/">https://www.eia.gov/tools/glossary/</a> .
2.2	Natural Gas	Net electricity generated by the combustion of natural gas (a gaseous mixture of hydrocarbon compounds, the primary one being methane).	MWh	Annual	U.S. Energy Information Administration, Online Glossary, <a href="https://www.eia.gov/tools/glossary/">https://www.eia.gov/tools/glossary/</a> .
2.3	Nuclear	Net electricity generated by the use of the thermal energy released from the fission of nuclear fuel in a reactor.	MWh	Annual	U.S. Energy Information Administration, Online Glossary, <a href="https://www.eia.gov/tools/glossary/">https://www.eia.gov/tools/glossary/</a> .
2.4	Petroleum	Net electricity generated by the combustion of petroleum (a broadly defined class of liquid hydrocarbon mixtures. Included are crude oil, lease condensate, unfinished oils, refined products obtained from the processing of crude oil, and natural gas plant liquids).	MWh	Annual	U.S. Energy Information Administration, Online Glossary, <a href="https://www.eia.gov/tools/glossary/">https://www.eia.gov/tools/glossary/</a> .
2.5	Total Renewable Energy Resources	Energy resources that are naturally replenishing but flow-limited. They are virtually inexhaustible in duration but limited in the amount of energy that is available per unit of time. Renewable energy resources include biomass, hydro, geothermal, solar, wind, ocean thermal, wave action, and tidal action.	MWh	Annual	U.S. Energy Information Administration, Online Glossary, <a href="https://www.eia.gov/tools/glossary/">https://www.eia.gov/tools/glossary/</a> .
2.5.1	Biomass/Biogas	Net electricity generated by the combustion of biomass (an organic nonfossil material of biological origin constituting a renewable energy source).	MWh	Annual	U.S. Energy Information Administration, Online Glossary, <a href="https://www.eia.gov/tools/glossary/">https://www.eia.gov/tools/glossary/</a> .
2.5.2	Geothermal	Net electricity generated by the use of thermal energy released from hot water or steam extracted from geothermal reservoirs in the earth's crust.	MWh	Annual	U.S. Energy Information Administration, Online Glossary, <a href="https://www.eia.gov/tools/glossary/">https://www.eia.gov/tools/glossary/</a> .
2.5.3	Hydroelectric	Net electricity generated by the use of flowing water.	MWh	Annual	U.S. Energy Information Administration, Online Glossary, <a href="https://www.eia.gov/tools/glossary/">https://www.eia.gov/tools/glossary/</a> .

2.5.4	Solar	Net electricity generated by the use of the radiant energy of the sun, which can be converted into other forms of energy, such as heat or electricity.	MWh	Annual	U.S. Energy Information Administration, Online Glossary, <a href="https://www.eia.gov/tools/glossary/">https://www.eia.gov/tools/glossary/</a> .
2.5.5	Wind	Net electricity generated by the use of kinetic energy present in wind motion that can be converted to mechanical energy for driving pumps, mills, and electric power generators.	MWh	Annual	U.S. Energy Information Administration, Online Glossary, <a href="https://www.eia.gov/tools/glossary/">https://www.eia.gov/tools/glossary/</a> .
2.6	Other	Net electricity generated by other resources that are not defined above. If applicable, this metric should also include market purchases where the generation resource is unknown.	MWh	Annual	
3	Investing in the Future: Capital Expenditures, Energy Efficiency (EE), and Smart Meters				
3.1	Total Annual Capital Expenditures	Align annual capital expenditures with data reported in recent investor presentations. A capital expenditure is the use of funds or assumption of a liability in order to obtain physical assets that are to be used for productive purposes for at least one year. This type of expenditure is made in order to expand the productive or competitive posture of a business.	Nominal Dollars	Annual	Accounting Tools, Q&A, <a href="http://www.accountingtools.com/questions-and-answers/what-is-a-capital-expenditure.html">http://www.accountingtools.com/questions-and-answers/what-is-a-capital-expenditure.html</a>
3.2	Incremental Annual Electricity Savings from EE Measures (MWh)	Incremental Annual Electricity Savings for the reporting year as reported to EIA on Form 861. Incremental Annual Savings for the reporting year are those changes in energy use caused in the current reporting year by: (1) new participants in DSM programs that operated in the previous reporting year, and (2) participants in new DSM programs that operated for the first time in the current reporting year. A "New program" is a program for which the reporting year is the first year the program achieved savings, regardless of when program development and expenditures began.	MWh	End of Year	U.S. Energy Information Administration, Form EIA-861 Annual Electric Power Industry Report Instructions. Available at: <a href="http://www.eia.gov/survey/form/eia_861/instructions.pdf">www.eia.gov/survey/form/eia_861/instructions.pdf</a> .
3.3	Incremental Annual Investment in Electric EE Programs (nominal dollars)	Total annual investment in electric energy efficiency programs as reported to EIA on Form 861.	Nominal Dollars	End of Year	U.S. Energy Information Administration, Form EIA-861 Annual Electric Power Industry Report Instructions. Available at: <a href="http://www.eia.gov/survey/form/eia_861/instructions.pdf">www.eia.gov/survey/form/eia_861/instructions.pdf</a> .
3.4	Percent of Total Electric Customers with Smart Meters (at end of year)	Number of electric smart meters installed at end-use customer locations, divided by number of total electric meters installed at end-use customer locations. Smart meters are defined as electricity meters that measure and record usage data at a minimum, in hourly intervals, and provide usage data to both consumers and energy companies at least once daily. Align reporting with EIA Form 861 meter data, which lists all types of meter technology used in the system as well as total meters in the system.	Percent	End of Year	U.S. Energy Information Administration, Online Glossary, <a href="https://www.eia.gov/tools/glossary/">https://www.eia.gov/tools/glossary/</a> .
4	Retail Electric Customer Count (at end of year)	Electric customer counts should be aligned with the data provided to EIA on Form 861 - Sales to Utility Customers.			U.S. Energy Information Administration, Form EIA-861 Annual Electric Power Industry Report Instructions. Available at: <a href="http://www.eia.gov/survey/form/eia_861/instructions.pdf">www.eia.gov/survey/form/eia_861/instructions.pdf</a> .
4.1	Commercial	An energy-consuming sector that consists of service-providing facilities and equipment of businesses; Federal, State, and local governments; and other private and public organizations, such as religious, social, or fraternal groups. The commercial sector includes institutional living quarters. It also includes sewage treatment facilities. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a wide variety of other equipment. Note: This sector includes generators that produce electricity and/or useful thermal output primarily to support the activities of the above-mentioned commercial establishments.	Number of end-use retail customers receiving electricity (individual homes and businesses count as one).	End of Year	U.S. Energy Information Administration, Online Glossary, <a href="https://www.eia.gov/tools/glossary/">https://www.eia.gov/tools/glossary/</a> .
4.2	Industrial	An energy-consuming sector that consists of all facilities and equipment used for producing, processing, or assembling goods. The industrial sector encompasses the following types of activity manufacturing (NAICS codes 31-33); agriculture, forestry, fishing and hunting (NAICS code 11); mining, including oil and gas extraction (NAICS code 21); and construction (NAICS code 23). Overall energy use in this sector is largely for process heat and cooling and powering machinery, with lesser amounts used for facility heating, air conditioning, and lighting. Fossil fuels are also used as raw material inputs to manufactured products. Note: This sector includes generators that produce electricity and/or useful thermal output primarily to support the above-mentioned industrial activities. Various EIA programs differ in sectoral coverage.	Number of end-use retail customers receiving electricity (individual homes and businesses count as one).	End of Year	U.S. Energy Information Administration, Online Glossary, <a href="https://www.eia.gov/tools/glossary/">https://www.eia.gov/tools/glossary/</a> .
4.3	Residential	An energy-consuming sector that consists of living quarters for private households. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a variety of other appliances. The residential sector excludes institutional living quarters. Note: Various EIA programs differ in sectoral coverage.	Number of end-use retail customers receiving electricity (individual homes and businesses count as one).	End of Year	U.S. Energy Information Administration, Online Glossary, <a href="https://www.eia.gov/tools/glossary/">https://www.eia.gov/tools/glossary/</a> .
	Emissions				
5	GHG Emissions: Carbon Dioxide (CO2) and Carbon Dioxide Equivalent (CO2e)				
5.1	Owned Generation				
5.1.1	Carbon Dioxide (CO2)				



5.1.1	Total Owned Generation CO2 Emissions	Total direct CO2 emissions from company equity-owned fossil fuel combustion generation in accordance with EPA's GHG Reporting Program (40 CFR, part 98, Subpart C – General Stationary Fuel Combustion and Subpart D – Electricity Production), using a continuous emission monitoring system (CEMS) or other approved methodology.	Metric Tons	Annual	U.S. Environmental Protection Agency, Greenhouse Gas Reporting Program (40 CFR, part 98, Subparts C and D).
5.1.2	Total Owned Generation CO2 Emissions Intensity	Total direct CO2 emissions from 5.1.1, divided by total MWh of owned net generation reported in the Utility Portfolio section.	Metric Tons/ Net MWh	Annual	
5.2	Carbon Dioxide Equivalent (CO2e)				
5.1.2.1	Total Owned Generation CO2e Emissions	Total direct CO2e emissions (CO2, CH4, and N2O) from company equity-owned fossil fuel combustion generation in accordance with EPA's GHG Reporting Program (40 CFR, part 98, Subpart C – General Stationary Fuel Combustion and Subpart D – Electricity Production), using a continuous emission monitoring system (CEMS) or other approved methodology.	Metric Tons	Annual	U.S. Environmental Protection Agency, Greenhouse Gas Reporting Program (40 CFR, part 98, Subparts C and D).
5.1.2.2	Total Owned Generation CO2e Emissions Intensity	Total direct CO2e emissions from 5.1.2.1, divided by total MWh of owned net generation reported in the Utility Portfolio section.	Metric Tons/ Net MWh	Annual	
5.2	Purchased Power				
5.2.1	Carbon Dioxide (CO2)				
5.2.1.1	Total Purchased Generation CO2 Emissions	"Purchased power CO2 emissions should be calculated using the most relevant and accurate of the following methods: (1) For direct purchases, such as PPAs, use the direct emissions data as reported to EPA. (2) For market purchases where emissions attributes are unknown, use applicable regional or national emissions rate: - ISO/RT0-level emission factors - Climate Registry emission factors - E-Grid emission factors"	Metric Tons	Annual	
5.2.1.2	Total Purchased Generation CO2 Emissions Intensity	Total purchased power CO2 emissions from 5.2.1.1, divided by total MWh of purchased net generation reported in the Utility Portfolio section.	Metric Tons/ Net MWh	Annual	
5.2.2	Carbon Dioxide Equivalent (CO2e)				
5.2.2.1	Total Purchased Generation CO2e Emissions	"Purchased power CO2e emissions should be calculated using the most relevant and accurate of the following methods: (1) For direct purchases, such as PPAs, use the direct emissions data as reported to EPA. (2) For market purchases where emissions attributes are unknown, use applicable regional or national emissions rate: - ISO/RT0-level emission factors - Climate Registry emission factors - E-Grid emission factors"	Metric Tons	Annual	
5.2.2.2	Total Purchased Generation CO2e Emissions Intensity	Total purchased power CO2e emissions from 5.2.2.1, divided by total MWh of purchased net generation reported in the Utility Portfolio section.	Metric Tons/ Net MWh	Annual	
5.3	Owned Generation + Purchased Power				
5.3.1	Carbon Dioxide (CO2)				
5.3.1.1	Total Owned + Purchased Generation CO2 Emissions	Sum of total CO2 emissions reported under 5.1.1.1 and 5.2.1.1.	Metric Tons	Annual	
5.3.1.2	Total Owned + Purchased Generation CO2 Emissions Intensity	Total emissions from 5.3.1.1, divided by total MWh of owned and purchased net generation reported in the Utility Portfolio section.	Metric Tons/ Net MWh	Annual	
5.3.2	Carbon Dioxide Equivalent (CO2e)				
5.3.2.1	Total Owned + Purchased Generation CO2e Emissions	Sum of total CO2e emissions reported under 5.1.2.1 and 5.2.2.1.	Metric Tons	Annual	
5.3.2.2	Total Owned + Purchased Generation CO2e Emissions Intensity	Total emissions from 5.3.2.1, divided by total MWh of owned and purchased net generation reported in the Utility Portfolio section.	Metric Tons/ Net MWh	Annual	
5.4	Non-Generation CO2e Emissions				
5.4.1	Fugitive CO2e emissions of sulfur hexafluoride	Total fugitive CO2e emissions of sulfur hexafluoride in accordance with EPA's GHG Reporting Program (40 CFR Part 98, Subpart DD).	Metric Tons	Annual	U.S. Environmental Protection Agency, Greenhouse Gas Reporting Program (40 CFR, part 98, Subpart DD).
5.4.2	Fugitive CO2e emissions from natural gas distribution	Total fugitive CO2e emissions from natural gas distribution in accordance with EPA's GHG Reporting Program (40 CFR Part 98, Subpart W)	Metric Tons	Annual	U.S. Environmental Protection Agency, Greenhouse Gas Reporting Program (40 CFR, part 98, Subpart W).

6	Nitrogen Oxide (NOx), Sulfur Dioxide (SO2), Mercury (Hg)				
6.1	Generation basis for calculation	"Indicate the generation basis for calculating SO2, NOx, and Hg emissions and intensity. Fossil: Fossil Fuel Generation Only Total: Total System Generation Other: Other (please specify in comment section)"			
6.2	Nitrogen Oxide (NOx)				
6.2.1	Total NOx Emissions	Total NOx emissions from company equity-owned fossil fuel combustion generation. In accordance with EPA's Acid Rain Reporting Program (40 CFR, part 75) or regulatory equivalent.	Metric Tons	Annual	U.S. Environmental Protection Agency, Acid Rain Reporting Program (40 CFR, part 75).
6.2.2	Total NOx Emissions Intensity	Total from above, divided by the MWh of generation basis as indicated in 6.1.	Metric Tons/ Net MWh	Annual	
6.3	Sulfur Dioxide (SO2)				
6.3.1	Total SO2 Emissions	Total SO2 emissions from company equity-owned fossil fuel combustion generation. In accordance with EPA's Acid Rain Reporting Program (40 CFR, part 75) or regulatory equivalent.	Metric Tons	Annual	U.S. Environmental Protection Agency, Acid Rain Reporting Program (40 CFR, part 75).
6.3.2	Total SO2 Emissions Intensity	Total from above, divided by the MWh of generation basis as indicated in 6.1.	Metric Tons/ Net MWh	Annual	
6.4	Mercury (Hg)				
6.4.1	Total Hg Emissions	Total Mercury emissions from company equity-owned fossil fuel combustion generation. Preferred methods of measurement are performance-based, direct measurement as outlined in the EPA Mercury and Air Toxics Standard (MATS). In the absence of performance-based measures, report value aligned with Toxics Release Inventory (TRI) or regulatory equivalent for international operations.	Kilograms	Annual	EPRI, Metrics to Benchmark Electric Power Company Sustainability Performance, 2018 Technical Report.
6.4.2	Total Hg Emissions Intensity	Total from above, divided by the MWh of generation basis as indicated in 6.1.	Kilograms/ Net MWh	Annual	
	Resources				
7	Human Resources				
7.1	Total Number of Employees	Average number of employees over the year. To calculate the annual average number of employees: (1) Calculate the total number of employees your establishment paid for all periods. Add the number of employees your establishment paid in every pay period during the data year. Count all employees that you paid at any time during the year and include full-time, part-time, temporary, seasonal, salaried, and hourly workers. Note that pay periods could be monthly, weekly, bi-weekly, and so on. (2) Divide the total number of employees (from step 1) by the number of pay periods your establishment had in during the data year. Be sure to count any pay periods when you had no (zero) employees. (3) Round the answer you computed in step 2 to the next highest whole number.	Number of Employees	Annual	U.S. Department of Labor, Bureau of Labor Statistics, Steps to estimate annual average number of employees, <a href="http://www.bls.gov/responses/iif/annualavg.htm">www.bls.gov/responses/iif/annualavg.htm</a> . EPRI, Metrics to Benchmark Electric Power Company Sustainability Performance, 2018 Technical Report.
7.2	Total Number of Board of Directors/ Trustees	Average number of employees on the Board of Directors/Trustees over the year.	Number of Employees	Annual	
7.3	Total Women on Board of Directors/ Trustees	Total number of women (defined as employees who identify as female) on Board of Directors/Trustees.	Number of Employees	Annual	U.S. Equal Employment Opportunity Commission, EEO Terminology, <a href="http://www.archives.gov/eo/terminology.html">www.archives.gov/eo/terminology.html</a> . EPRI, Metrics to Benchmark Electric Power Company Sustainability Performance, 2018 Technical Report.
7.4	Total Minorities on Board of Directors/ Trustees	Total number of minorities on Board of Directors/Trustees. Minority employees are defined as "the smaller part of a group. A group within a country or state that differs in race, religion or national origin from the dominant group. Minority is used to mean four particular groups who share a race, color or national origin." These groups are: "(1) American Indian or Alaskan Native. A person having origins in any of the original peoples of North America, and who maintain their culture through a tribe or community; (2) Asian or Pacific Islander. A person having origins in any of the original people of the Far East, Southeast Asia, India, or the Pacific Islands. These areas include, for example, China, India, Korea, the Philippine Islands, and Samoa; (3) Black (except Hispanic). A person having origins in any of the black racial groups of Africa; (4) Hispanic. A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race."	Number of Employees	Annual	U.S. Equal Employment Opportunity Commission, EEO Terminology, <a href="http://www.archives.gov/eo/terminology.html">www.archives.gov/eo/terminology.html</a> . EPRI, Metrics to Benchmark Electric Power Company Sustainability Performance, 2018 Technical Report.
7.5	Employee Safety Metrics				
7.5.1	Recordable Incident Rate	Number of injuries or illnesses x 200,000 / Number of employee labor hours worked. Injury or illness is recordable if it results in any of the following: death, days away from work, restricted work or transfer to another job, medical treatment beyond first aid, or loss of consciousness. You must also consider a case to meet the general recording criteria if it involves a significant injury or illness diagnosed by a physician or other licensed health care professional, even if it does not result in death, days away from work, restricted work or job transfer, medical treatment beyond first aid, or loss of consciousness. Record the injuries and illnesses of all employees on your payroll, whether they are labor, executive, hourly, salary, part-time, seasonal, or migrant workers. You also must record the recordable injuries and illnesses that occur to employees who are not on your payroll if you supervise these employees on a day-to-day basis. If your business is organized as a sole proprietorship or partnership, the owner or partners are not considered employees for recordkeeping purposes. For temporary employees, you must record these injuries and illnesses if you supervise these employees on a day-to-day basis. If the contractor's employee is under the day-to-day supervision of the contractor, the contractor is responsible for recording the injury or illness. If you supervise the contractor employee's work on a day-to-day basis, you must record the injury or illness.	Percent	Annual	U.S. Department of Labor, Occupational Health and Safety Administration, OSHA Recordable Incidents. EPRI, Metrics to Benchmark Electric Power Company Sustainability Performance, 2018 Technical Report.
7.5.2	Lost-time Case Rate	Calculated as: Number of lost-time cases x 200,000 / Number of employee labor hours worked. Only report for employees of the company as defined for the "recordable incident rate for employees" metric. A lost-time incident is one that resulted in an employee's inability to work the next full work day.	Percent	Annual	U.S. Department of Labor, Occupational Health and Safety Administration, OSHA Recordable Incidents. EPRI, Metrics to Benchmark Electric Power Company Sustainability Performance, 2018 Technical Report.

75.3	Days Away, Restricted, and Transfer (DART) Rate	Calculated as: Total number of DART incidents x 200,000 / Number of employee labor hours worked. A DART incident is one in which there were one or more lost days or one or more restricted days, or one that resulted in an employee transferring to a different job within the company.	Percent	Annual	U.S. Department of Labor, Occupational Health and Safety Administration, OSHA Recordable Incidents. EPRI, Metrics to Benchmark Sustainability Performance for the Electric Power Industry, 2018 Technical Report.
75.4	Work-related Fatalities	Total employee fatalities. Record for all employees on your payroll, whether they are labor, executive, hourly, salary, part-time, seasonal, or migrant workers. Include fatalities to those that occur to employees who are not on your payroll if you supervise these employees on a day-to-day basis. For temporary employees, report fatalities if you supervise these employees on a day-to-day basis.	Number of Employees	Annual	U.S. Department of Labor, Occupational Health and Safety Administration, OSHA Recordable Incidents. EPRI, Metrics to Benchmark Electric Power Company Sustainability Performance, 2018 Technical Report.
8	Fresh Water Resources				
8.1	Water Withdrawals - Consumptive (Billions of Liters/Net MWh)	Rate of freshwater consumed for use in thermal generation. "Freshwater" includes water sourced from fresh surface water, groundwater, rain water, and fresh municipal water. Do NOT include recycled, reclaimed, or gray water. Water consumption is defined as water that is not returned to the original water source after being withdrawn, including evaporation to the atmosphere. Divide billions of liters by equity-owned total net generation from all equity-owned net electric generation as reported under Metric 2, Net Generation for the data year (MWh).	Billions of Liters/Net MWh	Annual	Partially sourced from EPRI, Metrics to Benchmark Electric Power Company Sustainability Performance, 2018 Technical Report.
8.2	Water Withdrawals - Non-Consumptive (Billions of Liters/Net MWh)	Rate of fresh water withdrawn, but not consumed, for use in thermal generation. "Freshwater" includes water sourced from fresh surface water, groundwater, rain water, and fresh municipal water. Do NOT include recycled, reclaimed, or gray water. Information on organizational water withdrawal may be drawn from water meters, water bills, calculations derived from other available water data or (if neither water meters nor bills or reference data exist) the organization's own estimates. Divide billions of liters by equity-owned total net generation from all equity-owned net electric generation as reported under Metric 2, Net Generation for the data year (MWh).	Billions of Liters/Net MWh	Annual	Partially sourced from EPRI, Metrics to Benchmark Electric Power Company Sustainability Performance, 2018 Technical Report.
9	Waste Products				
9.1	Amount of Hazardous Waste Manifested for Disposal	Metric tons of hazardous waste, as defined by the Resource Conservation and Recovery Act (RCRA), manifested for disposal at a Treatment Storage and Disposal (TSD) facility. Methods of disposal include disposing to landfill, surface impoundment, waste pile, and land treatment units. Hazardous wastes include either listed wastes (F, K, P and U lists) or characteristic wastes (wastes which exhibit at least one of the following characteristics - ignitability, corrosivity, reactivity, toxicity). Include hazardous waste from all company operations including generation, transmissions, distribution, and other operations.	Metric Tons	Annual	Partially sourced from EPRI, Metrics to Benchmark Electric Power Company Sustainability Performance, 2018 Technical Report.
9.2	Percent of Coal Combustion Products Beneficially Used	Percent of coal combustion products (CCPs) - fly ash, bottom ash, boiler slag, flue gas desulfurization materials, scrubber bi-product - diverted from disposal into beneficial uses, including being sold. Include any CCP that is generated during the data year and stored for beneficial use in a future year. Only include CCP generated at company equity-owned facilities. If no weight data are available, estimate the weight using available information on waste density and volume collected, mass balances, or similar information.	Percent	Annual	Partially sourced from EPRI, Metrics to Benchmark Electric Power Company Sustainability Performance, 2018 Technical Report.

## AGA Voluntary Sustainability Metrics: Quantitative Information

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Parent Company: MDU Resources Group  
Operating Company(s): WBI Energy Transmission, Inc.  
Business Type(s): (e.g., vertically integrated, T&D only, competitive integrated)  
State(s) of Operation: Minnesota, Montana, North Dakota, South Dakota, Wyoming  
Regulatory Environment: Regulated  
Note: Data from operating companies is rolled up to the corporate level.  
Report Date:

Ref. No.	Refer to the "Definitions" column for more information on each metric.	Year Reported 2020	Reported Notes	Definitions	Comments, Additional Information
NATURAL GAS TRANSMISSION & STORAGE					
1.2	Transmission Pipelines, Blow Down Volumes, and Fugitive Emissions				
1.2.1	Total Miles of Transmission Pipeline Operated by gas utility (miles)	3,508			
1.2.2	Volume of Transmission Pipeline Blow Down Emissions - outside storage and compression facilities:			As reported to EPA under 40 CFR 98, Subpart W.	
1.2.2.1	scf natural gas	24,640,036			
1.2.2.3	metric tons CO2e	11,249			
1.3	Underground Natural Gas Storage Emissions				
1.3.2	Storage Compressor Station Emissions (metric tons CO2e)	N/A	Emissions from stroage fields were below the reporting threshold.	As reported to EPA under 40 CFR 98, Subpart W.	Total station minus wellhead emissions
1.3.3	Storage Facility Wellhead Component Fugitive Emissions (metric tons of CO2e)	N/A		Utilizing EPA emissions factors, as reported to EPA under Subpart W, 40 CFR 98.236, on the e-GRRT integrated reporting form, "Equipment Leaks Surveys and Population Counts [98.236 (q, r)]" tab.	
2	CO2e EMISSIONS FOR TRANSMISSION AND STORAGE COMPRESSION				
2.1	CO2e Emissions for Transmission Pipelines (metric tons)	59,767	Emissions reported for Cabin Creek and Charbonneau Compressor Stations. All other compressor station emissions were below the reporting threshold.	CO2 combustion emissions as reported to EPA under 40 CFR 98, Subpart C and methane emissions stated as CO2e as reported under Subpart W.	
2.2	CO2e Emissions for Storage Facilities (metric tons)	N/A	Storage compressor station emissions were below the reporting threshold.	CO2 combustion emissions as reported to EPA under 40 CFR 98, Subpart C and methane emissions stated as CO2e as reported under Subpart W.	
3	CONVENTIONAL AIR EMISSIONS FROM TRANSMISSION AND STORAGE COMPRESSION				
3.1	Emissions reported for all permitted sources (minor or major)			The number of permitted sources for conventional emissions may not be the same number of sources reporting under the EPA GHG reporting rule. Companies may wish to describe which, or how many, sources are included in the conventional pollutants data and whether the CO2e data reported includes all of these sources.	
3.1.1	NOx ( metric tons per year)	694			
3.1.2	VOC (metric tons per year)	205			
NATURAL GAS GATHERING & BOOSTING					
1	METHANE EMISSIONS				
1.1	Gathering and Boosting Pipelines, Blow Down Volumes, and Emissions				
1.1.1	Total Miles of Gathering Pipeline Operated by gas utility (miles)	0	WBI Energy does not own/operate gathering and boosting facilities with reportable greenhouse gas emissions at this time.		
1.1.2	Volume of Gathering Pipeline Blow Down Emissions (scf)	0		This metric is collected to support calculations under EPA 40 CFR 98, Subpart W.	
1.1.4	Gathering Pipeline Blow-Down Emissions outside storage and compression facilities (metric tons CO2e)	0			
2	CO2e EMISSIONS FOR GATHERING & BOOSTING COMPRESSION				
2.1	CO2e Combustion Emissions for Gathering & Boosting Compression Stations (metric tons)	0		CO2 combustion emissions as reported to EPA under 40 CFR 98, Subpart C, as directed in Subpart W, 98.232(k).	



2.2	C02e Emissions for Gathering & Boosting Facilities (metric tons)	0		Total C02e emissions as reported to EPA under 40 CFR 98 Subpart W	
3	CONVENTIONAL COMBUSTION EMISSIONS FROM GATHERING & BOOSTING COMPRESSION				
3.1	Emissions reported for all permitted sources (minor or major)			The number of permitted sources for conventional emissions may not be the same number of sources reporting under the EPA GHG reporting rule. Companies may wish to describe which, or how many, sources are included in the conventional pollutants data and whether the C02e data reported includes all of these sources.	
3.1.1	NOx ( metric tons per year)	0			
3.1.2	VOC (metric tons per year)	0			

## AGA Voluntary Sustainability Metrics: Quantitative Information

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Parent Company: MDU Resources Group  
Operating Company(s): WBI Energy Transmission, Inc  
Business Type(s): (e.g., vertically integrated, T&D only, competitive integrated)  
State(s) of Operation: Minnesota, Montana, North Dakota, South Dakota, Wyoming  
Regulatory Environment: Regulated  
Note: Data from operating companies is rolled up to the corporate level.  
Report Date:

Ref. No.	Refer to the "Definitions" column for more information on each metric.	Year Reported 2019	Reported Notes	Definitions	Comments, Additional Information
<b>NATURAL GAS TRANSMISSION &amp; STORAGE</b>					
<b>1.2</b>	<b>Transmission Pipelines, Blow Down Volumes, and Fugitive Emissions</b>				
1.2.1	Total Miles of Transmission Pipeline Operated by gas utility (miles)	3,505			
1.2.2	Volume of Transmission Pipeline Blow Down Emissions - outside storage and compression facilities:			As reported to EPA under 40 CFR 98, Subpart W.	
1.2.2.1	scf natural gas	22,507,250			
1.2.2.3	metric tons CO <sub>2</sub> e	10,275			
<b>1.3</b>	<b>Underground Natural Gas Storage Emissions</b>				
1.3.2	Storage Compressor Station Emissions (metric tons CO <sub>2</sub> e)	N/A	Emissions from storage fields were below the reporting threshold.	As reported to EPA under 40 CFR 98, Subpart W.	Total station minus wellhead emissions
1.3.3	Storage Facility Wellhead Component Fugitive Emissions (metric tons of CO <sub>2</sub> e)	N/A		Utilizing EPA emissions factors, as reported to EPA under Subpart W, 40 CFR 98.236, on the e-GRRRT integrated reporting form, "Equipment Leaks Surveys and Population Counts [98.236 (q, r)]" tab.	
<b>2 CO<sub>2</sub>e EMISSIONS FOR TRANSMISSION AND STORAGE COMPRESSION</b>					
<b>2.1</b>	<b>CO<sub>2</sub>e Emissions for Transmission Pipelines (metric tons)</b>	60,237	Emissions reported for Cabin Creek and Charbonneau Compressor Stations. All other compressor station emissions were below the reporting threshold.	CO <sub>2</sub> combustion emissions as reported to EPA under 40 CFR 98, Subpart C and methane emissions stated as CO <sub>2</sub> e as reported under Subpart W.	
<b>2.2</b>	<b>CO<sub>2</sub>e Emissions for Storage Facilities (metric tons)</b>	N/A	Storage compressor station emissions were below the reporting threshold.	CO <sub>2</sub> combustion emissions as reported to EPA under 40 CFR 98, Subpart C and methane emissions stated as CO <sub>2</sub> e as reported under Subpart W.	
<b>3 CONVENTIONAL AIR EMISSIONS FROM TRANSMISSION AND STORAGE COMPRESSION</b>					
<b>3.1</b>	<b>Emissions reported for all permitted sources (minor or major)</b>			The number of permitted sources for conventional emissions may not be the same number of sources reporting under the EPA GHG reporting rule. Companies may wish to describe which, or how many, sources are included in the conventional pollutants data and whether the CO <sub>2</sub> e data reported includes all of these sources.	
3.1.1	NO <sub>x</sub> ( metric tons per year)	739			
3.1.2	VOC (metric tons per year)	222			
<b>NATURAL GAS GATHERING &amp; BOOSTING</b>					
<b>1</b>	<b>METHANE EMISSIONS</b>				
<b>1.1</b>	<b>Gathering and Boosting Pipelines, Blow Down Volumes, and Emissions</b>				
1.1.1	Total Miles of Gathering Pipeline Operated by gas utility (miles)	550	Emissions reported for the Baker (MT) Gathering system. All other gathering system emissions were below the reporting threshold.		
1.1.2	Volume of Gathering Pipeline Blow Down Emissions (scf)	118,241		This metric is collected to support calculations under EPA 40 CFR 98, Subpart W.	
1.1.4	Gathering Pipeline Blow-Down Emissions outside storage and compression facilities (metric tons CO <sub>2</sub> e)	55			

<b>2</b>	<b>C02e EMISSIONS FOR GATHERING &amp; BOOSTING COMPRESSION</b>				
2.1	C02e Combustion Emissions for Gathering & Boosting Compression Stations (metric tons)	16,284	Emissions reported for the Baker (MT) Gathering system. All other gathering system emissions were below the reporting threshold.	C02 combustion emissions as reported to EPA under 40 CFR 98, Subpart C, as directed in Subpart W, 98.232(k).	
2.2	C02e Emissions for Gathering & Boosting Facilities (metric tons)	50,261	Emissions reported for the Baker (MT) Gathering system. All other gathering system emissions were below the reporting threshold.	Total C02e emissions as reported to EPA under 40 CFR 98 Subpart W	
<b>3</b>	<b>CONVENTIONAL COMBUSTION EMISSIONS FROM GATHERING &amp; BOOSTING COMPRESSION</b>				
3.1	Emissions reported for all permitted sources (minor or major)			The number of permitted sources for conventional emissions may not be the same number of sources reporting under the EPA GHG reporting rule. Companies may wish to describe which, or how many, sources are included in the conventional pollutants data and whether the C02e data reported includes all of these sources.	
3.1.1	NOx ( metric tons per year)	19	Emissions reported for the Baker (MT) Gathering system. All other gathering facilities are not required to report traditional emissions.		
3.1.2	VOC (metric tons per year)	58			

## AGA Voluntary Sustainability Metrics: Quantitative Information - Board Approved 10-5-2018

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Parent Company: MDU Resources Group  
Operating Company(s): WBI Energy Transmission, Inc  
Business Type(s): (e.g., vertically integrated, T&D only, competitive integrated)  
State(s) of Operation: Minnesota, Montana, North Dakota, South Dakota, Wyoming  
Regulatory Environment: Regulated  
Note: Data from operating companies is rolled up to the corporate level.  
Report Date:

Ref. No.	Refer to the "Definitions" column for more information on each metric.	Year Reported 2018	Reported Notes	Definitions	Comments, Additional Information
<b>NATURAL GAS TRANSMISSION &amp; STORAGE</b>					
<b>1.2</b>	<b>Transmission Pipelines, Blow Down Volumes, and Fugitive Emissions</b>				
1.2.1	Total Miles of Transmission Pipeline Operated by gas utility (miles)	3,493			
1.2.2	Volume of Transmission Pipeline Blow Down Emissions - outside storage and compression facilities:			As reported to EPA under 40 CFR 98, Subpart W.	
1.2.2.1	scf natural gas	58,202,244			
1.2.2.3	metric tons CO <sub>2</sub> e	26,571			
<b>1.3</b>	<b>Underground Natural Gas Storage Emissions</b>				
1.3.2	Storage Compressor Station Emissions (metric tons CO <sub>2</sub> e)	N/A	Emissions from storage fields were below the reporting threshold.	As reported to EPA under 40 CFR 98, Subpart W.	Total station minus wellhead emissions
1.3.3	Storage Facility Wellhead Component Fugitive Emissions (metric tons of CO <sub>2</sub> e)	N/A		Utilizing EPA emissions factors, as reported to EPA under Subpart W, 40 CFR 98.236, on the e-GRRRT integrated reporting form, "Equipment Leaks Surveys and Population Counts [98.236 (q, r)]" tab.	
<b>2 CO<sub>2</sub>e EMISSIONS FOR TRANSMISSION AND STORAGE COMPRESSION</b>					
<b>2.1</b>	<b>CO<sub>2</sub>e Emissions for Transmission Pipelines (metric tons)</b>	55,700	Emissions reported for Cabin Creek and Charbonneau Compressor Stations. All other compressor station emissions were below the reporting threshold.	CO <sub>2</sub> combustion emissions as reported to EPA under 40 CFR 98, Subpart C and methane emissions stated as CO <sub>2</sub> e as reported under Subpart W.	
<b>2.2</b>	<b>CO<sub>2</sub>e Emissions for Storage Facilities (metric tons)</b>	N/A	Storage compressor station emissions were below the reporting threshold.	CO <sub>2</sub> combustion emissions as reported to EPA under 40 CFR 98, Subpart C and methane emissions stated as CO <sub>2</sub> e as reported under Subpart W.	
<b>3 CONVENTIONAL AIR EMISSIONS FROM TRANSMISSION AND STORAGE COMPRESSION</b>					
<b>3.1</b>	<b>Emissions reported for all permitted sources (minor or major)</b>			The number of permitted sources for conventional emissions may not be the same number of sources reporting under the EPA GHG reporting rule. Companies may wish to describe which, or how many, sources are included in the conventional pollutants data and whether the CO <sub>2</sub> e data reported includes all of these sources.	
3.1.1	NO <sub>x</sub> (metric tons per year)	803			
3.1.2	VOC (metric tons per year)	231			
<b>NATURAL GAS GATHERING &amp; BOOSTING</b>					
<b>1</b>	<b>METHANE EMISSIONS</b>				
<b>1.1</b>	<b>Gathering and Boosting Pipelines, Blow Down Volumes, and Emissions</b>				
1.1.1	Total Miles of Gathering Pipeline Operated by gas utility (miles)	550	Emissions reported for the Baker (MT) Gathering system. All other gathering system emissions were below the reporting threshold.		
1.1.2	Volume of Gathering Pipeline Blow Down Emissions (scf)	357,010		This metric is collected to support calculations under EPA 40 CFR 98, Subpart W.	
1.1.4	Gathering Pipeline Blow-Down Emissions outside storage and compression facilities (metric tons CO <sub>2</sub> e)	165			



<b>2</b>	<b>C02e EMISSIONS FOR GATHERING &amp; BOOSTING COMPRESSION</b>				
2.1	C02e Combustion Emissions for Gathering & Boosting Compression Stations (metric tons)	17,260	Emissions reported for the Baker (MT) Gathering system. All other gathering system emissions were below the reporting threshold.	C02 combustion emissions as reported to EPA under 40 CFR 98, Subpart C, as directed in Subpart W, 98.232(k).	
2.2	C02e Emissions for Gathering & Boosting Facilities (metric tons)	50,922	Emissions reported for the Baker (MT) Gathering system. All other gathering system emissions were below the reporting threshold.	Total C02e emissions as reported to EPA under 40 CFR 98 Subpart W	
<b>3</b>	<b>CONVENTIONAL COMBUSTION EMISSIONS FROM GATHERING &amp; BOOSTING COMPRESSION</b>				
3.1	Emissions reported for all permitted sources (minor or major)			The number of permitted sources for conventional emissions may not be the same number of sources reporting under the EPA GHG reporting rule. Companies may wish to describe which, or how many, sources are included in the conventional pollutants data and whether the C02e data reported includes all of these sources.	
3.1.1	NOx ( metric tons per year)	18	Emissions reported for the Baker (MT) Gathering system. All other gathering facilities are not required to report traditional emissions.		
3.1.2	VOC (metric tons per year)	52			

## AGA Voluntary Sustainability Metrics: Quantitative Information

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Parent Company: MDU Resources Group  
 Operating Company(s): WBI Energy (WBI Energy Transmission, Inc. and WBI Energy Midstream, LLC)  
 Business Type(s): (e.g., vertically integrated, T&D only, competitive integrated)  
 State(s) of Operation: Montana, North Dakota, Wyoming, South Dakota, Minnesota  
 Regulatory Environment:  
 Note: Data from operating companies is rolled up to the corporate level.  
 Report Date:

Ref. No.	Refer to the "Definitions" column for more information on each metric.	Year Reported 2017	Reported Notes	Definitions	Comments, Additional Information
<b>NATURAL GAS TRANSMISSION &amp; STORAGE</b>					
<b>1.2</b>	<b>Transmission Pipelines, Blow Down Volumes, and Fugitive Emissions</b>				
1.2.1	Total Miles of Transmission Pipeline Operated by gas utility (miles)	0	Transmission pipeline system emissions were below the reporting threshold.		
1.2.2	Volume of Transmission Pipeline Blow Down Emissions - outside storage and compression facilities:			As reported to EPA under 40 CFR 98, Subpart W.	
1.2.2.1	scf natural gas	0			
1.2.2.3	metric tons CO <sub>2</sub> e	0			
<b>1.3</b>	<b>Underground Natural Gas Storage Emissions</b>				
1.3.2	Storage Compressor Station Emissions (metric tons CO <sub>2</sub> e)	0	Emissions from storage fields were below the reporting threshold.	As reported to EPA under 40 CFR 98, Subpart W.	Total station minus wellhead emissions
1.3.3	Storage Facility Wellhead Component Fugitive Emissions (metric tons of CO <sub>2</sub> e)	0		Utilizing EPA emissions factors, as reported to EPA under Subpart W, 40 CFR 98.236, on the e-GRRRT integrated reporting form, "Equipment Leaks Surveys and Population Counts [98.236 (q, r)]" tab.	
<b>2</b>	<b>CO<sub>2</sub>e EMISSIONS FOR TRANSMISSION AND STORAGE COMPRESSION</b>				
<b>2.1</b>	<b>CO<sub>2</sub>e Emissions for Transmission Pipelines (metric tons)</b>	26,708	Emissions reported for Cabin Creek Compressor Station. All other compressor stations emissions were below the reporting threshold.	CO <sub>2</sub> combustion emissions as reported to EPA under 40 CFR 98, Subpart C and methane emissions stated as CO <sub>2</sub> e as reported under Subpart W.	
<b>2.2</b>	<b>CO<sub>2</sub>e Emissions for Storage Facilities (metric tons)</b>	0	Storage compressor stations emissions were below the reporting threshold.	CO <sub>2</sub> combustion emissions as reported to EPA under 40 CFR 98, Subpart C and methane emissions stated as CO <sub>2</sub> e as reported under Subpart W.	
<b>3</b>	<b>CONVENTIONAL AIR EMISSIONS FROM TRANSMISSION AND STORAGE COMPRESSION</b>				
<b>3.1</b>	<b>Emissions reported for all permitted sources (minor or major)</b>		Conventional emissions calculations represent a larger number of permitted sources than sources reporting under the EPA GHG reporting rule.	The number of permitted sources for conventional emissions may not be the same number of sources reporting under the EPA GHG reporting rule. Companies may wish to describe which, or how many, sources are included in the conventional pollutants data and whether the CO <sub>2</sub> e data reported includes all of these sources.	
3.1.1	NO <sub>x</sub> ( metric tons per year)	792			
3.1.2	VOC (metric tons per year)	240			
<b>NATURAL GAS GATHERING &amp; BOOSTING</b>					
<b>1</b>	<b>METHANE EMISSIONS</b>				
<b>1.1</b>	<b>Gathering and Boosting Pipelines, Blow Down Volumes, and Emissions</b>				
1.1.1	Total Miles of Gathering Pipeline Operated by gas utility (miles)	550	Emissions reported for the Baker Gathering system. All other gathering system emissions were below the reporting threshold.		
1.1.2	Volume of Gathering Pipeline Blow Down Emissions (scf)	258,902		This metric is collected to support calculations under EPA 40 CFR 98, Subpart W.	
1.1.4	Gathering Pipeline Blow-Down Emissions outside storage and compression facilities (metric tons CO <sub>2</sub> e)	120			

<b>2</b>	<b>CO2e EMISSIONS FOR GATHERING &amp; BOOSTING COMPRESSION</b>				
2.1	CO2e Combustion Emissions for Gathering & Boosting Compression Stations (metric tons)	18,361	Emissions reported for the Baker Gathering system. All other gathering system emissions were below the reporting threshold.	CO2 combustion emissions as reported to EPA under 40 CFR 98, Subpart C, as directed in Subpart W, 98.232(k).	
2.2	CO2e Emissions for Gathering & Boosting Facilities (metric tons)	52,004	Emissions reported for the Baker Gathering system. All other gathering system emissions were below the reporting threshold.	Total CO2e emissions as reported to EPA under 40 CFR 98 Subpart W	
<b>3</b>	<b>CONVENTIONAL COMBUSTION EMISSIONS FROM GATHERING &amp; BOOSTING COMPRESSION</b>				
3.1	Emissions reported for all permitted sources (minor or major)			The number of permitted sources for conventional emissions may not be the same number of sources reporting under the EPA GHG reporting rule. Companies may wish to describe which, or how many, sources are included in the conventional pollutants data and whether the CO2e data reported includes all of these sources.	
3.1.1	NOx ( metric tons per year)	21	Emissions reported for the Baker Gathering system. All other gathering facilities are not required to report traditional emissions.		
3.1.2	VOC (metric tons per year)	68			

## Construction Materials Sustainability Accounting Standards Board (SASB) Framework

SASB Code	Topic	Accounting Metric	Category	Unit of Measure	Knife River Corporation Results
NR0401-01	Greenhouse Gas Emissions	Gross global Scope 1 greenhouse gas (GHG) emissions to the atmosphere (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride); percentage of emissions covered under a regulatory program	Quantitative	Metric tons of CO <sub>2</sub> -e, Percentage (%) - calculated in accordance with published GWP factors	Knife River produced approximately 217,914 metric tons of carbon dioxide equivalents in 2020, based on diesel fuel consumed and tracked in operations and converted using the global warming potential factors as identified by the Intergovernmental Panel on Climate Change's Fourth Assessment Report.
NR0401-02	Greenhouse Gas Emissions	Description of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion & Analysis	n/a	Knife River does not have scope 1 greenhouse gas emission reduction targets. It constantly evaluates and updates its equipment to the most efficient and cost-effective option available, while ensuring it is complying with all regulatory requirements. As manufacturers produce equipment that is more fuel efficient and produces fewer emittents, Knife River's emissions equivalents decline when replacing equipment with these higher-efficiency options.
NR0401-03	Air Quality	Air emissions for the following pollutants: NO <sub>x</sub> (excluding N <sub>2</sub> O), SO <sub>x</sub> , particulate matter, dioxins/furans, volatile organic compounds, polycyclic aromatic hydrocarbons, and heavy metals	Quantitative	Metric tons	Knife River does not track air emissions for all of these compounds. However, the company complies with all air quality permits for its facilities.
MR0401-04	Energy Management	Total energy consumed, percentage from: (1) purchased electricity, (2) alternative sources, (3) renewable sources	Quantitative	Total energy consumption from all sources as an aggregate figure in gigajoules or their multiples	Knife River does not track energy consumption at all of its facilities to provide an aggregate consumption amount. It is exploring options to undertake this effort; however, like emissions, energy consumption is impacted substantially by the annual scope and mix of mining, product sales and construction activity at its operations.
NR0401-05	Water Management	Total fresh water withdrawn, percentage recycled, percentage in regions with high or extremely high baseline water stress	Quantitative	Cubic meters, percentage	Knife River tracks water consumption at its facilities where it is a regulatory requirement but does not track water consumption in all operating areas. In operating areas that are particularly sensitive to water use, such as California, Knife River has special programs in place to make the most efficient use of the resource, such as washout systems and settling ponds at its ready-mix concrete facilities and aggregate sites to contain water on the properties and enable the re-use of processed water in aggregate production and washing of ready-mix equipment, which reduces the amount of fresh water that is needed in its operations. Fresh water is withdrawn from on-site wells or from local water utilities, if processed water cannot be used in the production of products.
NR0401-06	Waste Management	Amount of waste from operations, percentage hazardous, percentage recycled	Quantitative	Metric tons, percentage	Knife River reclaims or repurposes all waste from its ready-mix concrete and asphalt operations.
NR0401-07	Biodiversity Impacts	Description of environmental management policies and practices for active sites	Discussion and Analysis	n/a	Please see additional information on this website.
NR0401-08	Biodiversity Impacts	Terrestrial acreage disturbed, percentage of impacted area restored	Quantitative	Acres, percentage	Knife River does not track this data at all of its facilities.
NR0401-09	Workforce Health, Safety, and Well-Being	(1) Total recordable injury rate and (2) near miss frequency rate for (a) full-time employees and (b) contract employees	Quantitative	Rate	Recordable injury rate for all full-time employees: 2020 — 2.20 2019 — 2.22 2018 — 2.14
NR0401-10	Workforce Health, Safety, and Well-Being	Number of reported cases of silicosis (including a discussion of efforts to minimize workers' exposure to crystalline silica)	Quantitative	Number	Knife River does not have any reported cases of silicosis. In addition to meeting related regulatory requirements, Knife River maintains a Silica Exposure Plan to provide guidance on controlling occupational disease exposures to respirable crystalline silica for employees, other workers, and the public, in addition to meeting related regulatory requirements. A combination of control measures are used to achieve this objective and vary based on the type of work being performed, equipment being used, and crystalline silica content in the materials being used.
NR0401-11	Product Innovation	Percentage of products that can be used for credits in sustainable building design and construction certifications	Quantitative	Percentage of annual sales revenue	The materials Knife River provides are made to meet specifications defined by a project owner or engineering/architecture firm. When available, Knife River will propose value-engineering options to use alternative materials that reduce product cost, improve quality, or introduce recycled materials into a project; however, Knife River does not track the quantities of products it provides that can be used for credits in sustainable building design and construction certification.
NR0401-12	Product Innovation	Total addressable market and share of market for products that reduce energy, water, and/or material impacts during usage and/or production	Quantitative	U.S. Dollars, Percentage	Knife River does not provide information on markets and market share for the products and construction services it provides.
NR0401-13	Pricing Integrity & Transparency	Amount of legal and regulatory fines and settlements associated with cartel activities, price fixing, and anti-trust activities	Quantitative	U.S. Dollars	Knife River has never incurred fines or paid settlements related to cartel activities, price fixing, or anti-trust activities.



Construction Materials Sustainability Accounting Standards Board (SASB) Framework *(Continued)*

SASB Code	Topic	Activity Metric	Category	Unit of Measure	Knife River Corporation Results
NR0401-A		<p>Annual production by major product line</p> <p>Note: Determination of major product line (e.g., cement and aggregates, composites, etc.) should be based on revenue generation, and may include a category of "other" construction materials products that combines multiple smaller revenue streams.</p>	Quantitative	Please see additional information on this website.	

## Engineering and Construction Services Sustainability Accounting Standards Board (SASB) Framework

SASB Code	Topic	Accounting Metric	Category	Unit of Measure	MDU Construction Services Group Results
IF0301-01	Environmental Impacts of Project Development	Number of incidents of non-compliance with environmental permits, standards, and regulations	Quantitative	Number	None.
IF0301-02		Discussion of processes to assess and manage environmental risks associated with project design, siting, and construction	Discussion & Analysis	n/a	Assessment of environmental risks are typically performed by the project owner or its representative. To the extent environmental risks are applicable to a project, the project owner or its representative typically prescribes processes and procedures for environmental risk management and mitigation.
IF0301-03	Structural Integrity & Safety	Amount of defect- and safety-related rework expenses	Quantitative	U.S. Dollars (\$)	MDU Construction Services Group had no material defect- and safety-related rework expenses in the past three years.
IF0301-04		Amount of legal and regulatory fines and settlements associated with defect- and safety-related incidents (Disclosure shall include a description of fines and settlements and corrective actions implemented in response to events.)	Quantitative	U.S. Dollars (\$)	MDU Construction Services Group had no material settlements for defect-related incidents in the past three years. The company paid the following OSHA fines/settlements for safety-related incidents at Dec. 31: 2020 — None 2019 — \$7500 2018 — None
IF0301-05	Workforce Health & Safety	(1) Total recordable injury rate (TRIR) and (2) fatality rate for (a) direct employees and (b) contract employees	Quantitative	Rate	MDU Construction Services Group's TRIR rate for employees at Dec. 31: 2020 — 1.39 2019 — 1.66 2018 — 1.55 MDU Construction Services Group had one employee fatality in 2019 and did not have any employee fatalities in 2020 or 2018. The company does not track TRIR or fatality rates for subcontractors but is unaware of any fatalities of its subcontractors in the past three years.
IF0301-06	Climate Impacts of Business Mix	Backlog for (1) hydrocarbon-related projects and (2) renewable energy projects	Quantitative	U.S. Dollars (\$)	Certain of MDU Construction Services Group's operating companies perform installation and maintenance services for natural gas distribution utility companies, but MDU Construction Services Group does not categorize its project backlog based on the customer's type of source fuel. Certain of MDU Construction Services Group's operating companies perform wind- and solar-related projects. Backlog from solar-related projects at Dec. 31: 2020 — \$2,357,727 2019 — \$3,969,143 2018 — \$1,446,333
IF0301-07		Amount of backlog cancellations associated with hydrocarbon-related projects	Quantitative	U.S. Dollars (\$)	Certain of MDU Construction Services Group's operating companies perform installation and maintenance services for natural gas distribution utility companies, but MDU Construction Services Group does not categorize its project backlog based on the customer's type of source fuel.
IF0301-08		Backlog for non-energy projects associated with climate change mitigation	Quantitative	U.S. Dollars (\$)	MDU Construction Services Group had no material project backlog of non-energy projects associated with climate change mitigation in the past three years.
IF0301-09	Lifecycle Impacts of Buildings & Infrastructure	Number of (1) commissioned projects certified to a multi-attribute sustainability standard and (2) active projects seeking such certification	Quantitative	Number	MDU Construction Services Group's operating companies perform projects associated with multi-attributable sustainability standards, but MDU Construction Services Group does not categorize its project backlog based on this type of project.
IF0301-10		Description of process to incorporate operational-phase energy and water efficiency considerations into project planning and design	Discussion & Analysis	n/a	MDU Construction Services Group works with project owners to incorporate energy and water efficiency opportunities according to the project owner's interest.
IF0301-11	Business Ethics & Bidding Integrity	(1) Number of active projects and (2) backlog in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index (Provide a brief description of the approach used to manage ethical risks specific to the countries referenced where there are active projects and/or backlog.)	Quantitative	"Number, U.S. Dollars (\$)"	None. Other than periodic services provided for agencies of the U.S. government, MDU Construction Services Group only provides services and equipment in the United States.
IF0301-12		Amount of legal and regulatory fines and settlements associated with charges of (1) bribery or corruption and (2) anti-competitive practices (Disclosure shall include a description of fines and settlements and corrective actions implemented in response to events.)	Quantitative	U.S. Dollars (\$)	MDU Construction Services Group has never incurred fines or paid settlements related to bribery, corruption or anti-competitive practices.
IF0301-13		Description of policies and practices for prevention of (1) corruptions and bribery and (2) anti-competitive behavior in the project bidding processes	Discussion & Analysis	n/a	Please see additional information under the Sustainability-Governance area of this website.

## Engineering and Construction Services Sustainability Accounting Standards *(Continued)*

SASB Code	Topic	Activity Metric	Category	Unit of Measure	MDU Construction Services Group Results
IF0301-A	Where relevant, SASB recommends specific activity metrics that, at a minimum, should accompany the above SASB accounting metric disclosures. (p. 6)	Number of active projects (Active projects are defined as buildings and infrastructure construction projects currently under development, including, but not limited to, the design and construction stages. Active projects exclude projects that were commissioned during the fiscal year.)	Quantitative	Number	MDU Construction Services Group's active projects at Dec. 31: 2020 — 12,122 active out of 47,576 total 2019 — 17,048 active out of 44,629 total 2018 — 18,952 active out of 41,374 total
IF0301-B		Number of commissioned projects (Commissioned projects are defined as projects that were completed and deemed ready for service during the fiscal year. The scope of commissioned projects shall only include construction projects.)	Quantitative	Number	MDU Construction Services Group's commissioned projects at Dec. 31: 2020 — 35,454 2019 — 28,893 2018 — 22,422
IF0301-C		Total backlog (Backlog is defined as the value of projects not completed, or is defined by the registrant, consistent with existing public disclosure of backlog. The scope includes all backlog (domestic, international, public, and private) for construction projects and all other projects undertaken by the company including engineering, architecture and design, installation, planning, consulting, and repair and maintenance, among others.)	Quantitative	U.S. Dollars (\$)	MDU Construction Services Group's backlog at Dec. 31 (in millions): 2020 — \$1,273 2019 — \$1,144 2018 — \$939

## TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD) INDEX

TCFD Recommended Area of Disclosures	MDU Resources' Related Content in This Report
Governance: Describe the board's oversight of climate-related risks and opportunities.	<ul style="list-style-type: none"> <li>-Governance, pages 13-14</li> <li>-Board of directors, pages 14-15</li> <li>-Governance of climate risks and opportunities, page 15</li> </ul>
Governance: Describe management's role in assessing and managing climate-related risks and opportunities.	<ul style="list-style-type: none"> <li>-MDU Resources Environmental, Social and Governance Initiatives and Goals, pages 6-7</li> <li>-Governance of climate risks and opportunities, page 15</li> </ul>
Strategy: Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	<ul style="list-style-type: none"> <li>-See Risk Factors in MDU Resources' most recent Form 10-K</li> <li>-Electric and natural gas utilities: <ul style="list-style-type: none"> <li>-Retirement of coal facilities, pages 19-21</li> </ul> </li> </ul>
Strategy: Describe the impact of climate-related risks and opportunities on the organization's business strategy, and financial planning.	<p><b>Electric and Natural Gas Utilities</b></p> <ul style="list-style-type: none"> <li>-Retirement of Coal Facilities, pages 19-21</li> <li>-PCB Elimination, page 22</li> <li>-Electric Generation Emissions Reductions, page 22</li> <li>-Water Use, page 23</li> <li>-Renewable Energy, page 24</li> <li>-Carbon Sequestration Research, page 24</li> <li>-Energy Efficiency and Conservation Program, page 25</li> <li>-Environmental-Related Investments, page 25</li> <li>-Utility Pipeline Safety Management System, page 27</li> <li>-Natural Gas Distribution Environmental Matters, page 27</li> <li>-Natural Gas Utility Customer Energy Efficiency and Conservation Programs, page 28</li> <li>-Methane Emissions Reductions, page 29</li> <li>-Renewable Natural Gas, page 30</li> </ul> <p><b>Pipeline</b></p> <ul style="list-style-type: none"> <li>-Reducing Greenhouse Gas Emissions and Fugitive Methane Emissions, page 33</li> <li>-Reducing Carbon Dioxide Emissions, page 33</li> <li>-Minimizing Construction Impacts, page 34</li> <li>-Pipeline Integrity Management Program, pages 34-35</li> <li>-Pipeline Safety Management System, page 35</li> </ul> <p><b>Knife River</b></p> <ul style="list-style-type: none"> <li>-Environmental Related Investments, page 36</li> <li>-Vehicle Emissions Reductions Efforts, page 37</li> <li>-Renewable Diesel, page 37</li> <li>-Reducing the Use of On-Road Trucks, page 38</li> <li>-Land Impacts, page 38</li> <li>-Recycling, page 39</li> <li>-Environmentally Friendlier Asphalt, page 40</li> <li>-Impacts of Regulations and Laws, page 41</li> </ul> <p><b>Construction Services</b></p> <ul style="list-style-type: none"> <li>-Vehicle Emissions Reductions Efforts, page 43</li> <li>-Waste Management, page 43</li> </ul>
Strategy: Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	Electric Generation Climate Scenario Analysis, page 19
Risk Management: Describe the organization's processes for identifying and assessing climate-related risks.	<ul style="list-style-type: none"> <li>-Board of Directors, pages 14-15</li> <li>-Governance of Climate Risks and Opportunities, page 15</li> </ul>



## TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD) INDEX *(Continued)*

TCFD Recommended Area of Disclosures	MDU Resources' Related Content in This Report
Risk Management: Describe the organization's processes for managing climate-related risks.	-Board of Directors, pages 14-15 -Governance of Climate Risks and Opportunities, page 15
Risk Management: Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management.	-Board of Directors, pages 14-15 -Governance of Climate Risks and Opportunities, page 15
Metrics and Targets: Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	-Board of Directors, pages 14-15 -Governance of Climate Risks and Opportunities, page 15
Metrics and Targets: Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 GHG emissions and the related risks.	-Reference EEI/AGA/SASB appendices where emissions are provided -MDU Resources Environmental Stewardship/Business Unit Environmental Goals, page 6
Metrics and Targets: Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	-MDU Resources Environmental Stewardship/Business Unit Environmental Goals, page 6

Sustainability data can be challenging to measure accurately. MDU Resources works continuously to improve its data measurement, gathering, and reporting processes to increase the integrity of the information presented. This report contains the best data available at the time of publication. The data reporting period is for calendar year 2020 unless otherwise noted.

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