2020 CORPORATE SUSTAINABILITY REPORT

PEOPLE. PLANET. PROSPERITY.
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Our Commitment to Sustainability Strengthens a Changing World

Dear customers and investors,

ALLETE is putting sustainability into action while honoring our commitments to the climate, our customers and the communities we serve. Building strong communities goes hand-in-hand with caring for the environment. People, planet, and prosperity are part of who we are and what we do every day.

At ALLETE, we recognize that impacts from climate change are real – we have taken action, and are committed to doing more. Our overall strategy is to enhance and grow our companies by providing sustainable energy solutions to meet changing societal expectations and evolving regulations.

All of our companies are engaged in this effort. Minnesota Power began delivering 50% renewable energy to customers in late 2020, the first Minnesota utility to achieve that milestone. Just one month later, the company announced its vision to deliver 100% carbon-free energy by 2050 with interim targets to reach 70% renewable energy and close one of two remaining coal units by 2030, and to achieve an 80% reduction in carbon emissions and coal-free operations by 2035. Our other utility company, Superior Water, Light & Power in Wisconsin, receives its energy from Minnesota Power and shares in these carbon-reduction and climate goals.

ALLETE Clean Energy continues to expand its national footprint through its success in creating clean-energy solutions for its customers. In 2020, it added two new wind projects to increase its wind facility portfolio to more than 1,000 megawatts (MWs) across seven states, and it has another 300-megawatt wind site under construction. ALLETE Clean Energy is now building on its reputation and strong track record of success to expand its focus beyond wind to additional opportunities within the clean-energy space.

BNI Energy’s focus on sustainability involves supporting its customer to advance an ambitious project to take the carbon emissions from a neighboring power plant and safely sequester them deep underground. If successful, it could make North Dakota’s lignite a valuable source of clean, affordable and reliable energy for decades to come.

Our view of sustainability, however, goes beyond reaching these important environmental and climate goals. It includes supporting our customers and local communities to foster a healthy and thriving society. While our companies provide essential services that are the backbone of our modern society, we also play an essential role in that society. As events of the past year have shown, we need resilient, equitable communities that offer diverse economic opportunities for everyone.

In viewing sustainability through that lens, we know that our actions outside of the clean-energy transition are critically important. We believe we must nurture a more diverse workforce to help build stronger communities. To do so, we strive to create a work culture that embraces employees’ unique backgrounds, talents and perspectives and encourages them to achieve their fullest potential. With integrity as our foundation, we have created a corporate governance structure that serves as an example of diversity, equity and inclusion from the top down, and we have more work to do.

As a leading company in the region, our financial choices also can have a big impact. We have initiatives underway to support diverse businesses through our investment and purchasing decisions. It is equally important that we thoughtfully address our region’s social needs through our distribution of grants. We are committed to supporting programs that focus on education, income inequality, social justice and the opportunity gap.

The COVID-19 pandemic and turmoil during the past year exposed these social problems even further, prompting corporate and employee giving focused on immediate needs along with our usual broad donations. With many families working and learning from home, and the high demand for health-care services, the pandemic also reaffirmed the value of our essential, 24/7 energy services.

We have a saying at ALLETE that we strive to achieve “the right results, the right way.” This sustainability report highlights the many ways we achieved the right results, the right way for the climate, our customers, our communities and our employees. When we all work together to build equitable, healthy communities served by increasingly clean energy, we create the change we wish to see and build a better world for tomorrow.

Bethany M. Owen
ALLETE President and CEO
INTRODUCTION

ALLETE is putting sustainability into action while honoring our commitments to the climate, our customers and the communities we serve.
TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES
This section of ALLETE’s Corporate Sustainability Report has been compiled in accordance with the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD) and the TCFD Implementation Guide. Additional guidance has been taken from the Climate Disclosure Standards Board (CDSB), and other information and data has been sourced from ALLETE’s Sustainability Accounting Standards Board (SASB) reporting, as well as the Edison Electric Institute (EEI) Environmental, Social, and Governance (ESG) report.

ALLETE recognizes the significant impacts climate change can have on our businesses, and the importance of evaluating our business model for different climate-related transitions/pathways. Our recently announced carbon vision for Minnesota Power, ALLETE’s largest business unit, represents a proposed path that significantly reduces the risks of more aggressive carbon emission reduction scenarios that might be imposed by external parties through regulation or legislation. Subsequently, this report focuses on ALLETE’s actual and projected carbon reductions in comparison to state, national, and international goals. The comparison of our carbon vision to various carbon-reduction goals illustrates our proactive approach toward managing transitional risk associated with shifts to a lower-carbon economy.

We believe our considerable progress on reducing carbon emissions, coupled with our bold vision for the future, positions us to continue to be a leader in renewable energy and carbon reduction for decades to come. This combination of execution and vision helps ALLETE manage transitional and physical risks, while also providing an excellent platform for continuing the significant growth ALLETE has and continues to achieve.

Our Phased TCFD Approach

This report focuses on 2019 information for TCFD, as well as SASB and EEI reporting frameworks, because 2020 metrics were not yet available at the time of this publication. Updated information for 2020 data will be made available later in 2021, and subsequent reports will be published slightly later in the year to allow the inclusion of the previous year’s data.
Governance and Management

(TCFD G(a) and G(b))

Our commitment to sustainability is led and supported through strong board leadership, intentional management focus and sound governance practices. We firmly believe these elements are foundational to ensure ALLETE and its investors continue to prosper while protecting the planet and supporting and empowering employees, stakeholders and our communities.

Governance

The board oversees ALLETE’s strategy and Enterprise Risk Management, including the evaluation of sustainability-related risks and opportunities and ESG initiatives, in a manner designed to drive performance for our investors and other stakeholders. Corporate responsibility is integrated into our governance processes and is embedded in our strategy and our core values, namely: integrity, environmental stewardship, safety, employee growth, and community engagement.

Each committee of the ALLETE board of directors has an oversight role in the advancement of sustainability measures through evaluation of ALLETE’s climate-related reporting process, linking environmental performance to executive compensation, or ensuring sustainability-related financial disclosures receive appropriate levels of review and assurance.

+ Corporate Governance and Nominating Committee oversees the reporting of ESG matters and addresses ESG topics on at least a quarterly basis.

+ The Executive Compensation Committee establishes the company’s philosophy and policies regarding ALLETE executive and director compensation, which includes setting sustainability-related performance goals. Our annual incentive plan (AIP) is designed to balance the needs of multiple stakeholders, including investors, employees and customers. Environmental, reliability, and safety metrics have been incorporated into annual incentive plan (AIP) performance goals for more than 15 years. In 2019 and 2020 we added sustainability goals to advance our next-generation sustainability vision and increase the transparency and clarity for sustainability reporting.

+ The Audit Committee assists the board in its oversight of ALLETE’s sustainability-related SEC financial disclosures and internal controls over financial reporting, as well as compliance with legal and regulatory requirements. The Audit Committee also receives audit reports for ESG reporting from ALLETE’s internal audit department.

Management

As an energy company, evaluating, preparing, planning and responding to environmental and climate-related risks is a management priority. Many of ALLETE’s businesses and growth initiatives are focused on meeting regulatory requirements and mandates that are related to climate-related concerns. This includes reducing carbon emissions, adding renewable energy, and strengthening our energy delivery system.

As discussed in the risk management section, ALLETE’s management closely monitors, tracks and evaluates environmental and climate-related issues on regulatory, legislative and policy fronts. Environmental regulations and mandates are identified through monitoring the Federal Register, participating in trade associations and industry peer groups, and engaging with external legal and regulatory consultants.

Once identified, environmental and/or climate issues are then assessed for impact to the company through the company’s risk management programs and groups. See the section on transitional risk management activities at ALLETE for more information on ALLETE’s environmental strategy group.

During 2020, management actively engaged with investors, customers and other key stakeholders to discuss ALLETE’s sustainability strategy and initiatives and to gain insights into stakeholders’ perspectives about sustainability and corporate responsibility, and how to effectively measure, communicate and disclose our efforts.
Strategy for Climate-Related Risks and Opportunities

(TCFD S(a), S(b), and S(c))

ALLETE’s Overall Strategy for Climate Change Risks and Opportunities

ALLETE’s growth strategy is designed to put sustainability into action. Our robust but flexible strategy is designed to simultaneously manage risks and help advance the clean-energy economy. We do this by researching, evaluating and implementing real-world solutions that provide environmental, social and economic benefit. This approach positions ALLETE for long-term resiliency in a lower-carbon economy, and is a business approach that is designed to endure and thrive through the transitional and physical risks associated with climate change. Embedded throughout this strategy is an unwavering commitment to protect the environment while also providing consistent value and services to our customers, investors and all of the regions we serve.

While managing risks is important, there are also significant opportunities within our businesses to participate in the transition to a lower-carbon economy. Financial growth has already been achieved through expanding renewable generation for our regulated and nonregulated businesses, as well as significant investments in transmission infrastructure.

We feel these growth opportunities will continue in the coming years, and innovative solutions like carbon capture and sequestration technology, electrification of different sectors of the economy, energy efficiency and energy storage will create additional business opportunities. ALLETE’s growth strategy is designed to provide solutions for these converging trends and needs in the energy sector, with more than $1.6 billion in planned capital investments over the next five years, most of which advance clean-energy initiatives.

Key Elements

Our multipronged strategy for climate-related risks and opportunities relies on the following common elements across our business units.

Expand renewable sources of energy
Renewable energy will provide growth and reduce risks associated with additional carbon regulations. Currently, ALLETE is ranked second among investor-owned utilities for investment in renewable energy based on market capitalization.

Reduce overall carbon emissions
ALLETE’s approach to decarbonization includes coal fleet retirements, conversion to natural gas, and partnering with customers on carbon capture and sequestration projects.

Strengthen the Electric Grid
ALLETE is investing in infrastructure for managing the delivery of increasing amounts of renewable energy, and enhancing the resiliency and reliability of the grid to protect against extreme weather events while providing customers more choice and control.

Adopt innovative solutions
We are reducing water use, investing in infrastructure that will be more resistant to weather changes, and implementing strategic underground installation of energy delivery components that may be more vulnerable to climate impacts. Coupled with ongoing efforts to identify feasible alternative low- or zero-carbon fuels and carbon capture and sequestration technology, we are optimistic technology advancement will continue to help ALLETE lead the way to a lower-carbon energy future.
Each ALLETE company plays a unique and significant role in executing our strategy. Combined, our businesses work together to create a well-balanced approach toward managing risks and building on opportunities to transition to a lower-carbon future.
Minnesota Power is moving to renewable energy faster and further than most similar utilities through innovative projects and partnerships. It serves customers, including large industrial customers that provide clean minerals for a clean-energy economy, with safe and reliable power.

Minnesota Power generates, transmits and distributes electricity in northern Minnesota, an area rich in natural resources. Increased renewable standards are expediting the transition away from coal and creating renewable infrastructure opportunities. Additional wind generation/solar/storage and supporting transmission and distribution will play a significant role in Minnesota Power’s future.

+ Minnesota Power leads Minnesota utilities in renewable generation with 50% renewable sources, and has plans to reach 70% renewables by 2030. Minnesota Power’s latest addition to renewable generation sources includes a power purchase agreement with Nobles 2, a 250-megawatt wind energy facility ALLETE developed in partnership with Tenaska.

+ Minnesota Power recently energized the Great Northern Transmission Line (GNTL), a 224-mile transmission line that represents an innovative energy delivery and storage system for renewable energy. This project delivers an additional 250 megawatts of hydropower from Manitoba Hydro to Minnesota Power’s service territory. Significant opportunity also exists in potential modernization and expansion of Minnesota Power’s direct current (DC) transmission line from North Dakota, connecting wind-rich North Dakota with natural resource-rich Minnesota.

Minnesota Power recently announced a vision for a 100% carbon-free energy supply by 2050, transitioning away from coal-fired generation by 2035.

Minnesota Power’s 100% carbon-free energy vision

<table>
<thead>
<tr>
<th>Today</th>
<th>By 2030</th>
<th>By 2035</th>
<th>By 2050</th>
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<tr>
<td>Minnesota Power provides 50% renewable energy, the first utility in Minnesota to achieve that milestone.</td>
<td>Add an estimated 400 MW of wind and solar power to reach 70% renewable energy.</td>
<td>Achieve 80% carbon-free target and a coal-free energy supply by transforming the company’s last coal unit.</td>
<td>Adopt innovative solutions and use evolving technology to deliver 100% carbon-free energy.</td>
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Minnesota Power also will invest in infrastructure for managing the delivery of increasing amounts of renewable energy and engage with stakeholders on strategies for reaching the 2050 carbon-free energy goal reliably, safely, affordably and justly.
**ALLETE Clean Energy** leverages industry knowledge and innovation to bring clean energy to customers across North America. It has a growing reputation as a respected national player in wind energy as it builds relationships, grows its capabilities and expands to new geographies.

ALLETE Clean Energy is an independent power producer and supplier that develops and acquires renewable projects and delivers clean energy solutions at the heart of the exciting energy transformation underway across North America. ALLETE Clean Energy’s entrepreneurial spirit and talented team fuel the company’s passion for clean energy project development, construction and efficient operations.

+ With the addition of the Caddo wind energy project, ALLETE Clean Energy will have more than 1,500 megawatts (MW) of clean, renewable power in its built-transferred and operating portfolio. Its customer base expanded in 2020 to include an additional utility and Fortune 500 companies in the food, beverage and retail sectors.

+ ALLETE Clean Energy’s deployment of production tax credit-qualified refurbishment projects are helping to make wind energy projects more economical and efficient. ALLETE Clean Energy is increasingly providing asset management and other value-added renewable industry resources.

+ ALLETE Clean Energy is partnering with industry experts to recycle decommissioned wind turbine blades during its refurbishment projects, simultaneously conserving resources and landfill space while continuing to develop modernized renewable power projects.

**ALLETE Clean Energy is strategically positioned as demands for clean energy accelerate.**

The Diamond Spring wind site in Oklahoma produces electricity for Fortune 500 corporate customers.
Superior Water, Light & Power is transforming the way it delivers electricity, natural gas and water to its customers in northwestern Wisconsin while providing more information and options to help them manage their energy and water use. The company purchases its power from Minnesota Power, resulting in a 50% renewable energy supply to its electric customers.

- Received approval to build, construct and operate a 470-kilowatt community solar garden in Superior, Wisconsin, to provide customers greater choice for their power supply.

- Advanced Metering Infrastructure deployment across its electric, gas and water utilities is 90% complete, allowing customers more control over their energy use and increased accuracy in billing.

- Beginning in 2019, the company commenced a 30-year water infrastructure review and associated replacement projects to ensure water quality, reliability and flexibility to serve current and future customer needs.
BNI Energy is engaging in national efforts to develop carbon capture and sequestration for the energy industry and is an industry leader in reclamation practices at its North Dakota mine.

BNI Energy owns and operates BNI Coal, a lignite mine near Center, North Dakota. Two electric generating cooperatives, Minnkota Power and Square Butte, operate the Milton R. Young Generating Station and utilize virtually all of the coal produced by BNI Energy under long-term agreements. BNI Energy’s vision is to be a trusted partner recognized as an expert in delivering energy solutions while being environmentally responsible, community minded and financially strong.

BNI Energy has a rich history of responsible energy production in North Dakota and is focused on value-added energy services and infrastructure solutions that balance environmental stewardship and the energy needs of consumers. The company is leveraging its talent, experience and solid track record to advance sustainable solutions in North Dakota. Increasing regulation and evolving social expectations have placed a priority and urgency on finding lower carbon clean-energy solutions.

Part of BNI Energy’s mission is to work with partners such as Minnkota Power Cooperative and the state of North Dakota to advance clean-carbon solutions, including carbon sequestration technology at the Milton R. Young Generating Station. Such solutions are critical to the coal industry and could help solve climate issues and secure the utilization of North Dakota’s vast lignite resources for generations. BNI also is an industry leader in mineland reclamation at its Center Mine, where farmers work alongside mining operations on reclaimed land. Most recently, BNI Energy received the North Dakota Public Service Commission Excellence in Reclamation Award for research on mineland reclamation practices.

BNI is an industry leader in mineland reclamation at its Center Mine.
Physical Risks of Climate Change on ALLETE

Many climate models predict that global climate change will result in the potential for increased frequency, intensity, and duration of severe weather or other natural disasters. In turn, these changes could result in increased costs to ALLETE’s businesses and decreased reliability and increased costs for our customers.
**Short- to Medium-Term Physical Risks**

**Intensity, frequency, duration of storms**
Wind storms, heavy precipitation, ice storms and snowstorms all have the potential to affect our operations.

All of ALLETE’s companies recognize this risk and the potential impact it could have on our operations, and plan accordingly to minimize disruptions. Our regulated operations at Minnesota Power and Superior Water, Light & Power, with their extensive energy delivery systems, have particularly robust response plans based off the incident command approach.

Despite these plans, changes in the intensity, frequency, and duration of weather events due to climate change could stress availability of both internal and mutual-aid resources in restoring critical infrastructure.

Extreme or extended precipitation events can also significantly affect our operations. This could include inundation of critical infrastructure, including thermal and hydroelectric generation located next to surface waters or substations or other energy delivery infrastructure. Prolonged saturation of soils can also impact wooden power poles, causing structural concerns from increased microbial activity.

**Water availability**
Lack of water availability for our thermal and electrical conversion facilities is another potential physical risk due to climate change. Water is used for cooling purposes for our thermal facilities for electrical generation, and is also used to cool electrical conversion infrastructure at our high-voltage direct current (HVDC) conversion terminals in Minnesota and North Dakota. Additionally, Minnesota Power hydropower generation, both owned and purchased, depends on fairly consistent natural conditions for precipitation and evaporation, in addition to well-regulated water use conditions.

As detailed in the SASB report, Minnesota Power withdraws and consumes the most water of the ALLETE business units. However, Minnesota Power has significantly decreased water usage, totaling a 90% reduction at the largest generating facilities (Boswell, Laskin and Taconite Harbor) since 2005. In 2019, Minnesota Power withdrew 90,839,000 m³ of water, of which 15,713,000 m³ were for consumptive use. By comparison, Superior Water, Light & Power withdrew a total of 2,329,000 m³ for its residential, commercial, industrial, and all other customers in 2019. BNI withdrew 99,400 m³ for its coal mining operations. ALLETE Clean Energy’s water withdrawals were negligible, serving potable and domestic water usage, and were not reported for 2019 SASB metrics.

**Wildfire risks**
Changing precipitation and temperature patterns, along with altered forest management practices, can change the amount and/or type of hazardous fuels on timbered lands, thereby increasing the risk of wildfires. Wildfire presents risks to our transmission, distribution and generation facilities, as well as potential liability due to proximity of energized equipment to potential wildfire fuel sources.

See the Risk Management: Physical section for efforts we have taken to reduce these risks.
Transitional Risks, Opportunities and Impacts

Climate-related transitional risks that could adversely affect our financial position include effects of environmental- or economic-based laws, regulations, incentives or initiatives designed to reduce the quantity and/or impact of greenhouse gas emissions. Additionally, restrictions on land use, wildlife impacts, and other environmental regulations could affect the siting, construction and operation of new or existing generation and transmission facilities needed to transition to lower-carbon generation sources.

One of the more significant transitional risks involves scenarios where carbon reduction or renewable generation requirements are mandated, but do not allow for a thoughtful transition to protect the safety, reliability and/or affordability of energy for our customers. Requirements to pursue more aggressive carbon-reduction goals and renewable generation before cost-effective technology and regulatory policy have been established could place significant pressure on one or more of our businesses and/or our customers.

ALLETE also recognizes that some approaches to limit the worst impacts of climate change would require the electric sector to decarbonize faster than other sectors. In these scenarios, the electric sector reduces or eliminates carbon emissions 10-15 years prior to overall 2050 net-zero goals, which would allow electrification of other sectors and reduce overall net emissions. This “electric system first” approach represents significant risks and opportunities, which ALLETE closely tracks and incorporates into planning and strategic activities.

The majority of our risk management discussion in this report is focused on carbon regulations related to climate change; other risk factors are discussed in more detail in the most recent annual report on Form 10-K filed with the Securities and Exchange Commission (SEC).
Short- to Medium-Term Transitional Risks

Special care must be taken when assessing the magnitude and impacts of climate-related transitional risks for ALLETE, as the diversity of our business mix is a significant part of our resiliency. That diversified business mix requires a unique risk assessment approach, with transition risks that potentially could impact one business negatively while being beneficial to another business.

In the following section, different risks and opportunities that ALLETE monitors and addresses are discussed. This list is not exhaustive, but rather is focused on the primary risks and opportunities to ALLETE, based on magnitude, probability, and other factors. Below we make a number of comparisons to aggregate emission reductions at the state, national, and global levels. Such comparisons are strictly illustrative; comparison of aggregate reduction levels to individual companies requires certain assumptions that are often not representative of the unique circumstances and uncertainties present in reality. See EPRI (Rose and Scott, 2020, 2018) for more discussion on these comparisons.

Economic Risks

Both our regulated utilities and our other businesses are subject to various types of economic risk. For our regulated utilities, we need to work within our regulatory compact to maintain financial health to support investments required for the clean energy transformation. Lack of access to capital, impacts to credit ratings, or widespread disruptions to the economy all could affect ALLETE’s strategy to advance clean energy initiatives. Changes to production tax credits (PTCs), tax credits or incentives for carbon capture and sequestration, and other economic instruments also could create additional risks and opportunities for our business units. Other economic factors, such as market prices and the overall energy market, can also be difficult to predict and represent risks that must be monitored and incorporated into our overall strategy and risk management processes.
State-level Regulatory Risks

ALLETE monitors state-level developments for climate and energy-related matters in all of the states where we operate. Several of the more relevant state-level regulatory risks are discussed here.

Minnesota’s Next Generation Energy Act of 2007 (NGEA) set multiple-year goals for greenhouse gas emission reductions, a state-based goal which applies only to Minnesota Power. Transitional risks from the NGEA are considered low, as Minnesota Power has already achieved 50% carbon reductions from 2005 levels, well in advance of the goals set forth in the NGEA. Minnesota Power has proposed a 100% carbon-free generation operational strategy by 2050, 20% higher than the NGEA goals, in its preferred Integrated Resource Plan (IRP) filed with the Minnesota Public Utilities Commission (MPUC) in 2021.

As represented in Figure 1, if existing carbon performance and vision are executed consistent with the company’s vision, transitional risks from NGEA are anticipated to be low. However, despite Minnesota Power and the electric utility sector in Minnesota being responsible for the most reductions in the state and meeting NGEA goals to date, proposed legislation was introduced in early 2021 in Minnesota that would set a new goal of 100% carbon-free energy from the electric utility sector by 2040.

Minnesota Power currently plans to be carbon-free by 2050, 10 years later than the proposed state legislation would require. Minnesota Power’s plan incorporated a variety of factors into account when developing its carbon-free vision by 2050, including reliability, affordability, host community transition, and the current uncertainty around technological advancements that may or may not occur over the next 30 years. While the proposed legislation is not expected to become law in its current form, future legislation could result in more aggressive carbon goals that do not fully align with Minnesota Power’s timing for its preferred plan with respect to carbon reduction and renewable generation.

Minnesota Power, BNI Energy, and ALLETE Clean Energy all have a significant presence in North Dakota, a state with abundant fossil and renewable resources. North Dakota has also been advancing carbon capture and sequestration efforts for its carbon-based energy resources. BNI Energy is working with its customer, Minnkota Power, to support its carbon capture and sequestration effort, and also achieves biological carbon capture through net positive plantings of trees and wetland restoration projects through its mineland reclamation program.

ALLETE Clean Energy developed three wind-generating facilities in North Dakota, one owned facility (Glen Ullin, 106 megawatts) and two build-own-transfer projects (Thunder Spirit I and II, at 107 and 48 megawatts, respectively). Minnesota Power’s 500-megawatt Bison wind generating facility, located in the wind-rich center of North Dakota, is Minnesota Power’s largest source of owned renewable power. BNI Energy, located in Center, North Dakota, has a long-established presence of lignite coal mining in North Dakota and has cost-plus contracts that extend to 2037.

The expansion of wind resources in North Dakota has provided significant opportunities for many energy companies, and renewable energy

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1 As noted in the main text, comparisons to aggregate emissions reductions should be treated with caution, since the aggregate reductions do not reflect individual companies and their unique circumstances.
development in North Dakota has been a major component of ALLETE’s strategy. The Minnesota Power-owned DC transmission line is also a major strategic asset for ALLETE. The DC line is able to deliver renewable wind energy from North Dakota to Minnesota Power’s service territory with less line loss than an equivalently-sized alternate current (AC) transmission line.

However, the low fuel costs and tax incentives associated with wind energy have placed economic pressures on fossil fuel based-generating stations in the state, which in turn has caused some counties to implement moratoriums on new wind or solar development. ALLETE continues to monitor these developments, especially as they impact the potential for Minnesota Power and ALLETE Clean Energy to expand renewable generation or to site and construct additional energy delivery infrastructure in North Dakota.

**National-level Regulatory Risks**

The United States Environmental Protection Agency (EPA) has a mandate to regulate carbon dioxide, which originates from the 2007 Massachusetts v. EPA U.S. Supreme Court decision and EPA’s resultant 2009 Endangerment Finding on CO₂ (carbon dioxide). The Endangerment Finding established carbon dioxide as a pollutant that negatively impacts human health and the environment. Since that time, the EPA has been responsible for regulating carbon dioxide in some manner. However, over a decade after the Endangerment Finding, despite two rulemaking attempts by the EPA (the Clean Power Plan (CPP) and the Affordable Clean Energy (ACE) Rule), no such federal requirement has been implemented.

The EPA can be reasonably expected to craft a replacement rule regulating carbon dioxide emissions from existing power plants in the future. Future national carbon regulations may impose more stringent requirements; however, to date, ALLETE has been able to take steps to balance customer reliability and affordability with actual or potential carbon reduction goals. This strategy is an important aspect of managing transitional risk given the level of uncertainty in how or when carbon regulations may come into effect, and the extent to which they might require additional carbon emission reductions.

The example in Figure 2 demonstrates how Minnesota Power could have fared under the more aggressive of the two EPA regulations, the Clean Power Plan. Actual outcomes would have depended on important factors such as regulatory policies, allocation of credits, the opportunity and impacts of allowance trading, and other factors.

While these Minnesota mass-based limits were not finalized and are not in effect, this graphic is provided to show how Minnesota Power’s overall carbon reductions might have fared under a national carbon reduction standard.

Minnesota Power already has reduced carbon emissions 50% from 2005 levels, exceeding potential CPP goals by a decade². The CPP was part of the Obama administration’s strategy for realizing the Intended Nationally Determined Contribution (INDC) goal of 26–28% reduction by 2025.

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²Comparisons to aggregate emissions reductions should be treated with caution, since the aggregate reductions do not reflect individual companies and their unique circumstances.
The EPA has also issued rulemaking to apply CO₂ emission New Source Performance Standards (NSPS) to new, modified, and reconstructed fossil fuel-fired electric generating units under Section 111(b) of the Clean Air Act. The NSPS rule was finalized in October 2015, revised in December 2018, and finalized again in January 2021. Our proposed natural gas combined cycle facility, the Nemadji Trail Energy Center (NTEC), is expected to fully meet the NSPS requirements, and should not be impacted by this rulemaking. However, additional rulemakings may occur and we will continue to monitor Section 111(b) developments.

**International-level Risks**

In early 2021, the Biden administration announced its intention to take several climate-related actions. These actions, taken either independently or in conjunction, could create both risks and opportunities for ALLETE.

President Biden’s decision to re-enter the Paris Agreement is expected to result in new, potentially more aggressive carbon-reduction pledge for the U.S., including for the electric sector. The Biden administration is also pursuing economic policies that could impact ALLETE’s businesses. One of President Biden’s executive orders reconvenes an interagency working group to establish interim (which have been released) and final social costs of three greenhouse gases on a per ton basis. The three greenhouse gases with potential social costs include carbon dioxide, nitrous oxide and methane. Once updated, it is expected that the finalized social cost figures will be used by the Biden administration to inform federal regulations and major agency actions. This in turn could justify aggressive climate actions that could create additional risks and opportunities for ALLETE.
Longer-Term Risks and Impacts

Some longer-term risk areas, as discussed in ALLETE’s 2020 Form 10-K report filed with the SEC, include the following:

The siting and operation of our wind energy facilities depends heavily on meteorological conditions, as well as avoiding or minimizing negative impacts to flora, fauna, and critical habitat. Although ALLETE’s wind energy facilities are located in diverse geographic regions to reduce the potential impact that may be caused by unfavorable weather in a particular region, suitable meteorological conditions are variable and difficult to predict. If wind conditions are unfavorable or meteorological conditions are unsuitable, our electricity generation and revenue from wind energy facilities may be substantially below our expectations. The electricity produced, production tax credits received, and revenue generated by a wind energy facility are highly dependent on suitable wind conditions and associated weather conditions, which are variable and beyond our control.

We base our decisions about which wind projects to build or acquire, as well as our electricity generation estimates, in part on the findings of long-term wind and other meteorological studies conducted on the project site and its region, as well as avoiding or minimizing impact on birds, bats, and other species. However, the unpredictable nature of wind conditions, weather and meteorological conditions, and/or expansion of avian and bat ranges can result in material deviations from these studies, permit conditions and our performance expectations. Additionally, wildlife protections under the Endangered Species Act are subject to change based on evolving research and government policy. Furthermore, components of our systems could be damaged by severe weather, such as hailstorms, lightning or tornadoes. In addition, replacement and spare parts for key components of our diverse turbine portfolio may be difficult or costly to acquire or may be unavailable. Unfavorable wind conditions, weather or changes to meteorological patterns could impair the effectiveness of our wind energy facility assets, reduce their output beneath their rated capacity or require shutdown of key equipment, impeding operation of our wind energy facilities. Expanding ranges or further regulation of avian and bat species could require mitigation activities that could affect future performance of operating facilities or new site acquisition or development.

The construction, operation and maintenance of our electric generation facilities or investment in facilities are subject to operational risks that could adversely affect our financial position, results of operations and cash flows. The construction and operation of generating facilities involves many risks, including the performance by key contracted suppliers and maintenance providers; start-up operations risks; breakdown or failure of facilities; the dependence on the availability of wind or water resources; or the impact of unusual, adverse weather conditions or other natural events; as well as the risk of performance below expected levels of output or efficiency. We could be subject to costs associated with any unexpected failure to produce and deliver power, including failure caused by breakdown or forced outage, as well as repairing damage to facilities due to storms, natural disasters, wars, sabotage, terrorist acts and other catastrophic events.

BNI Energy may be adversely impacted by its exposure to customer concentration and environmental laws and regulations. BNI Energy may be adversely impacted by the transitional risks associated with environmental laws and regulations, which could have an adverse effect on our financial position, results of operations and cash flows. In addition, insurance companies have decreased the available coverage for policyholders in the mining industry, affecting the availability of coverage and leading to higher deductibles and premiums.
Compatibility of ALLETE’s Strategy with a Net-Zero Carbon Future

Under Section 5(c) of the TCFD Implementation Guide, the TCFD recommends evaluating the company against physical and transitional risks associated with different climate scenarios, including a 2°C scenario.

ALLETE recognizes that such an analysis could provide useful information to evaluate the long-term resiliency of our strategy. However, such an effort is highly intensive from a resource perspective, and part of our obligation to our customers, investors and regulators is to evaluate such scenarios at a time when critical components of our carbon vision have enough certainty to provide a meaningful analysis. On Feb. 1, 2021, ALLETE’s largest company, Minnesota Power, presented its 15-year energy plan to the MPUC in the form of an IRP. The IRP outlines a bold vision for Minnesota Power’s energy future, including a coal-free goal by 2035 and a carbon-free goal by 2050. Minnesota Power’s carbon emissions from thermal generation represent approximately 95% of ALLETE’s overall Scope 1 carbon emissions in 2019.

The goals of the Paris Agreement are meant to limit the worst impacts of global climate change by reducing warming to certain levels. While sector- or company-specific carbon-reduction targets have not been established to meet these climate goals, measuring the company’s performance and vision against these goals (in this case, 1.5°C and 2°C) illustrates how our actions and vision help manage the risks associated with potential future changes in carbon policy or regulations.

For simplicity, ALLETE’s carbon emissions and projection are based on Minnesota Power’s actual and projected emissions from our Electric Generating Units (EGUs) using our carbon calculation methodology. BNI Energy represents the remaining (approximately 5%) of Scope 1 emissions that have been calculated for ALLETE, with Superior Water, Light & Power’s and ALLETE Clean Energy’s Scope 1 emissions not currently calculated. However, Superior Water, Light & Power’s and ALLETE Clean Energy’s Scope 1 emissions are primarily from vehicle emissions and generators, and would represent a small amount of additional Scope 1 generation.

In this analysis, we have projected (Figures 3 and 4) our actual and projected carbon emission reduction rates against the ranges determined by two EPRI reports, the Review of 1.5°C and other Newer Global Emission Scenarios and Grounding Decisions: A Scientific Foundation for Companies Considering Global Climate Scenarios and Greenhouse Gases.

It is important to note that these graphs do not imply that these are the ranges ALLETE needs to meet; these emissions pathways are based on modeling of aggregate markets and idealized policy and technology assumptions, and do not capture the unique circumstances of individual companies. Different countries, sectors, and individual companies will have different cost-effective emissions reductions and timing of reductions based on unique technology, costs, markets, and regulatory structures in place.

3EPRI’s 2020 study notes that “caution is merited regarding direct use [of global emissions scenarios] as quantitative benchmarks for evaluating or guiding companies. Global and subglobal results from these scenarios—emissions, market, and technology (e.g., coal plants, vehicle mix)—are problematic as benchmarks, as well as inputs to even more disaggregated assessment (e.g., asset-level). Among other things, they model markets not companies, are contingent on embedded scenario assumptions, missing key uncertainties, and suggest economically inefficient identical action across companies.”
In Figure 3, a range of emissions has been modeled to limit warming by less than 1.5° Celsius (C) from pre-industrial levels, with a net-zero outcomes before and after 2050. Actual (2020) and projected (2025-2050) carbon emissions from ALLETE’s major emission sources are represented by the blue line, with blue vertical bars on the graph representing a wider potential carbon-reduction ranges post-2021. The wider range for future carbon emissions is due to a variety of factors, ranging from economic dispatch levels for Boswell, the outcome of MP’s IRP, and potential future regulatory changes.

This scenario represents a low probability of “overshoot,” which is generically defined as a period of time when there is a probability that temperatures go above the temperature goal—in this case, 1.5° C—before cooling back down. Even if this fairly aggressive scenario was implemented for ALLETE’s major sources of carbon emissions, our carbon-reduction strategy positions the company well for those regulatory outcomes. Again, sector-specific and company-specific reductions will depend on regulatory policies, available technology, and markets, as well as balancing environmental performance, safety, affordability, and reliability.

Figure 3 In this graphic, carbon emission reductions from ALLETE’s largest Scope 1 sources are shown in relation to the estimated ranges needed for a 1.5° C scenario with low temperature overshoot. The vertical bars from 2021-2050 represent approximate potential ranges of carbon emission reductions, which will be dependent on technology advancements, regulatory requirements and policies, and other factors not possible to predict at this time.
Figure 4 represents a 2°C scenario. Again, ALLETE’s major carbon emissions fall below the range of projections\(^{6}\). Although additional requirements may be imposed upon our businesses, the carbon-reduction progress we’ve achieved to date and our carbon-free vision is important factor in managing the risk of more ambitious carbon reduction requirements in the future for Minnesota Power and ALLETE in the future. It is expected that there will be more clarity around Minnesota Power’s IRP status, as well as potential new national and international goals for additional carbon-reduction goals, near the end of 2021.

\(^{6}\)Derived from Rose and Scott (2018 and 2020).

\(^{7}\)Comparisons to aggregate emissions reductions should be treated with caution, since the aggregate reductions do not reflect individual companies and their unique circumstances.
Risk Management: Identifying and Managing Climate-Related Risks at ALLETE

Just as climate-related risks are classified into physical and transitional risks, ALLETE tailors risk-management activities according to risk type. We use well-established risk-management tools and processes to identify and manage climate-related risks on an ongoing basis, with clear communication of risk factors and risk-management approaches to management and the board.

Physical Risk Management
Includes planning, infrastructure hardening, and reduced reliance on natural resources where possible to reduce risk of operational impacts.

Transitional Risk Management
Relies on external sensing and internal collaboration to assess, quantify, and communicate the impacts and management strategies for environmental or economic requirements related to climate change.
**Physical Risk Management**

ALLETE’s infrastructure is designed and constructed with resiliency in mind. Harsh, ever-changing weather conditions are a normal course of business for our operations, and we build, operate and maintain our infrastructure to last long periods of time in extremely challenging conditions.

However, ALLETE understands that climate change may shift the intensity, frequency, and duration of extreme weather events in the coming years. We also recognize that less-extreme, longer-term trends can also significantly alter the world in which we operate, including but not limited to changes in water availability, extended warmer weather that affects in-ground infrastructure, and ecosystem-level changes.

In addition to broader risk mitigation activities, such as geographic distribution of wind energy resources to account for potential wind pattern changes, ALLETE’s risk management activities to manage the physical impacts of climate change include the following:

- Strong planning, preparedness and mutual assistance arrangements to prepare for extreme weather events
- More durable and resilient energy delivery infrastructure
- Reduced reliance on consumptive and non-consumptive water usage
- Maintaining and improving the natural ecosystems in which we operate

All of these approaches are key components to ensure we continue to deliver safe, reliable and affordable energy to our customers and the regions we serve under a variety of climate scenarios.

**Emergency Action Response**

With thousands of collective miles of transmission and distribution lines, Minnesota Power and Superior Water, Light & Power have an inherently higher risk from negative impacts from changes in intensity, frequency, or duration of storm events due to climate change. SWLP also owns natural gas transmission and distribution infrastructure, as well as water intake, treatment, and delivery. The reliable, safe and efficient delivery of electricity, natural gas, and water to our customers is of the utmost importance to our companies. Therefore, the companies consider emergency action response a key tool in managing risks from climate change to ensure reliable and safe service throughout different disruptions.

Our regulated operations design and build our infrastructure system to withstand various weather conditions, including high winds, ice, snow, and extreme heat and cold. Intense weather conditions, however, are beyond our control and at times do impact service to our customers. This risk factor is more prevalent with aboveground energy delivery systems, which can be more susceptible to extreme weather events. In those instances, we respond as expeditiously as possible, while also ensuring the continued safety of our personnel and the public.

The company strives to follow effective emergency management principles and protocols that enhance its ability to provide safe and reliable energy services. Minnesota Power and Superior Water, Light & Power use the National Incident Management System (NIMS) to guide their Emergency Response Plans (ERP). The NIMS is a comprehensive national approach to incident management, applicable at all jurisdictional levels and across functional disciplines. It improves the effectiveness of emergency response providers and incident management organizations across a full spectrum of potential incidents and hazard scenarios. NIMS relies on the Incident Command System (ICS) to coordinate and manage the response of an organization. Overall, this approach provides a high level of coordination and cooperation between the company’s regulated operations and public and private entities in a variety of domestic incident management activities.

**Energy Delivery System Resiliency**

While changes in intensity, frequency, or duration of storms are often associated with climate change, ALLETE also recognizes that long-term effects can also present risks to our businesses. Our energy delivery system is built for resiliency, and we have installed higher-class pole systems that provide additional durability in soils that remain saturated longer than historically experienced, or that may have higher levels of soil microbial activity due to longer growing seasons.

We have also invested in grid modernization efforts, including additional underground infrastructure and more redundancy to prevent incidents from occurring. Our energy delivery system also is evolving to become more adaptable when incorporating integration of distributed energy sources, including smaller renewable sources of generation.

**Enhanced Water Management and Planning**

It is anticipated that climate change may result in changes in precipitation levels and events with water availability implications. From Minnesota Power’s renewable hydroelectric power generation, to the cooling waters essential for thermal generation and electrical conversion facilities, ALLETE implements numerous risk-management approaches to limit the potential impacts associated with water use and availability risks caused from climate change and watershed land-use practices.
One of the most significant risk management activities ALLETE has undertaken is the reduction of consumptive and non-consumptive water use at Minnesota Power’s thermal facilities. Since 2005, Minnesota Power has reduced total water use by 90%, for an average water reduction of over 150 billion gallons per year. This has been the result of decreased cooling water use following the idling of Taconite Harbor Energy Center, the natural gas conversion of the Laskin Energy Center, and the retirement of Boswell Energy Center Units 1 and 2.

The remaining large thermal generation at Minnesota Power requires much less water to operate. This is a result of, among other things, the use of cooling towers rather than once-through cooling water for Boswell Units 3 and 4. A proposed dry cooling technology is also planned for the Nemadji Trail Energy Center. Additionally, the HVDC facilities in Center, North Dakota, and Hermantown, Minnesota, are also planned to be converted to dry cooling within the next five to six years.

Minnesota Power also uses a proactive planning approach to help predict and manage watershed dynamics for our renewable hydroelectric facilities. Each winter, Minnesota Power convenes a technical panel of public agency meteorological and natural resource experts, residents of the hydroelectric reservoirs watershed, and Minnesota Power operations to discuss current and forecasted temperature and precipitation conditions. Based off the current and predicted conditions, Minnesota Power selects a plan for subsequent hydropower operations to manage various requirements and expectations around reservoir levels, river flows and operational needs. This approach has been highly successful to account for variable and uncertain weather patterns, with Minnesota Power hydropower operations typically reaching desired refill targets for our reservoirs.

Wildfire Risks – Vegetation Management and Rajala Woods Initiative
Changes to precipitation, temperature and other factors from climate change are expected to impact flora and fauna health, distribution and abundance, including in the areas in which we do business. Shifts in tree species health and/or abundance can create risks from wildfires, as well as exacerbating the impacts from storms.

Minnesota Power’s and Superior Water, Light & Power’s vegetation management program enables safe and reliable transmission and distribution of electricity by controlling growth of non-compatible species and encouraging growth of compatible species under, on or adjacent to its transmission and distribution facilities, rights-of-way or easements. Non-compatible species are defined as those trees that mature at a height that allows them to grow into the electric facilities and cause outages. This is accomplished through adherence to integrated vegetation management principles, which include mechanical and chemical methods of control. Our cyclical vegetation management approach ensures periodic maintenance on distribution and transmission lines, ultimately reducing the risks of outages to our energy delivery systems and more severe wildfire risks in our service territory.

Additionally, Minnesota Power has proactively adapted aggressive forest management goals for company-owned lands through our Rajala Woods initiative, harvesting shorter-lived tree species more vulnerable to weather-induced disruptions and altered forest management activities. Rather than allowing all of the harvested lands to return to the existing cycle of short-lived tree species, Minnesota Power is planting millions of native, long-lived conifer species, such as white, red and jack pines.

To date, Minnesota Power has planted more than 1.5 million long-lived tree species, halfway to its goal of 3 million trees. Minnesota Power’s forest management activities, including pest control and managing competing vegetation, have resulted in high survival rates for the new, more resilient tree species planted.
Transitional Risk Management

The transition to a low or net-zero carbon future represents significant risks and opportunities for most companies, and this is particularly relevant for energy companies. While ALLETE has committed to reducing carbon emissions consistent with pathways designed to limit climate change under 2° C, uncertainty regarding additional environmental or economic regulations and/or legislation can still present risks to our business model(s).

ALLETE tracks, reports and communicates transitional risks through a combination of internal subject matter expert monitoring along with external sensing and engagement with trade groups, peer organizations and governmental/nongovernmental entities to identify and assess transitional risk and opportunities for the company.

Environmental Strategy Group

The Environmental Strategy Group (ES Group) consists of executive and nonexecutive leaders from various disciplines within ALLETE. The ES Group meetings and topics are designed to function primarily in a risk-management role for our most pressing environmental matters. Regulatory risk assessments are typically prepared by the Environmental & Land Management department, along with that company operations typically identifying technical and financial risks. The ES Group then holistically evaluates the company’s environmental risk for the relevant issues at each meeting, with the intent to guide actions that minimize risks and uphold the company’s environmental stewardship values.

The ES Group is designed to have representation from a wide range of disciplines that can evaluate the risks and benefits of environmentally-related actions. The ES Group is designed to bring forward the benefits and risk assessments across multiple functions to allow for a fully informed risk management decision. Executive membership on the ES Group includes ALLETE’s chief executive officer, chief administrative officer, chief legal officer, corporate treasurer, Minnesota Power’s chief operating officer, and vice president of strategy and planning.

Depending on the type of environmental/climate risk or opportunity, certain issues are then elevated to management at the subsidiary board. Depending on the stage of the issue, strategy and risk management activities then commence, as described in later sections. This can include a range of activities, from participating in external working groups or advisory panels to ensure reasonable regulatory outcomes to planning for installation of treatment technology, renewable generation or transmission upgrades.

The ES Group meets approximately two to three times per year. Meeting topics are based on regulatory developments, a determination by the ES Group chair that a meeting on a certain topic is warranted and timely, a request by Minnesota Power or ALLETE management to address a particular issue, and/or a request by a leader/sponsor of a working group to present an issue for the purposes of approval or guidance.

Climate Risk/Opportunities Working Group

While the ES Group is largely focused on environmental regulatory risk management, there are also numerous other economic, legislative and policy-driven initiatives at the company regarding climate change and carbon emissions. To ensure these risks are identified and managed, the Climate Risks/Opportunities (CRO) working group, consisting of leaders from environmental, regulatory affairs and legislative affairs, meets monthly to discuss and track local, state, national and international activities regarding climate change. While the CRO’s focus is primarily on transitional risk, trends in physical impacts from climate change are also included in the monthly agenda.

Based on development on these various fronts, a climate risk/opportunity dashboard is updated and the most significant climate-related issues are communicated to the environmental risk management signposts group on a quarterly basis.

Enterprise Risk Management – Signposts

ALLETE has a strong process in place for evaluating climate-related risks through a COSO-based Enterprise Risk Management (ERM) program. Quarterly ERM Signpost meetings evaluate the strategic landscape in a five-year outlook, focusing on a variety of risk factors including the economy, financial and capital markets, fuel commodities, environmental regulation, technology changes, regulatory and legislative developments, and regional economic indicators.

Risks presented from climate change are evaluated as part of the ERM Signpost monitoring. The risks monitored are primarily transitional. The ERM Signpost risk-management summaries are sent to the ALLETE board of directors on a quarterly basis.
Metrics and Targets

ALLETE has numerous targets and initiatives in place to mitigate climate-related risks and implement solutions to reduce the impacts of climate change. Because our companies provide essential services to our customers, and because goals set for our regulated operations are often subject to approval from our economic regulators, setting definitive quantitative targets that are too specific often can be detrimental in providing the flexibility required to meet the needs of our customers.

However, ALLETE recognizes that setting goals and establishing metrics to track our progress is a powerful tool to ensure our commitment to manage climate-related risks and opportunities. Our proposed carbon vision for Minnesota Power is one example of a goal we have set that is designed, in part, to mitigate climate-related risks. ALLETE has a strong emphasis on environmental performance for all of our businesses, including linking environmental performance and sustainability reporting progress to executive compensation.

As of the date of this report, the company has not formally integrated climate-related performance metrics into its policies for remuneration or other incentives for executive leaders, management or employees. There is a direct link between executive compensation to overall environmental performance, which is tracked via environmental penalties levied by regulatory agencies. Environmental violations received by ALLETE or its companies may reduce the AIP award that can be received by the responsible company’s plan participants.

In 2020, AIP performance key goals included establishing a framework for all ALLETE sustainability dimensions, and increasing transparency and clarity of our sustainability journey through sustainability reporting. The first such report was published in June of 2020, modeled on the Edison Electric Institute’s (EEI) ESG template. Future goals and metrics may include establishing more refined climate scenarios to measure the resiliency of our businesses, as recommended in the TCFD and CDSB, bolstering our process for evaluating climate-related risks and opportunities, and linking other sustainability goals to executive compensation.

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8See the EEI quantitative section in the back of this report.
**ALLETE’s CO₂ Equivalent Emissions**

As of 2019, Minnesota Power’s calculated greenhouse gas emissions from its owned and generated resources was approximately 6.5 million metric tons of CO₂e. This represents a 37% reduction from 2005 levels, with 2021 projections representing over a 50% reduction from 2005 levels. In its IRP submittal, Minnesota Power announced the plan to reduce carbon emissions by 80% from major generating sources by 2035, with a 100% carbon-free goal by 2050. Carbon emissions from vehicles and operational machinery such as back-up generators are minimal in comparison with the carbon emissions from thermal generating stations and are not included in the Scope 1 emission reporting at this time.

Superior Water, Light & Power has minimal Scope 1 emissions, with the majority of the associated emissions for its electric services coming from Scope 2 purchased power. The company purchases approximately 800,000 megawatt-hours of electrical energy from Minnesota Power, which includes power sold to their electric customers, with only about 0.2% (approximately 1,351 megawatt-hours) of that electrical energy used for water distribution. Using the 2019 carbon intensity of 1,392 lbs. of CO₂/megawatt-hour, Superior Water, Light & Power’s Scope 2 emission equals approximately 500,000 metric tons of CO₂e year. This number is already included in Minnesota Power’s Scope 1 emissions.

Emission sources from vehicles and operational machinery at Superior Water, Light & Power are minimal in comparison with the Scope 2 carbon emissions and are not included in the Scope 1 emission reporting at this time.

BNI Energy has approximately 350,000 metric tons of carbon emissions associated with their Scope 1 emissions.

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**Table: ALLETE’s CO₂ Equivalent Emissions**

<table>
<thead>
<tr>
<th>2019 Values, metric tons CO₂e</th>
<th>Minnesota Power</th>
<th>Superior Water, Light &amp; Power</th>
<th>BNI Energy</th>
<th>ALLETE Clean Energy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope 1</td>
<td>6,473,573</td>
<td>Not calculated</td>
<td>348,666</td>
<td>Not calculated</td>
</tr>
<tr>
<td>Scope 2</td>
<td>Purchased power included in Scope 1 emissions</td>
<td>503,665</td>
<td>Not calculated</td>
<td>Not calculated</td>
</tr>
<tr>
<td>Scope 3</td>
<td>Not calculated</td>
<td>Not calculated</td>
<td>Not calculated</td>
<td>Not calculated</td>
</tr>
</tbody>
</table>

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9. Thermal generation sources are based on emissions from Boswell, Laskin and Taconite Harbor, consistent with the methodology used in the EEI report. Additional CO₂e emissions do occur from Rapids Energy Center and Hibbard Renewable Energy Center, as well as from various other sources like vehicle emissions and back-up generators.

10. CO₂e is generally defined as CO₂ equivalent, where GHGs are converted and reported as an equivalent mass of carbon dioxide.

11. Includes purchased gasoline and diesel.

12. Already included for in Minnesota Power’s Scope 1 emissions.
ENVIRONMENTAL POLICY STATEMENT
AND ENVIRONMENTAL MANAGEMENT SYSTEM
ALLETE
Environmental Ethics Statement

Environmental stewardship is one of ALLETE’s core values and the people of ALLETE are committed to being responsible corporate citizens. We support the concepts of environmental stewardship and believe they are good for business. Consistent with this value, we will:

+ Protect the environment as we carry out our responsibilities.

+ Limit the environmental impacts of our activities.

+ Demonstrate and promote conservation of land, air, water and energy resources.

+ Meet environmental regulatory requirements and company commitments.

+ Stress efficiency, recycling and pollution prevention.

+ Advocate reasonable and practical environmental laws, regulations, policies and practices.

+ Strive to continually improve our environmental performance.

ALLETE will continually balance the environmental impact of our activities with our obligations to shareholders, customers, communities and future generations.
Environmental Management System (EMS)

As a core element of its environmental performance improvement strategy, ALLETE’s Environmental and Land Management department has implemented an Environmental Management System (EMS) to manage its environmental activities.

ALLETE’s EMS improves the consistency of environmental management activities by reducing our overall environmental impacts.

The EMS is designed to provide a solid foundation for performance of environmental and land management work at the company. Established work practices and policies are memorialized in procedures, guidance documents and policies, which are subject to frequent review and adjustment due to both planned and unplanned changes. The combination of a solid foundation and structured, disciplined adaptability create a culture of continuous improvement for ALLETE’s overall performance, even in times of frequent and substantial change.

**Documentation**

Procedures, forms, guidance documents and policies clearly outline how we perform critical activities, where we record data, and what our standards are for various requirements. Department leadership ensures document owners keep department records current and applicable. Simultaneously, a structured compliance document system was developed to store all documentation.

**Management of Change (MOC)**

A list of potential events that could disrupt normal business operations has been developed by department experts and used as a trigger to conduct an MOC. The MOC triggers includes changes in operations, regulations, staffing or outside intervention, and the list of triggers is updated as new events occur. After an MOC is triggered, staff uses a pre-built assessment questionnaire to ensure appropriate mitigating steps are taken to avoid unwanted impacts.

**Incidents**

In order to learn from past incidents and prevent future events, incidents are documented, ranked by severity and tracked to identify trends. Incidents that reach a certain threshold of risk or impact are subject to a formal incident review process to identify operational changes to reduce or prevent future occurrences.

**Communication**

All critical changes to the EMS, including new or modified procedures, policies, or forms; new management of change activities; new significant incidents or learning team reviews; and the results of incident investigations are all communicated via emails, phone conversations, or virtual or in-person meetings.
Energy efficiency is an integral part of the business strategy at Minnesota Power and Superior Water, Light & Power as well as ALLETE’s sustainability in action strategy.

The two utilities offer a wide range of products and services and work with their customers to help them understand, manage and reduce their energy use.
Minnesota programs

Minnesota Power is the only Minnesota utility to have exceeded the state of Minnesota’s energy conservation goal each year since the state implemented the savings target in 2010.

The company’s Conservation Improvement Program works with business and residential customers to find specific ways to reduce energy use.

Customers saved more than 67,669,200 kilowatt-hours in 2019

That’s enough energy to:
- power about 7,470 homes for a year
- reduce carbon emissions by 52,580 tons
- take 10,360 cars off the road for a year

Total energy saved in 2019 was 2.5% of retail energy sales, well above the state goal of 1.5%. Conservation Improvement Program expenditures were $8,280,773 for 2019.

Wisconsin programs

Superior Water, Light & Power partners with Focus on Energy to provide customers with information, resources and financial incentives to help manage energy use. This program is managed by the state of Wisconsin and Superior Water, Light & Power contributes 1.2% of its annual retail utility revenue (electricity and natural gas) to help fund it. The company contributed $955,729 in 2020. Program goals and initiatives are established on a statewide basis working with all participating utilities and publicly reported on the Focus on Energy website.

Electric vehicles/mine truck electrification

Minnesota Power is expanding its support for electric vehicles and helping to accelerate the shift to electric power in the transportation sector. The Minnesota Public Utilities Commission is reviewing the company’s proposed rebates for installing residential chargers and a rewards program for customers who own electric vehicles (EVs). Minnesota Power also is working with business owners and others to build an EV charging network in northeastern Minnesota, and has announced plans to switch a significant portion of its own vehicle fleet to electric in the next 10 years.

Superior Water, Light & Power plans to expand its support of transportation sector electrification in 2021.

Charging network

In 2020-2021 Minnesota Power is donating Level 2 electric vehicle charging stations to business customers at 21 sites in 19 communities. The company also has supported the construction of 10 public charging stations in its service territory. In 2021, Superior Water, Light & Power plans to donate a Level 2 electric vehicle charger to a business customer in Superior, Wisconsin.

Fleet transformation

Minnesota Power and Superior Water, Light & Power have set a goal of having 50 percent of its light-duty vehicles, such as pickups, be transitioned to electric by 2030 and 25 percent of its medium and heavy-duty vehicles, including line trucks, be transitioned to electric plug-in technology by 2030.

Mine truck electrification

Minnesota Power also is looking forward to working with customers on a potential mine truck electrification pilot. While policy-makers have focused on the electrification of transportation and buildings, electrification of industry is a key interest of Minnesota Power and its mining customers. The company is evaluating the potential for a pilot project that could include support for a site-specific analysis, replacement or retrofitting of a portion of an existing haul truck fleet, engineering and installation of the catenary system and substations, and service extension to the trolley line.
Minnesota Power has set a goal of transitioning 50% of its light-duty vehicles to electric and 25% of its medium- to heavy-duty vehicles to plug-in technology by 2030.
CYBER AND PHYSICAL SECURITY

ALLELTE regards grid reliability, security and resilience as the highest priority to support our customers, communities, employees and their families.

In order to keep pace with the ever-changing and emerging threats to our operations, ALLETE uses a team approach and technology as a force multiplier. Through cyber and physical security programs, along with emergency preparedness, our efforts greatly increase our situational awareness and readiness and are key components of operating the power grid in a reliable and safe manner.

ALLELTE formed a Cyber Security department in 2011 that focuses solely on cybersecurity and cyber regulatory compliance for ALLETE and its subsidiaries. This department continues to enhance its capabilities to mitigate vulnerabilities and defend against threats. The threats are constantly evolving and require continual vigilance to the changing threat landscape. The cybersecurity program uses a defense in depth strategy coupled with a risk-based approach using industry accepted standards and best practices as a guide to protect, defend and respond. Training personnel, hardening systems, and addressing single points of failure are undertaken to increase our preparedness and mitigate vulnerabilities.

The team has been recognized for its contributions to improving cybersecurity tools, open-source sharing of capabilities with other cybersecurity professionals, and using security orchestration automation and response tools to more effectively tie disparate systems together allowing effective response to detected events. ALLETE Cyber Security is a firm believer that sharing our cybersecurity preparedness with our peers helps improve the cybersecurity effectiveness of the energy industry and our cross-sector partners.

The ALLETE Security and Emergency Management (ASEM) department provides services across the ALLETE family of companies consistent with its strategic vision to “be the recognized ALLETE physical security and emergency management authority and establish industry-renowned programs to encompass the entire corporation.” The department utilizes a comprehensive physical security and emergency management framework composed of several different process cycles that fall within the core national-level emergency management planning framework shared by both public and private entities to provide grid reliability, security and resilience. Through a newer emergency and security operations center, ASEM services include 24/7 hour monitoring of specific access control systems, door alarms, fire alarms, camera viewing, and the initiation of emergency response for multiple corporate business units across seven states.

ALLELTE also has large and diverse information-sharing relationships and response partnerships including federal, state, regional, tribal, local and industrial entities that span the private and public sectors.

ALLELTE’s cyber and physical security programs are also subject to North American Electric Reliability Corporation (NERC) reliability standards. To provide broad oversight in the areas of Bulk Electric System reliability compliance, the NERC Compliance Steering Committee (NCSC) regularly reviews effectiveness of compliance program controls, recommends actions for continuous program improvements, and facilitates and ensures engagement of internal teams with industry partners and our regulators on matters such as incidences of non-compliance, compliance enforcement activities, and industry issues.
ALLETE is an energy company, and all of our business units have an unwavering commitment to a reliable supply of energy through all manner of disruptions.

While the widespread power outages in Texas in February 2021 underscored the importance of a resilient and reliable energy supply, extreme cold and other weather events are part of our daily lives in most of the regions in which ALLETE operates. We are committed to a resilient grid, which requires different sources of energy when primary sources disappear. Our considerable investment in renewable energy is reinforced by our baseload power sources, while our energy delivery system continues to improve grid resiliency to address a variety of weather, generation mix and other challenges.

This balanced approach helps protect our customers from both emergency interruptions and the shock of price spikes. We will continue to make investments to prevent outages, such as replacing overhead wiring with underground wiring in many areas, maintaining electric service stability through investments in our transmission system, and investing in technology to restore customers more rapidly through both automated switching and faster crew response to system problems.

Grid Resiliency and Energy Delivery

Reliability and delivered electricity information reporting via SASB standards is summarized below.

<table>
<thead>
<tr>
<th>Accounting Metric</th>
<th>Minnesota Power 2019 Data</th>
<th>SWL&amp;P 2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Average Interruption Duration Index (SAIDI)</td>
<td>164.54 min.</td>
<td>39.6 min.</td>
</tr>
<tr>
<td>System Average Interruption Frequency Index (SAIFI)</td>
<td>1.53 min.</td>
<td>0.41 min.</td>
</tr>
<tr>
<td>Customer Average Interruption Duration Index (CAIDI)</td>
<td>107.45 min.</td>
<td>96.83 min.</td>
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</table>

*Inclusive of major event days

Total electricity delivered to:

<table>
<thead>
<tr>
<th>Category</th>
<th>MN 2019 MWh</th>
<th>SWL&amp;P 2019 MWh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>1,008,187 MWh</td>
<td>88,032 MWh</td>
</tr>
<tr>
<td>Commercial</td>
<td>1,202,403 MWh</td>
<td>108,171 MWh</td>
</tr>
<tr>
<td>Industrial</td>
<td>6,709,265 MWh</td>
<td>585,355 MWh</td>
</tr>
<tr>
<td>Wholesale</td>
<td>4,652,952 MWh</td>
<td>0 MWh</td>
</tr>
</tbody>
</table>

The Great Northern Transmission Line
WORKFORCE CULTURE AND ENGAGEMENT
ALLETE differentiates itself on people, culture, leadership and values, and the strength and resilience of these have been tested and proven in 2020. With all of the opportunities and challenges, these differentiators have never been more critical to our future success.

Diversity, Equity & Inclusion     Employee & Contractor Safety     Community Giving & Engagement     Supply Chain     Economic Development
Diversity, Equity and Inclusion

For more than a century, ALLETE has been successful because of our ability to attract and retain high-quality people who demonstrate our shared values. We appreciate and value diverse backgrounds, ideas and opinions—and we will continue to encourage and embrace diversity, equity and inclusion.

ALLETE is committed to be part of the solution to create a more equitable society for all people.¹³

Gender Diversity

42.9% of ALLETE executive officers are female. Minnesota Census of Women in Corporate Leadership named ALLETE a 2020 Women on Boards winning company for its commitment to board gender diversity.

Diversity, Equity and Inclusion framework

In 2020, ALLETE’s president and CEO committed to advancing DE&I efforts with other EEI companies, and established a multidimensional framework of companywide focus areas. We also bolstered our diversity awareness and inclusion efforts through our Respect in the Workplace initiative.

Veteran Outreach and Support

The state of Minnesota designated Minnesota Power and ALLETE Clean Energy as Yellow Ribbon Companies for military efforts, 2016 and 2019 respectively. In 2020, we raised $25,000 for veterans organizations, enhanced deployment support for employees and family members, and strengthened community outreach.

---

**Total ALLETE Employees**

As of December 31, 2020 (full-time, part-time, temporary)

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>23.2%</td>
<td>23.4%</td>
</tr>
<tr>
<td>Minority</td>
<td>2.2%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Veterans</td>
<td>6.1%</td>
<td>5.7%</td>
</tr>
</tbody>
</table>

¹³See ALLETE’s Human Rights Statement
2020 Turnover
The average employee turnover in 2020 was 5.4% for employees. Approximately 45.3% of employee turnover involved retirements, 48.4% resulted from resignations and the remaining 6.3% includes turnover for other reasons, such as unsatisfactory performance.

Development and Engagement
ALLETE is committed to creating a learning environment for employees to provide them opportunities to develop their strengths, broaden their experiences, and take on new roles and responsibilities within the company. Employees have the opportunity to attend internal educational offerings; gain experiences through on-the-job learning and apprenticeships; advance education through our tuition reimbursement program; gain professional certification and licensure; and engage in external professional networks, nonprofit organizations and our communities. Together, our employees strengthen our organization through a culture that sustains our commitment to core values with solid leadership that inspires excellence and unity.

Health and Wellness
The success of our business is fundamentally connected to the health and well-being of our employees. We provide comprehensive health and wellness benefits and resources that support healthy, productive and fully engaged members – both on and off the job. We are responding to the COVID-19 pandemic by taking steps to mitigate the potential risks posed by its transmission and have implemented company-wide business continuity plans and precautionary measures on behalf of employees and the public.

Collective Bargaining and Labor Relations
ALLETE is proud of its longstanding relationship with the International Brotherhood of Electrical Workers (IBEW). As part of our shared interests, we are committed to constructive dialogue and good-faith negotiations with legally recognized unions. As of the end of 2020, 45% of ALLETE employees were covered by collective bargaining agreements. We look for opportunities to work collaboratively with IBEW to advance joint goals, including our Zero Injury safety culture and employee skill development.

Future Workforce
ALLETE recognizes the rapid rate of change in the energy industry, which guides how we prepare our current and future workforce. We are focusing initiatives on programs to expand the diversity of new hires and updating our on-the-job trainings—including apprenticeships, and scholarships aimed at bridging opportunity gaps—as we recognize the importance of a strong talent pipeline.
Employee and Contractor Safety

At ALLETE we choose to work safely for our families, each other and the public. We commit to be injury-free through continuous learning and improvement. Our safety value is based on the belief and commitment that everyone can go home unhurt each day.

Safety strategy

Our safety strategy is built on the three planks of culture, system and awareness:

+ **Culture**
  We strive for employee engagement and participation through the use of safety improvement teams, family safety days, safety committees, safety conversations, and a culture that focuses on learning and improving rather than blaming and punishing.

+ **Systems**
  We commit to safety compliance and strive to go beyond compliance to implement robust safety and health programs that protect employees, contractors, visitors and the public.

+ **Awareness**
  We continually seek out industry best practices by participating in industry groups and organizations as well as regular benchmarking. We also learn from our own experiences. We continually look to the latest safety research for emerging trends and improvements in the safety field.

Programs and Management

The ALLETE safety journey is one of "wanting to" be safe rather than "having to" be safe. Employee engagement and participation are critical elements in the promotion and maintenance of safety. ALLETE strives to provide a workplace where safety engagement and participation are part of the daily routine.

The ALLETE Safety Strategy Group consists of managers, employees, and IBEW representation who meet monthly to develop and assess safety strategy, provide direction, and review safety progress and initiatives.

Safety Improvement Teams (SIT) meet regularly at all sites. These teams identify hazards, promote safety, and interact with the Safety Strategy Group regularly. Each SIT develops yearly safety plans for their areas and works to achieve initiatives that both align with broader safety goals as well as meet the needs of their individual company or site.
Safety Focus Areas

+ **Serious Injury and Fatality (SIF) preventions**
  SIF prevention is an emerging field in safety. ALLETE has worked with the Edison Electric Institute, and leading academic researchers like Dr. Matthew Hallowell of the University of Colorado on the identification of SIF precursors. This research has been built into our safety conversations and looks for the presence of hazards known to be associated with serious injuries and fatalities.

+ **ALLETE Moves by Vimocity**
  ALLETE has embarked on a new program to address soft tissue and musculoskeletal injuries by partnering with Vimocity to help employees improve mobility and reduce pain. The program provides an online platform based on the three areas of daily muscle and joint care, body positioning and ergonomics.

+ **Human performance improvement and operational learning**
  ALLETE uses practices and principles developed by the Department of Energy and others recognizing that human beings are fallible and will make errors and that human error is predictable, manageable and preventable. Through the use of human performance tools, a culture of learning, the use of learning teams and a focus on systemic improvements, we seek to build resilient systems that are not negatively affected by inevitable human error.

+ **Data analytics**
  ALLETE tracks both leading and lagging metrics and uses Microsoft Power BI to display and analyze injury trends, safety participation and other data to make better decisions on safety practices.

+ **Contractor Safety Management**
  A cross-functional team works together to ensure that contractors receive and understand our safety expectations. Contractors go through training when they arrive onsite to ensure that they are aware of policies and expectations as well as local hazards.

### Safety and Health Programs and Management

#### Leadership
+ Safety Strategy Group
+ Local Safety Improvement Teams

#### Management
+ Workplace accident and injury prevention program
+ Safety strategy culture, systems, awareness
+ On-site safety hazard audits
+ Industrial hygiene program

#### Employees
+ Annual safety training
+ Family Safety Days
+ ALLETE Moves—soft tissue injury prevention
+ Regional safety meetings

#### Preventative
+ Safety conversations
+ Human performance improvement tools
+ Pre-job brief process
+ Leading metrics
+ Incident learning and Learning Teams
+ Stop work authority

#### Contractors
+ Safety orientation
+ Safety onboarding

#### Public
+ Public safety information available on ALLETE websites and through targeted messaging

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1. The number of work-related injuries or illnesses requiring more than first-aid treatment.
2. The number of cases of work-related injury or illness resulting in lost workdays.
3. The number of days away from work as a result of work-related injury or illness.
4. The number of cases of work-related injuries or illnesses with days away from work, restricted duty, or transfers.

---

**ALLETE Safety Performance (per 100 employees)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Recordable Incident Rate</th>
<th>Lost Workday Case Rate</th>
<th>Severity Rate</th>
<th>Transfer, Restricted, and Days Away Incident Rate</th>
<th>Fatalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>2.5</td>
<td>0.8</td>
<td>13</td>
<td>25</td>
<td>0.2</td>
</tr>
<tr>
<td>2017</td>
<td>7.7</td>
<td>0.8</td>
<td>14</td>
<td>24</td>
<td>1.0</td>
</tr>
<tr>
<td>2018</td>
<td>13.6</td>
<td>0.7</td>
<td>1.4</td>
<td>6.5</td>
<td>0.2</td>
</tr>
<tr>
<td>2019</td>
<td>17.4</td>
<td>1.2</td>
<td>2.6</td>
<td>26</td>
<td>0.4</td>
</tr>
<tr>
<td>2020</td>
<td>23.6</td>
<td>1.8</td>
<td>3.2</td>
<td>3.2</td>
<td>1.8</td>
</tr>
</tbody>
</table>
Community Giving and Engagement

ALLETE and its companies have a long history of supporting the communities where their employees live and work. Typically, these efforts take place through a combination of corporate donations, grants from the Minnesota Power Foundation, and employee giving and volunteerism.

United Way
Even with volunteer activities and fundraisers curtailed or moved strictly online in 2020 because of the COVID-19 pandemic, the employees and retirees of ALLETE, Minnesota Power, Superior Water, Light & Power, ALLETE Clean Energy, and BNI Energy opened their hearts and wallets to help others. They gave $238,280 to 15 United Ways in six states during the United Way fall payroll pledge campaign.

In addition to the individual pledges, the Minnesota Power Foundation contributed $200,000 and donations from individual business units totaled $25,000. The Icy Dip Challenge, in which representatives of each company jumped into a cold lake after earning pledges from employees, raised $9,585 to bring ALLETE’s total United Way contribution to $472,865.

Other donations
Overall, ALLETE and its family of businesses and the Minnesota Power Foundation contributed $853,588 in the past year to support vibrant and sustainable communities, close opportunity gaps, and help people of all ages live with purpose and passion.

In addition to its $200,000 United Way donation, the Minnesota Power Foundation contributed $319,695 in grants to programs and nonprofits focused in the areas of education, community enrichment, health and human services, and arts and culture.

Total contributed by ALLETE and its family of businesses and the Minnesota Power Foundation in the past year.

$853,588

$519,695
Foundation Total

$333,893
ALLETE Total

+ $103,034
Minnesota Power

+ $128,904
ALLETE Clean Energy

+ $39,360
SWL&P

+ $62,595
BNI Energy
The Pandemic
COVID-19 relief figured prominently in many of ALLETE's donations in 2020. For example:

+ The Minnesota Power Foundation donated $113,050 to support four special COVID-19 response funds and a number of nonprofits on the front lines of the pandemic in northeastern Minnesota.

+ The corporate-wide Feeding Our Communities campaign raised more than $28,000 to fight hunger and support five food banks with outreach in four states.

+ ALLETE Clean Energy donated $50,000 in partnership with GE Renewable Energy and Wanzak to the Mill Creek School District in Mill Creek, Oklahoma. The contribution was used for expenses related to remote learning due to the pandemic.

Volunteering
Employees at ALLETE managed to find ways to remain engaged in their communities while following pandemic safety protocols. For example, employees organized an at-home “sewing bee” and donated more than 1,000 cloth masks to hospitals and nonprofit organizations.

Each year, ALLETE recognizes outstanding volunteers among its employees with the Don Shippar Community Leadership Award. Recipients have included first responders, a woman dedicated to bringing medical supplies and clean water to people in her native Cameroon, and a volunteer who organized a community festival to support a cancer crisis fund.

Learn more about the community giving efforts of ALLETE and the Minnesota Power Foundation at positivelypowerful.org
Supply Chain

ALLETE values its relationships with suppliers. We strive to ensure that every business decision is guided by our mission, vision and values and our commitment to operate with high ethical standards. We expect our suppliers to share this commitment. This includes promoting sustainability through environmental stewardship, upholding human and workplace rights and ensuring safety culture and reporting.

+ Conduct and ethics

We are committed to ethical business conduct and compliance with applicable laws, regulations and policies, and we expect our suppliers to share this commitment and adhere to ALLETE’s Code of Business Conduct. We require our suppliers to engage in fair dealing by not taking unfair advantage of anyone through manipulation, concealment, abuse of privileged information, misrepresentation of material facts or any other unfair dealing practice.

+ Safety requirements

The safety and security of employees, contractors and visitors is of the utmost importance to ALLETE. Suppliers will be held responsible for the actions of their employees and any sub-contractor employees. All applicable rules, laws, regulations and ALLETE policies shall be observed. Suppliers are required to complete contractor safety orientation and conduct work in a safe manner, stop work immediately to correct unsafe work conditions or unsafe work practices, take corrective action and proceed in a safe manner.

+ Supplier diversity

ALLETE is working to expand and partner with diverse suppliers including minority-owned, women-owned, veteran-owned, LGBT-owned, small economically disadvantaged businesses, HUBZone businesses, and disability-owned businesses so that our suppliers reflect the diversity of the communities we serve. ALLETE provides equal access for all qualified businesses, including both direct Tier 1 diverse suppliers and also Tier 2 suppliers that report on diverse spend.

+ Digital supply chain

ALLETE utilizes paperless electronic document processing in almost all areas of the supply chain including new supplier forms, request for proposals questions, purchase orders and payments. Going digital has many benefits including improving operational efficiency, providing flexible virtual access, streamlining processes, eliminating costs and reducing environmental impacts.

+ Procurement best practices

Suppliers are required to participate in bid processes and procurement practices in accordance with best practices. Best practices include communicating only with named ALLETE representatives during contract negotiations or bid evaluation and refraining from attempts to influence ALLETE employees or senior managers in order to obtain work.
Economic Development

ALLETE is an advocate for the communities we serve, frequently acting as a catalyst in regional economic development initiatives and providing long-standing support for local, regional and state-level economic development partners.

We accomplish this through employee engagement, financial support, and facilitating program assistance to the appropriate entities. Our employees contribute their expertise by serving on boards, advisory groups, and community and economic development organizations.

This economic development capacity also helped the communities we serve weather the economic storm caused by the global pandemic. For example, Minnesota Power provided financial contributions to COVID-19 relief programs for small businesses and promoted rapid response measures from community and regional programs offering grants, forgivable loans and technical assistance to business customers in the service area.

ALLETE also focuses on a thoughtful and just transition for host communities. This includes transition plans for our own businesses, as well as those of our large customers. As one example, Minnesota Power is currently actively engaged in efforts to address major industry closures, as well as supporting the attraction of new business investments in the regions in which we operate.
Our commitment to sustainability is led and supported through strong board leadership, intentional focus by the executive management team, and sound governance practices.

The board oversees ALLETE’s strategy, including sustainability-related risks and opportunities, actively ensures that the company is managed in a way that builds long-term value for shareholders, and assures ALLETE’s vitality for its customers and employees, as well as other stakeholders.

ALLETE’s Board of Directors
Our board consists of directors who have demonstrated ethical conduct and have a diversity of skills, backgrounds, age, tenure and gender. All directors, except our executive chair and our CEO, are independent. The corporate governance and nominating committee regularly reviews the skills, expertise and attributes that are important for effective governance of the company and identifies priorities for recommending candidates to the board. The slate of director nominations for the 2021 annual meeting includes six directors who are women, which constitutes a majority of the board. ALLETE is committed to actively seeking candidates who will enhance the board’s racial and ethnic diversity.

**Corporate Governance and Nominating Committee**
- Oversees ALLETE’s sustainability reporting.
- Reviews ESG issues quarterly.
- Consists solely of independent directors.

**Executive Compensation Committee**
- Ensures compensation practices align with company goals to attract and retain talent.
- Links sustainability to executive compensation.
- Consists solely of independent directors.

**Audit Committee**
- Ensures sustainability-related SEC financial disclosures receive appropriate levels of review and assurance.
- Consists solely of independent directors.

**Our board of directors as of December 31, 2020**
- Nine out of 11 directors are independent.
- Lead director is independent with clearly defined responsibilities.
- Executive sessions of independent directors held at each regularly scheduled meeting.
- Annual board and committee self-assessments.
- Share ownership guidelines encourage directors to act as owners and focus on long-term, sustained performance when making business decisions.
2019 SUSTAINABILITY ACCOUNTING STANDARDS BOARD (SASB)
Minnesota Power
Electric Utility and Power Generators SASB Standard

**Greenhouse Gas Emissions & Energy Resource Planning**

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-EU-110a.1</td>
<td>(1) Gross global Scope 1 emissions</td>
<td>6,473,573 metric tons CO2e</td>
<td>Includes only direct GHG emissions of CO2e from owned and purchased generation of electric power used to serve customers. Excludes emissions from sales. Omits GHG emissions from minor sources such as mobile sources and offices which are estimated to be negligible (&lt;0.5% of total)</td>
</tr>
<tr>
<td>IF-EU-110a.2</td>
<td>(2) Percentage covered under emissions-limiting regulations, and</td>
<td>0%</td>
<td>State RPS goals exist, but no federal or state regulations limiting CO2e are currently in place</td>
</tr>
<tr>
<td>IF-EU-110a.3</td>
<td>(3) Percentage covered under emissions-reporting regulations</td>
<td>~100%</td>
<td>Virtually all reported emission sources are subject to state and federal reporting requirements such as EPA’s GHG Rules (Title 40, Chapter I, Subchapter C, Part 98 of the Code of Federal Regulation)</td>
</tr>
<tr>
<td>IF-EU-140a.1</td>
<td>Power-delivery related GHG emissions</td>
<td>6,473,573 metric tons CO2e</td>
<td>Please see IF-EU-110a.1</td>
</tr>
<tr>
<td>IF-EU-140a.2</td>
<td>Short/long term plans to manage emissions</td>
<td>See MP’s Corporate Sustainability Report (CSR) for further detail on MP’s GHG reduction plans, including the recent “Vision for 100 Percent Carbon-Free Energy by 2050” announcement</td>
<td></td>
</tr>
<tr>
<td>IF-EU-140a.3</td>
<td>Number of incidents of non-compliance associated with water quantity and/or quality permits, standards, and regulations</td>
<td>0 incidents</td>
<td></td>
</tr>
</tbody>
</table>

**Water Management**

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
<th>Description of water management risks and discussion of strategies and practices to mitigate those risks:</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-EU-140a.1</td>
<td>(1) Total water withdrawn</td>
<td>90,839 thousand cubic meters (m³)</td>
<td>Minnesota Power environmental values include promoting water conservation and recycling, as well as full compliance with the numerous existing state and federal requirements regulating water withdrawal, consumption, and discharge. These regulations include both quantitative and qualitative restrictions on the amount, source, and constituents of the water used for operations. Water use information and water quality data is actively collected and reported in adherence with operating permits. Water management risks include emerging or increased limitations on both the quality and quantity of local water resources.</td>
</tr>
<tr>
<td>IF-EU-140a.2</td>
<td>(2) Total water consumed</td>
<td>15,713 thousand cubic meters (m³)</td>
<td>As a result of this water management approach, MP has reduced water usage by 90% from 2005 levels, with additional water use reduction projects planned in the future. MP’s water withdrawal rates and water discharge rates will continue to decrease significantly as we convert to dry handling and storage of coal combustion residuals, install thermal evaporation unit at Boswell, and reduce or eliminate cooling water use at our Arrowhead and Center high-voltage direct current conversion facilities. As we reduce overall water usage, our water quality for discharges are designed to continue to meet or exceed state and national water quality standards.</td>
</tr>
</tbody>
</table>

**Air Quality**

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
<th>Description of air quality:</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-EU-120a.1</td>
<td>Air emissions of the following*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NOx</td>
<td>2570</td>
<td>Percentage within or near urbanized areas</td>
</tr>
<tr>
<td></td>
<td>SOx (SO₂)</td>
<td>626</td>
<td>16%</td>
</tr>
<tr>
<td></td>
<td>PM10</td>
<td>231</td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>Lead</td>
<td>0.30</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>Mercury</td>
<td>0.01</td>
<td>24%</td>
</tr>
</tbody>
</table>

*Data includes reported emissions sources such as electrical power boilers, emergency generators, paint booths, & material handling. Emissions from mobile sources, office buildings, etc. are not reported.
## Minnesota Power

*Electric Utility and Power Generators SASB Standard*

### Coal Ash Management

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-EU-150a.1</td>
<td>(1) Amount of coal combustion residuals (CCR) generated</td>
<td>195,986 metric tons</td>
</tr>
<tr>
<td></td>
<td>(2) Percentage recycled</td>
<td>19%</td>
</tr>
<tr>
<td>IF-EU-150a.2</td>
<td>(1) Total number of CCR impoundments,</td>
<td>10 *</td>
</tr>
<tr>
<td></td>
<td>(2) broken down by hazard potential classification and structural integrity assessment</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comparison of CCR Impoundment</th>
<th>Less than Low Hazard Potential</th>
<th>Low Hazard Potential</th>
<th>Significant Hazard Potential</th>
<th>High Hazard Potential</th>
<th>Incised</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfactory</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fair</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Poor</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Unsatisfactory</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Not Applicable</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

*per SASB, the total number (10) includes all owned/operated active, inactive, and closed impoundments

### Energy Affordability

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-EU-240a.1</td>
<td>Average retail electric rate for:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1) residential customers,</td>
<td>11.08 cents / KWh</td>
</tr>
<tr>
<td></td>
<td>(2) commercial customers, and</td>
<td>10.17 cents / KWh</td>
</tr>
<tr>
<td></td>
<td>(3) industrial customers</td>
<td>6.53 cents / KWh</td>
</tr>
<tr>
<td>IF-EU-240a.2</td>
<td>Typical monthly electric bill for residential customers for:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1) 500 kWh and,</td>
<td>$51.61 / month</td>
</tr>
<tr>
<td></td>
<td>(2) 1,000 kWh</td>
<td>$108.47 / month</td>
</tr>
<tr>
<td>IF-EU-240a.3</td>
<td>Number of residential customer electric disconnections for non-payment, and</td>
<td>2,138</td>
</tr>
<tr>
<td></td>
<td>percentage reconnected within 30 days</td>
<td>81%</td>
</tr>
</tbody>
</table>

**Discussion of how policies, programs, and regulations impact the number and duration of residential customer disconnections:**

Minnesota Power believes it is important to work with customers to avoid disconnection of service and, in the event that disconnection does occur, to work with customers on timely reconnection. Minnesota Power follows the disconnection rules and processes as outlined in Minnesota Rules and Statutes. Procedures are described in the Electric Service Regulations of Minnesota Power. Due to the current COVID-19 pandemic, Minnesota Power has certain customer protections in place. This includes a stay on residential and small business (general service) disconnections, waiving late payment charges, and no reconnection fees.

**Discussion of impact of external factors on customer affordability of electricity including economic conditions of the service territory:**

As energy affordability is a shared priority between Minnesota Power, its customers, and other stakeholders, the Company has a number of programs and services in place to manage the affordability of electric service for its customers. The Company works closely with area fuel assistance and weatherization agencies, landlords, and housing authorities, low-income advocacy groups, fellow energy providers, and local community agencies and leaders to collaborate on service offerings and outreach. In fact, there are numerous programs in place today to help customers save energy, have flexible payment options, and/or receive energy assistance. These programs and services often provide for cross-program referrals and include:

- **Customer Affordability of Residential Electricity (“CARE”) Discount Program:**
  Minnesota Power has offered its CARE Program to its residential customers since November 1, 2011. Under CARE, those who qualify under the federally-funded Low Income Home Energy Assistance Program (“LIHEAP”), as determined by application through Energy Assistance Program Service Providers, are eligible. Minnesota Power also recently received approval of its proposed program modifications for CARE, including a nearly doubling of the annual CARE budget from nearly $1M to $1.75M. These consensus-driven program modifications were developed collaboratively through a robust stakeholder engagement process and are intended to provide additional relief to low income customers in northern Minnesota. The modifications use a combination of a low barrier, automated discount through the flat discount component, as well as a targeted energy burden discount that would be more meaningful for higher usage low income customers. This targeted discount is on a first-come, first-served basis. Program changes went into effect January 1, 2020.

- **Energy Efficiency Programs:**
  Provide energy efficiency resources to customers, including on-site energy analysis and direct installation of energy efficient technologies. Low cost/no cost efficiency programs are available to income-eligible customers through the Energy Partners conservation program offering delivered in collaboration through fuel and weatherization assistance agencies.

- **Payment Plans and Arrangements:**
  Work with customers to identify mutually-agreeable payment terms for keeping accounts current or catching up on past due balances. Special provisions are available for military service personnel as well as those with medically necessarily equipment.

- **Budget Billing:**
  Customers can spread a year’s electricity bills evenly across twelve months to simplify monthly payments and budgeting and smooth out higher-than-average bills that may be experienced in colder-weather months.

- **Energy Assistance:**
  Connecting customers with fuel or heating assistance resources, including the opportunity for customers to support the Salvation Army HeatShare program through one-time or monthly contributions when paying their electric bill. Minnesota Power also contributes to the Salvation Army HeatShare program through the Minnesota Power Foundation.
Minnesota Power
Electric Utility and Power Generators SASB Standard

- **Community Involvement**: Employees actively engage in communities, volunteering time and talent, and contributing to agencies such as United Way.

In addition to a multitude of program services, some of the most meaningful and impactful ways to ensure affordability are to support a thriving, diverse regional economy with competitive rates for businesses, continued economic development efforts, community investment through employee volunteerism and giving, and ongoing collaboration with community leaders and stakeholders to identify shared solutions that meet the needs of communities and customers.

Minnesota Power’s Electric Rates remain below the U.S. Average, and according to the Bureau of Economic Analysis, the Gross Domestic Product of the Duluth Metropolitan Statistical Area has grown at an average pace of about 6.6 percent in the years following the 2015 regional recession. Bureau of Labor Statistics data show the unemployment rate lagged this regional recession, by remaining relatively low (4.9 percent) in 2015 and increasing to about 5.6 percent in 2016. As of November 2019 (the latest month with available data), the unemployment rate was about 3 percent.

### Workforce Health & Safety

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-EU-320a.1</td>
<td>(1) Total recordable incident rate (TRIR),</td>
<td>1.9</td>
</tr>
<tr>
<td></td>
<td>(2) fatality rate, and</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>(3) near miss frequency rate (NMFR)</td>
<td>Not Reported</td>
</tr>
</tbody>
</table>

### End-Use Efficiency & Demand

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-EU-420a.1</td>
<td>Percentage of electric utility revenues that (1) are decoupled and (2) contain a lost revenue adjustment mechanism (LRAM)</td>
<td>0</td>
<td>MP has not yet been required to have a decoupling program, and currently has no decoupling mechanism in place</td>
</tr>
<tr>
<td></td>
<td>Percentage of electric load served by smart grid technology* (meters)</td>
<td>61%</td>
<td>Represents the percent of total electric customers with smart meters at year-end. MP is currently targeting 100% smart meter deployment by the end of 2023.</td>
</tr>
</tbody>
</table>

**Discussion of opportunities and challenges associated with the development and operations of a smart grid:**

Minnesota Power has a continuing commitment to delivering safe, reliable, and affordable energy across a smarter grid able to adjust to the transitioning baseload fleet, respond to renewable energy production, and provide greater resiliency through increased situational awareness and capability. To this end, Minnesota Power works with customers to deploy smart grid technology such as Advanced Metering Infrastructure (AMI) and Automated Meter Reading (AMR). At the end of 2019, 61 percent of customers had smart meters deployed, and the current company target is full deployment by the end of 2023, excepting customers who self-select to opt-out of the program.

Minnesota Power also operates a variety of “smart grid” technologies at the distribution level, including line sensors and other automated intelligence gathering devices. Please see Minnesota Power’s February 1, 2021 Integrated Resource Plan, Appendix G: Distribution Planning Activities for further information about MP’s efforts to improve grid technology, including a discussion of challenges and opportunities. For instance, one of the known challenges of grid transformation is to identify and access flexible customer loads to help optimize the integration of variable renewable energy production.

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-EU-420a.3</td>
<td>Customer electricity savings from efficiency measures, by market</td>
<td>67,669 MWh</td>
<td>Represents total savings achieved at the busbar through Conservation Improvement Programs (CIP).</td>
</tr>
</tbody>
</table>

**Discussion of customer efficiency regulations relevant to operational markets:**

Energy conservation regulations and related reporting/compliance activities are outlined in Minnesota Power’s 2019 Conservation Improvement Program (CIP) Consolidated Filing dated May 1, 2020. Relevant regulations include, but are not limited to: Minn. Stat. §§ 216B.2401, 216B.241, 216B.2411 and 216C.412; and Minn. Rule 7690.0550.

2019 was the tenth consecutive year in which Minnesota Power met or exceeded Minnesota’s 1.5% energy savings goal established in Minn. Stat. § 216B.241. Minnesota Power achieved energy savings of 2.5% of retail energy sales. The Company also achieved energy savings totaling 67,669,222 kWh, which is 118%of the approved energy-savings goal for the year. The Company also achieved demand savings of 8,338 kW, which is 92% of the approved demand-savings goal.
Minnesota Power
Electric Utility and Power Generators SASB Standard

**Nuclear Safety & Emergency Management**

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-EU-540a.1</td>
<td>Total number of nuclear power units</td>
<td>0</td>
<td>Minnesota Power does not own or operate any nuclear power units</td>
</tr>
<tr>
<td>IF-EU-540a.2</td>
<td>Description of efforts to manage nuclear safety and emergency preparedness</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

**Grid Resiliency**

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-EU-550a.1</td>
<td>Number of incidents of non-compliance with physical and/or cybersecurity standards or regulations</td>
<td>Confidential*</td>
<td></td>
</tr>
<tr>
<td>IF-EU-550a.2</td>
<td>(1) System Average Interruption Duration Index (SAIDI),</td>
<td>164.54 minutes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2) System Average Interruption Frequency Index (SAIFI),</td>
<td>1.53</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(3) Customer Average Interruption Duration Index (CAIDI)</td>
<td>107.45 minutes</td>
<td></td>
</tr>
</tbody>
</table>

*Further detail about MP’s cyber and physical security efforts may be found within the CSR

**Activity Metrics Section**

<table>
<thead>
<tr>
<th>Activity Metrics</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-EU-000.A Number of customers served:</td>
<td>(1) residential,</td>
<td>120,649</td>
</tr>
<tr>
<td></td>
<td>(2) commercial,</td>
<td>23,047</td>
</tr>
<tr>
<td></td>
<td>(3) industrial</td>
<td>379</td>
</tr>
<tr>
<td>IF-EU-000.B Total electricity delivered to:</td>
<td>(1) residential,</td>
<td>1,008,187 MWh</td>
</tr>
<tr>
<td></td>
<td>(2) commercial,</td>
<td>1,202,403 MWh</td>
</tr>
<tr>
<td></td>
<td>(3) industrial and</td>
<td>6,709,265 MWh</td>
</tr>
<tr>
<td></td>
<td>(2) wholesale customers*</td>
<td>4,652,952 MWh</td>
</tr>
<tr>
<td>IF-EU-000.C Length of transmission and distribution lines</td>
<td></td>
<td>14,500.35 km</td>
</tr>
<tr>
<td>IF-EU-000.D Total electricity generated,</td>
<td>[MP owned/operated only]</td>
<td>6,477,004 MWh</td>
</tr>
<tr>
<td></td>
<td>Percentage by major energy source,</td>
<td>Proportions scaled to reflect electricity generation from MP owned/operated assets only – no purchases</td>
</tr>
<tr>
<td></td>
<td></td>
<td>64.2% coal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>24.9% wind</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10.0% hydro</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.2% natural gas</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.4% biomass</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.2% solar</td>
</tr>
<tr>
<td>IF-EU-000.E Total wholesale electricity purchased*</td>
<td>[MP owned/operated only]</td>
<td>7,581,781 MWh</td>
</tr>
</tbody>
</table>

*The wholesale customers and wholesale purchases categories include short-term market purchases in the MISO market and from other power suppliers

**All MP-generated electricity occurs in the traditionally rate regulated electricity markets of the State of North Dakota and the State of Minnesota
## ALLETE Clean Energy

**Wind Technology and Project Developers SASB Standard**

### Workforce Health & Safety

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>RR-WT-320a.1</td>
<td>(1) Total recordable incident rate (TRIR) and (2) fatality rate for (a) direct employees and (b) contract employees</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Personnel Type</strong></td>
<td><strong>TRIR</strong></td>
</tr>
<tr>
<td></td>
<td>Direct employees</td>
<td>6.9</td>
</tr>
<tr>
<td></td>
<td>Contract employees</td>
<td></td>
</tr>
</tbody>
</table>

### Ecological Impacts of Project Development

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>RR-WT-410a.1</td>
<td>Average A-weighted sound power level of wind turbines, by wind turbine class</td>
<td>Not Reported</td>
</tr>
<tr>
<td>RR-WT-410a.2</td>
<td>Backlog cancellations associated with community or ecological impacts</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>RR-WT-410a.3</td>
<td>Description of efforts to address ecological and community impacts of wind energy production through turbine design:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ALLETE Clean Energy operates and develops new projects under a wide variety of national, state, county and local requirements. At all times we meet or exceed the requirements where a site is or to be located. Furthermore, we are committed to stakeholder outreach to understand the views and expectations of a variety of parties, including landowners, regulators, and indigenous communities, as well as applicable agencies.</td>
<td></td>
</tr>
</tbody>
</table>

### Materials Efficiency

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>RR-WT-440b.1</td>
<td>Top five materials consumed, by weight</td>
<td>Not Reported</td>
</tr>
<tr>
<td>RR-WT-440b.2</td>
<td>Average top head mass per turbine capacity, by wind turbine class</td>
<td>Not Reported</td>
</tr>
<tr>
<td>RR-WT-440b.3</td>
<td>Description of approach to optimize materials efficiency of wind turbine design:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ALLETE Clean Energy does not currently have an approach to optimize material efficiency of wind turbine design, instead it relies on the supply chain to effectively manage this risk.</td>
<td></td>
</tr>
</tbody>
</table>

### Activity Metrics Section

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>RR-WT-000.A</td>
<td>Number of delivered wind turbines, by wind turbine class</td>
<td>43</td>
</tr>
<tr>
<td>RR-WT-000.B</td>
<td>Aggregate capacity of delivered wind turbines, by wind turbine class</td>
<td>Not Reported</td>
</tr>
<tr>
<td>RR-WT-000.C</td>
<td>Amount of turbine backlog</td>
<td>63</td>
</tr>
<tr>
<td>RR-WT-000.D</td>
<td>Aggregate capacity of turbine backlog</td>
<td>Not Reported</td>
</tr>
</tbody>
</table>

### Materials Sourcing

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>RR-WT-440a.1</td>
<td>Description of the management of risks associated with the use of critical materials:</td>
</tr>
<tr>
<td></td>
<td>ALLETE Clean Energy does not have a critical material sourcing policy and relies on our equipment suppliers to manage this portion of the supply chain.</td>
</tr>
</tbody>
</table>
# ALLETE Clean Energy

## Electric Utility and Power Generators SASB Standard

### Greenhouse Gas Emissions & Energy Resource Planning

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-EU-110a.1</td>
<td>(1) Gross global Scope 1 emissions</td>
<td>Not Reported</td>
<td>ACE GHG emissions would be limited to vehicles and heating fuels.</td>
</tr>
<tr>
<td></td>
<td>(2) Percentage covered under emissions-limiting regulations, and</td>
<td>0%</td>
<td>State RPS goals exist, but no federal or state regulations limiting CO2e are currently in place</td>
</tr>
<tr>
<td></td>
<td>(3) Percentage covered under emissions-reporting regulations</td>
<td>0%</td>
<td>ACE is not currently required to report GHG emissions under existing U.S. regulations</td>
</tr>
<tr>
<td>IF-EU-110a.2</td>
<td>Power-delivery related GHG emissions</td>
<td>0 metric tons CO2e</td>
<td>All energy is delivered at the busbar – no power delivery-related GHG emissions</td>
</tr>
<tr>
<td>IF-EU-110a.3</td>
<td>Short/long term plans to manage emissions</td>
<td>Not Reported</td>
<td></td>
</tr>
<tr>
<td>IF-EU-110a.4</td>
<td>(1) Number of customers served in markets subject to renewable portfolio standards (RPS), and</td>
<td>6</td>
<td>BPA, Xcel, Alliant, Midamerican, Delmarva, ODEC. Also sell voluntary compliance RECs to 8 additional customers</td>
</tr>
<tr>
<td></td>
<td>(2) percentage fulfillment of RPS target by market</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

### Water Management

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-EU-140a.1</td>
<td>(1) Total water withdrawn</td>
<td>Not Reported</td>
<td>Percent of each region with High or Extremely High Baseline Water Stress</td>
</tr>
<tr>
<td></td>
<td>(2) Total water consumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IF-EU-140a.2</td>
<td>Number of incidents of non-compliance associated with water quantity and/or quality permits, standards, and regulations</td>
<td>Not reported</td>
<td></td>
</tr>
<tr>
<td>IF-EU-140a.3</td>
<td>Description of water management risks and discussion of strategies and practices to mitigate those risks:</td>
<td></td>
<td>ALLETE Clean Energy water use is minimal and related to domestic use in operations and maintenance (O &amp; M) facilities – no cooling or process water is required. Current building codes are followed at O &amp; M facilities for water reduction strategies.</td>
</tr>
</tbody>
</table>

### Coal Ash Management

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-EU-150a.1</td>
<td>(1) Amount of coal combustion residuals (CCR) generated</td>
<td>N/A*</td>
</tr>
<tr>
<td></td>
<td>(2) Percentage recycled</td>
<td></td>
</tr>
<tr>
<td>IF-EU-150a.2</td>
<td>(1) Total number of CCR impoundments,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2) broken down by hazard potential classification and structural integrity assessment</td>
<td></td>
</tr>
</tbody>
</table>

*ALLETE Clean Energy does not generate or store CCR

---

*Emissions limited to office buildings, vehicles, etc, and anticipated to be minimal
## ALLETE Clean Energy
### Electric Utility and Power Generators SASB Standard

### Energy Affordability

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-EU-240a.1</td>
<td>Average retail electric rate for (1) residential customers, (2) commercial customers, and (3) industrial customers</td>
<td></td>
</tr>
<tr>
<td>IF-EU-240a.2</td>
<td>Typical monthly electric bill for residential customers for: (1) 500 kWh and, (2) 1,000 kWh</td>
<td>N / A*</td>
</tr>
<tr>
<td>IF-EU-240a.3</td>
<td>Number of residential customer electric disconnections for non-payment, and percentage reconnected within 30 days*</td>
<td></td>
</tr>
<tr>
<td>IF-EU-240a.4</td>
<td>Discussion of impact of external factors on customer affordability of electricity including economic conditions of the service territory</td>
<td></td>
</tr>
</tbody>
</table>

*Not applicable to ALLETE Clean Energy because ACE, as an independent power producer, sells energy at wholesale, not retail.

### End-Use Efficiency & Demand

<table>
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<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-EU-420a.1</td>
<td>Percentage of electric utility revenues that (1) are decoupled and (2) contain a lost revenue adjustment mechanism (LRAM)</td>
<td>N / A*</td>
</tr>
<tr>
<td>IF-EU-420a.2</td>
<td>Percentage of electric load served by smart grid technology* (meters)</td>
<td></td>
</tr>
<tr>
<td>IF-EU-420a.3</td>
<td>Customer electricity savings from efficiency measures, by market*</td>
<td></td>
</tr>
</tbody>
</table>

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### Nuclear Safety & Emergency Management

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-EU-540a.1</td>
<td>Total number of nuclear power units</td>
<td>0</td>
<td>ALLETE Clean Energy does not own or operate any nuclear power units</td>
</tr>
<tr>
<td>IF-EU-540a.2</td>
<td>Description of efforts to manage nuclear safety and emergency preparedness</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

### Workforce Health & Safety

<table>
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<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
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</thead>
<tbody>
<tr>
<td>IF-EU-320a.1</td>
<td>(1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR)</td>
<td>6.9</td>
</tr>
</tbody>
</table>

### Grid Resiliency

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
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</thead>
<tbody>
<tr>
<td>IF-EU-550a.1</td>
<td>Number of incidents of non-compliance with physical and/or cybersecurity standards or regulations</td>
<td>Not Reported</td>
</tr>
<tr>
<td>IF-EU-550a.2</td>
<td>(1) System Average Interruption Duration Index (SAIDI), (2) System Average Interruption Frequency Index (SAIFI), and (3) Customer Average Interruption Duration Index (CAIDI) inclusive of major event days*</td>
<td>N / A**</td>
</tr>
</tbody>
</table>

*ALLETE cyber and physical security efforts are described in greater detail in the Corporate Sustainability Report (CSR).

** Not applicable to ALLETE Clean Energy because ACE, as an independent power producer, sells energy at wholesale, not retail.
### Activity Metrics Section

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-EU-000.A</td>
<td>Number of customers served*: (1) residential,</td>
<td>0</td>
</tr>
<tr>
<td>IF-EU-000.B</td>
<td>Total electricity delivered* to: (1) residential,</td>
<td>0 MWh</td>
</tr>
<tr>
<td>IF-EU-000.C</td>
<td>Length of transmission and distribution lines**</td>
<td>0 km</td>
</tr>
<tr>
<td>IF-EU-000.D</td>
<td>Total electricity generated</td>
<td>Not Reported</td>
</tr>
<tr>
<td>IF-EU-000.E</td>
<td>Total wholesale electricity purchased</td>
<td>0 MWh</td>
</tr>
</tbody>
</table>

*ALLETE Clean Energy’s customer base is 100% wholesale delivery (no wholesale purchases)

**ALLETE Clean Energy does not operate transmission and distribution lines

***In 2019, 73 percent of sales occurred in the traditionally rate regulated states of Minnesota, Iowa, and North Dakota. 27 percent of sales occurred in the unregulated markets of Oregon and Pennsylvania.
# Superior Water, Light & Power

Electric Utility and Power Generators SASB Standard


<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-EU-110a.1</td>
<td>(1) Gross global Scope 1 emissions</td>
<td>Not Reported – SWLP Scope 1 emissions are minimal.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2) Percentage covered under emissions-limiting regulations, and</td>
<td></td>
<td>SWLP purchases electrical energy for resale from Minnesota Power—see MP disclosures for GHG information.</td>
</tr>
<tr>
<td>IF-EU-110a.2</td>
<td>Power-delivery related GHG emissions</td>
<td>Not Reported – SWLP does not participate in RPS</td>
<td></td>
</tr>
<tr>
<td>IF-EU-110a.3</td>
<td>Short/long term plans to manage emissions</td>
<td>Not Reported – SWLP Scope 1 emissions are minimal.</td>
<td></td>
</tr>
<tr>
<td>IF-EU-110a.4</td>
<td>(1) Number of customers served in markets subject to renewable portfolio standards (RPS), and</td>
<td>Not Reported - SWLP does not participate in RPS</td>
<td></td>
</tr>
</tbody>
</table>

## Water Management

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-EU-140a.1</td>
<td>(1) Total water withdrawn</td>
<td>Not Reported – SWLP does not withdraw or consume water for electrical generation or distribution</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2) Total water consumed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-EU-140a.2</td>
<td>Number of incidents of non-compliance associated with water quantity and/or quality permits, standards, and regulations</td>
<td>Not Reported – SWLP does not withdraw or consume water for electrical generation or distribution</td>
<td></td>
</tr>
<tr>
<td>IF-EU-140a.3</td>
<td>Description of water management risks and discussion of strategies and practices to mitigate those risks:</td>
<td>Not Reported – SWLP does not withdraw or consume water for electrical generation or distribution</td>
<td></td>
</tr>
</tbody>
</table>

## Air Quality

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-EU-120a.1</td>
<td>Air emissions of the following*: Metric tons</td>
<td></td>
<td>No emissions associated with the production or distribution of electrical energy.</td>
</tr>
<tr>
<td></td>
<td>NOx</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SOx (SO₂)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PM10</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lead</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mercury</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Superior Water, Light & Power
### Electric Utility and Power Generators SASB Standard

### Coal Ash Management

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-EU-150a.1</td>
<td>(1) Amount of coal combustion residuals (CCR) generated</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2) Percentage recycled</td>
<td></td>
</tr>
<tr>
<td>IF-EU-150a.2</td>
<td>(1) Total number of CCR impoundments,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2) broken down by hazard potential classification and structural integrity assessment</td>
<td>Not applicable – SWLP does not generate CCR</td>
</tr>
</tbody>
</table>

### Energy Affordability

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-EU-240a.1</td>
<td>Average retail electric rate for (1) residential customers,</td>
<td>12.23 cents / KWh</td>
</tr>
<tr>
<td></td>
<td>(2) commercial customers, and</td>
<td>9.54 cents / KWh</td>
</tr>
<tr>
<td></td>
<td>(3) industrial customers</td>
<td>6.20 cents / KWh</td>
</tr>
<tr>
<td>IF-EU-240a.2</td>
<td>Typical monthly electric bill for residential customers for:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1) 500 kWh and,</td>
<td>$57.50 / month</td>
</tr>
<tr>
<td></td>
<td>(2) 1,000 kWh</td>
<td>$124.00 / month</td>
</tr>
<tr>
<td>IF-EU-240a.3</td>
<td>Number of residential customer electric disconnections for non-payment, and</td>
<td>873</td>
</tr>
<tr>
<td></td>
<td>percentage reconnected within 30 days*</td>
<td>Not Reported</td>
</tr>
<tr>
<td>IF-EU-240a.4</td>
<td>Discussion of impact of external factors on customer affordability of electricity including economic conditions of the service territory</td>
<td>Not Reported</td>
</tr>
</tbody>
</table>

### Workforce Health & Safety

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-EU-320a.1</td>
<td>(1) Total recordable incident rate (TRIR),</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2) fatality rate,</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>(3) near miss frequency rate (NMFR)</td>
<td>N/A*</td>
</tr>
</tbody>
</table>

*NMFR is not a parameter that SWL&P reports externally

### End-Use Efficiency & Demand

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-EU-420a.1</td>
<td>Percentage of electric utility revenues that (1) are decoupled and</td>
<td>0</td>
<td>SWL&amp;P has not yet been required to have a decoupling program, and currently has no decoupling mechanism in place</td>
</tr>
<tr>
<td></td>
<td>(2) contain a lost revenue adjustment mechanism (LRAM)</td>
<td>0%</td>
<td>SWL&amp;P currently has no LRAM rates in place</td>
</tr>
<tr>
<td>IF-EU-420a.2</td>
<td>Percentage of electric load served by smart grid technology* (meters)</td>
<td>100%</td>
<td>Represents the percent of total electric customers with smart meters at year-end.</td>
</tr>
<tr>
<td>IF-EU-420a.3</td>
<td>Customer electricity savings from efficiency measures, by market*</td>
<td>1.039 MWh</td>
<td>Focus on Energy is Wisconsin utilities’ statewide energy efficiency and renewable resource program funded by the state’s investor owned energy utilities and participating municipal and electric cooperative utilities.</td>
</tr>
</tbody>
</table>

### Nuclear Safety & Emergency Management

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-EU-540a.1</td>
<td>Total number of nuclear power units</td>
<td>0</td>
<td>SWL&amp;P does not own or operate any nuclear power units</td>
</tr>
<tr>
<td>IF-EU-540a.2</td>
<td>Description of efforts to manage nuclear safety and emergency preparedness</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>
Superior Water, Light & Power
Electric Utility and Power Generators SASB Standard

### Grid Resiliency

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-EU-550a.1</td>
<td>Number of incidents of non-compliance with physical and/or cybersecurity standards or regulations</td>
<td>Confidential*</td>
</tr>
<tr>
<td>IF-EU-550a.2</td>
<td>(1) System Average Interruption Duration Index (SAIDI),</td>
<td>39.6 minutes</td>
</tr>
<tr>
<td></td>
<td>(2) System Average Interruption Frequency Index (SAIFI), and</td>
<td>0.41 minutes</td>
</tr>
<tr>
<td></td>
<td>(3) Customer Average Interruption Duration Index (CAIDI) inclusive of major event days*</td>
<td>96.83 minutes</td>
</tr>
</tbody>
</table>

*Further detail about SWL&P’s cyber and physical security efforts may be found within the CSR

### Activity Metrics Section

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-EU-000.A</td>
<td>Number of customers served:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1) residential,</td>
<td>11,595</td>
</tr>
<tr>
<td></td>
<td>(2) commercial,</td>
<td>1,908</td>
</tr>
<tr>
<td></td>
<td>(3) industrial</td>
<td>24</td>
</tr>
<tr>
<td>IF-EU-000.B</td>
<td>Total electricity delivered to:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1) residential,</td>
<td>88,032 MWh</td>
</tr>
<tr>
<td></td>
<td>(2) commercial,</td>
<td>108,171 MWh</td>
</tr>
<tr>
<td></td>
<td>(3) industrial and</td>
<td>585,355 MWh</td>
</tr>
<tr>
<td></td>
<td>(2) wholesale customers</td>
<td>0 MWh</td>
</tr>
<tr>
<td>IF-EU-000.C</td>
<td>Length of transmission and distribution lines</td>
<td>853 km</td>
</tr>
<tr>
<td>IF-EU-000.E</td>
<td>Total wholesale electricity purchased</td>
<td>796,348 MWh</td>
</tr>
</tbody>
</table>
Superior Water, Light & Power
Gas SASB Standard

### Energy Affordability

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-GU-240a.1</td>
<td>Average retail gas rate for (1) residential customers, (2) commercial and (3) industrial customers, (4) transportation services only</td>
<td>$8.10 / MMBtu, $5.69 / MMBtu, $3.63 / MMBtu</td>
</tr>
<tr>
<td>IF-GU-240a.2</td>
<td>Typical monthly gas bill for residential customers for: (1) 50 MMBtu and, (2) 100 MMBtu of gas delivered per year</td>
<td>$15.19, $28.61</td>
</tr>
<tr>
<td>IF-GU-240a.3</td>
<td>Number of residential customer gas disconnections for non-payment, and percentage reconnected within 30 days*</td>
<td>61, Not Reported</td>
</tr>
<tr>
<td>IF-GU-240a.4</td>
<td>Discussion of impact of external factors on customer affordability of gas including economic conditions of the service territory; Not Reported</td>
<td></td>
</tr>
</tbody>
</table>

### End-Use Efficiency

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-GU-420a.1</td>
<td>Percentage of gas utility revenues that (1) are decoupled and (2) contain a lost revenue adjustment mechanism (LRAM)</td>
<td>0, 0%</td>
<td>SWLP has not yet been required to have a decoupling program, and currently has no decoupling mechanism in place.</td>
</tr>
<tr>
<td>IF-GU-420a.2</td>
<td>Customer gas savings from efficiency measures by market*</td>
<td>191 MMBtu</td>
<td>Focus on Energy is Wisconsin utilities’ statewide energy efficiency and renewable resource program funded by the state’s investor owned energy utilities and participating municipal and electric cooperative utilities.</td>
</tr>
</tbody>
</table>

### Integrity of Gas Delivery Infrastructure

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-GU-550a.1</td>
<td>Number of (1) reportable pipeline incidents, (2) Corrective Action Orders (CAO), and (3) Notices of Probable Violation (NOPV)</td>
<td>0, 0, 2</td>
</tr>
<tr>
<td>IF-GU-550a.2</td>
<td>Percentage of distribution pipeline that is (1) cast and/or wrought iron and (2) unprotected steel</td>
<td>0%, 0%</td>
</tr>
<tr>
<td>IF-GU-550a.3</td>
<td>Percentage of (1) gas transmission pipelines inspected, (2) gas distribution pipelines inspected</td>
<td>100%, 66%</td>
</tr>
</tbody>
</table>

Description of efforts to manage the integrity of gas delivery infrastructure, including risks related to safety and emissions:

SWL&P’s natural gas transmission pipelines deliver gas directly to some large industrial customers and to our company’s gate stations, where pressure is lowered for final distribution to utility customers. The distribution systems consist of mains, which are usually located along or under city streets, and smaller service lines that branch off the mains and distribute natural gas service to homes and businesses. None of these pipeline systems are constructed of potentially high-risk materials, such as cast and wrought iron or unprotected bare steel.

SWL&P is dedicated to keeping its employees, customers, and communities safe through training, education, and awareness. All SWL&P journeyman crews and service responders are trained on emergency response and are available 24 hours a day, seven days a week. In addition, our company’s Transmission and Distribution Integrity Management Programs provide a process for inspecting and assessing the condition of SWL&P-owned natural gas pipelines and establishing a maintenance program based on regulatory requirements and best industry practices.

Further detail about SWL&P’s cyber and physical security efforts may be found within the CSR.
## Superior Water, Light & Power
### Gas SASB Standard

### Activity Metrics Section

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-GU-000.A</td>
<td>Number of customers served:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1) residential,</td>
<td>11,478</td>
</tr>
<tr>
<td></td>
<td>(2) commercial, and</td>
<td>1,317</td>
</tr>
<tr>
<td></td>
<td>(3) industrial</td>
<td>16</td>
</tr>
<tr>
<td>IF-GU-000.B</td>
<td>Amount of natural gas delivered to:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1) residential customers,</td>
<td>1,109,475 MMBtu</td>
</tr>
<tr>
<td></td>
<td>(2) commercial customers,</td>
<td>861,974 MMBtu</td>
</tr>
<tr>
<td></td>
<td>(3) industrial customers,</td>
<td>302,824 MMBtu</td>
</tr>
<tr>
<td></td>
<td>(2) transferred to a third party</td>
<td>107,346 MMBtu</td>
</tr>
<tr>
<td>IF-GU-000.C</td>
<td>Length of gas (1) transmission pipelines and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2) distribution pipelines</td>
<td>32 km</td>
</tr>
<tr>
<td></td>
<td></td>
<td>456 km</td>
</tr>
</tbody>
</table>
# Superior Water, Light & Power
## Water SASB Standard

### Energy Management

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-WU-130a.1</td>
<td>(1) Total energy consumed,</td>
<td>4865 GJ</td>
</tr>
<tr>
<td></td>
<td>(2) percentage grid electricity,</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>(3) percentage renewable</td>
<td>29%</td>
</tr>
</tbody>
</table>

### Distribution Network Efficiency

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-WU-140a.1</td>
<td>Water main replacement rate</td>
<td>0.23%</td>
</tr>
<tr>
<td>IF-WU-140a.2</td>
<td>Volume of non-revenue water losses</td>
<td>247 m³</td>
</tr>
</tbody>
</table>

### Effluent Quality Management

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-WU-140b.1</td>
<td>Number of incidents of non-compliance associated with water effluent quality permits, standards, and regulations</td>
<td>0</td>
</tr>
<tr>
<td>IF-WU-140b.2</td>
<td>Discussion of strategies to manage effluents of emerging concern:</td>
<td>Nothing Reported</td>
</tr>
</tbody>
</table>

### Water Affordability & Access

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-WU-240a.1</td>
<td>Average retail water rate for (1) residential customers</td>
<td>$9.68/CCF</td>
</tr>
<tr>
<td></td>
<td>(2) commercial customers, and</td>
<td>$6.97/CCF</td>
</tr>
<tr>
<td></td>
<td>(3) industrial customers</td>
<td>$5.59/CCF</td>
</tr>
<tr>
<td>IF-WU-240a.2</td>
<td>Typical monthly water bill for residential customers for 10 Ccf of water delivered per month</td>
<td>$67.40</td>
</tr>
<tr>
<td>IF-WU-240a.3</td>
<td>Number of residential customer water disconnections for non-payment, and percentage reconnected within 30 days*</td>
<td>17</td>
</tr>
<tr>
<td>IF-WU-240a.4</td>
<td>Discussion of impact of external factors on customer affordability of water, including economic conditions of the service territory:</td>
<td>Not Reported</td>
</tr>
</tbody>
</table>

### Drinking Water Quality

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-WU-250a.1</td>
<td>Number of (1) acute health-based, (2) non-acute health-based, and (3) non-health-based drinking water violations</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>IF-WU-250a.2</td>
<td>Discussion of strategies to manage drinking water contaminants of emerging concern:</td>
<td>Nothing Reported</td>
<td></td>
</tr>
</tbody>
</table>
# Superior Water, Light & Power

## Water SASB Standard

### End-Use Efficiency

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-WU-420a.1</td>
<td>Percentage of water utility revenues from rate structures that are designed to promote conservation and revenue resilience</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>IF-WU-420a.2</td>
<td>Customer water savings from efficiency measures by market*</td>
<td>NA</td>
<td>SWL&amp;P does not have any programs in place</td>
</tr>
</tbody>
</table>

### Water Supply Resilience

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-WU-440a.1</td>
<td>Total water sourced from regions with High or Extremely High Baseline Water Stress, percentage purchased from a third party</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>IF-WU-440a.2</td>
<td>Volume of recycled water delivered to customers</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>IF-WU-440a.3</td>
<td>Discussion of strategies to manage risks associated with the quality and availability of water resources: Nothing Reported</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Network Resiliency & Impacts of Climate Change

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-WU-450a.3</td>
<td>(1) Number of unplanned service disruptions, and (2) customers affected, each by duration category</td>
<td>Not Reported</td>
<td>Not Reported</td>
</tr>
</tbody>
</table>
**BNI Energy**

**Coal Operations Standard**

### Greenhouse Gas Emissions

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EM-CO-110a.1</td>
<td>(1) Gross global Scope 1 emissions</td>
<td>62,890.51 metric tons CO2e</td>
<td>Diesel and gasoline mobile sources; Electricity consumption. Calculated using EPA GHG Equivalencies conversions.</td>
</tr>
<tr>
<td>EM-CO-110a.2</td>
<td>(2) Percentage covered under emissions-limiting regulations, and</td>
<td>0%</td>
<td>No federal or state regulations limiting CO2e are currently in place</td>
</tr>
</tbody>
</table>

**EM-CO-110a.2 (Continued)**

**Protection and Monitoring plans**

- Monitoring of water
  - Quarterly monitoring and reporting of ground water levels
  - Annual monitoring and reporting of our ground water chemistry
  - Programs to monitor ground water wells on adjacent land owners
  - Monthly pond inspections
  - Extensive surface water monitoring and testing prior to discharging of water
- Air quality
  - Contemporary reclamation to minimize disturbed acres
  - Utilize cover crops, minimum till and no-till farming practices on reclaimed lands
  - Include tree plantings, native grasslands and wetlands on reclaimed lands
  - Minimize road grading plans
  - Watering of roadways/work areas
- Recycle and reuse to minimize waste

### Water Management

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>EM-CO-140a.1</td>
<td>(1) Total fresh water withdrawn</td>
<td>99.4 m3, thousands</td>
</tr>
<tr>
<td>EM-CO-140a.2</td>
<td>(2) Percentage recycled</td>
<td>0%*</td>
</tr>
<tr>
<td>EM-CO-140a.3</td>
<td>(3) Percentage in regions with High or Extremely High Baseline Water Stress</td>
<td>0%</td>
</tr>
</tbody>
</table>

**BNI Energy** manages water as part of our operations but we do not use water in any mining process. Water is contained in sediment ponds and released after water quality is tested and verified.

### Waste Management

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EM-CO-150a.1</td>
<td>Number of tailings impoundments, broken down by MSHA hazard potential</td>
<td>0</td>
<td>BNI has no tailings basins – its operations do not generate ash slurry</td>
</tr>
</tbody>
</table>

---

**Short-term carbon management**

- Carbon management
  - ALLETE and BNI Energy conceptualized and initiated project Tundra in 2013 which proposes to capture up to four million tons of CO2 per year from the Milton R. Young Generating Station that BNI supplies and geologically sequester the CO2 beneath the land that BNI owns. BNI transitioned leadership and development of Project Tundra to Minnkota Power Cooperative, the owner of the Milton R. Young Generation Station, in 2018. Minnkota is currently developing Project Tundra while BNI Energy continues to support the project in the field and in the community.
  - Mitigation through net positive acres of tree plantings (shelterbelts, woodlands, and conservational tree plantings)
  - Mitigation through net positive acres of reclaimed wetlands
  - Promoting private ownerships of lands to be reclaimed into native grasslands

- Promotion of bio-diversity and productivity
  - Investment in research promoting biodiversity
  - Additions of pollinator plots
  - Promotion of wildlife food plots
  - Annual monitoring programs for grass, crops, wildlife

- Land Management
  - Diversification of crops, native grassland plantings, and tree plantings
  - No-till or minimal till management
  - Managed grazing plans that promote diversity and soil health
  - Managed haying plans to promote stand heights and nesting cover

### Long-term carbon management

- Carbon management
  - ALLETE and BNI Energy have repeatedly recognized for its industry leading land reclamation and environmental stewardship practices. We have been leaders in developing carbon solutions for more than a decade including our involvement in the Plains CO2 reduction partnership, Lignite Research Council and funding the research and development of carbon capture and utilization technologies. Our long and short term efforts to reduce carbon are focused in three areas.

- Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis or performance against those targets:

  BNI Energy is committed to protecting the quality of North Dakota’s land, air and water. After all, this is our home - most of our employees are native North Dakotans who care deeply about the environment. BNI Energy has been short term efforts to reduce carbon are focused in three areas.

- Carbon management
  - ALLETE and BNI Energy conceptualized and initiated project Tundra in 2013 which proposes to capture up to four million tons of CO2 per year from the Milton R. Young Generating Station that BNI supplies and geologically sequester the CO2 beneath the land that BNI owns. BNI transitioned leadership and development of Project Tundra to Minnkota Power Cooperative, the owner of the Milton R. Young Generation Station, in 2018. Minnkota is currently developing Project Tundra while BNI Energy continues to support the project in the field and in the community.
  - Mitigation through net positive acres of tree plantings (shelterbelts, woodlands, and conservational tree plantings)
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- Promotion of bio-diversity and productivity
  - Investment in research promoting biodiversity
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  - Promotion of wildlife food plots
  - Annual monitoring programs for grass, crops, wildlife

- Land Management
  - Diversification of crops, native grassland plantings, and tree plantings
  - No-till or minimal till management
  - Managed grazing plans that promote diversity and soil health
  - Managed haying plans to promote stand heights and nesting cover

---
**BNI Energy**

**Coal Operations Standard**

### Workforce Health & Safety

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>EM-CO-320a.1</td>
<td>(1) Total recordable incident rate (TRIR)</td>
<td>1.81</td>
</tr>
<tr>
<td></td>
<td>(2) fatality rate, and</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>(3) near miss frequency rate (NMFR)</td>
<td>Not Reported</td>
</tr>
</tbody>
</table>

**Discussion of management of accident and safety risks and long-term health and safety risks:**

Safety is a core value at BNI that is deeply engrained in our culture and is foundational to all that we do. The safety of our employees and their families, customers, contractors, and the community is our highest priority. Our zero injury safety vision is aligned with a safety strategy that is driven by culture, systems, and awareness and fueled by employee engagement, continuous learning, monitoring, and the use of data and analytics.

To ensure, reinforce, and promote our zero injury safety culture, we leverage the following safety systems and employee engagement:

- Safety Improvement Teams (SITs) within our business unit and across our subsidiary companies
- Participation in corporate Safety Strategy Group
- Collection and analysis of leading safety indicators
- Tracking and analysis of lagging safety indicators
- Incident reporting, investigation, and communication processes
- Safety learning teams to review all incidents
- Safety alert communications
- Stringent onboarding process for new employees
- 8+ hours of annual Mine Safety and Health Administration refresher training
- Monthly large group safety meetings
- Weekly small group safety meetings
- Daily work area inspections and safety conversations
- Job specific and/or task specific training
- Certification and/or qualification training hours
- Vision, audio, chest x-ray, and annual physical health monitoring programs
- Stretching and soft tissue health programs for at work and home

### Biodiversity Impacts

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>EM-CO-150a.1</td>
<td>Description of environmental management policies and practices for active sites:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reclamation and land management are key techniques in managing biodiversity impacts. BNI continues to be on the leading edge of agricultural practices. No-till agriculture, cover crops, livestock integration, and rotational grazing are all practices used to increase overall soil health and consequently increase plant production and grassland diversity. These land management practices are critical to returning the land to greater value (empirical and intrinsic) than pre-mining.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Since 2017, BNI has hosted North Dakota State University research plots testing various techniques to increase water infiltration, reduce compaction, and species richness. Soil diversity is achieved through seed mixes, lift thicknesses, and re-spread depths. These data and research conclusions are anticipated to improve short and long term land management techniques and subsequent regulations. This has potential to improve our landscape scale biodiversity and land value in the post-mine setting.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Threatened, Endangered, and/or Species of Concern</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Critical habitat evaluations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Annual monitoring programs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Specialized monitoring</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Focus on biodiversity of reclamation</td>
<td></td>
</tr>
<tr>
<td>EM-CO-160a.2</td>
<td>Percentage of mine sites where acid rock drainage is: (1) predicted to occur,</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>(2) actively mitigated, and</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>(3) under treatment or remediation</td>
<td>0%</td>
</tr>
<tr>
<td>EM-CO-160a.3</td>
<td>Percentage of (1) proved and</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>(2) probable reserves in or near sites with protected conservation status or endangered species habitat</td>
<td>0%</td>
</tr>
</tbody>
</table>
BNI Energy
Coal Operations Standard

Rights of Indigenous Peoples

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>EM-CO-210a.1</td>
<td>Percentage of (1) proved and (2) probable reserves in or near indigenous land</td>
<td>0%</td>
</tr>
</tbody>
</table>
| EM-CO-210a.2| Discussion of engagement processes and due diligence practices with respect to the management of indigenous rights:  
- Cultural resource protections
  o Compliance with state and federal protections
  o Tribal consultations of relative sites and use of on-site monitors
  o Avoidance and protections of cultural sites if achievable
  o Mitigation of sites when necessary
  o Mitigation of these sites has helped add cultural and historic value and knowledge. |           |

Community Relations

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
</table>
| EM-CO-210b.1| Discussion of processes to manage risks and opportunities associated with community rights and interests:  
- Interactive permitting: Local, state, federal government  
- Landowner relations  
  o Coordination and planning  
- Local community involvement  
  o Supporting employees participation in events, causes, emergency services, military, boards, commissions  
  o Donation to local schools, business, events, clubs, emergency services  
  o Coordination with county commission to mitigate any negative impacts of the mining operations by relocating or improving infrastructure  
  o Contribution to the cost of maintaining infrastructure impacted by our operations |           |
| EM-CO-210b.2| Number of non-technical delays                                                     | 0         |
|             | Duration of non-technical delays                                                  | 0 days    |

Labor Relations

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>EM-CO-310a.1</td>
<td>Percentage of active workforce covered under collective bargaining agreements, broken down by U.S. and foreign employees</td>
<td>74%</td>
</tr>
<tr>
<td>EM-CO-310a.2</td>
<td>Number of strikes and lockouts</td>
<td>0</td>
</tr>
<tr>
<td>EM-CO-310a.3</td>
<td>Duration of days of strikes and lockouts</td>
<td>0 days</td>
</tr>
</tbody>
</table>

Reserves Valuation & Capital Expenditures

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>EM-CO-420a.1</td>
<td>Sensitivity of coal reserve levels to future price projection scenarios that account for a price on carbon emissions</td>
<td>Not Reported</td>
</tr>
<tr>
<td>EM-CO-420a.2</td>
<td>Estimated carbon dioxide emissions embedded in proven coal reserves</td>
<td></td>
</tr>
<tr>
<td>EM-CO-420a.3</td>
<td>Discussion of how price and demand for coal and/or climate regulation influence the capital expenditure strategy for exploration, acquisition, and development of assets</td>
<td></td>
</tr>
</tbody>
</table>

Activity Metrics Section

<table>
<thead>
<tr>
<th>SASB Code</th>
<th>Accounting Metric</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>EM-CO-000.A</td>
<td>Production of thermal coal</td>
<td>3.8 million metric tons</td>
</tr>
<tr>
<td>EM-CO-000.B</td>
<td>Production of metallurgical coal</td>
<td>N/A*</td>
</tr>
</tbody>
</table>

*BNI does not produce metallurgical coal
## Portfolio

<table>
<thead>
<tr>
<th>Ref. No.</th>
<th>Owned Nameplate Generation Capacity at end of year (MWh)</th>
<th>Baseline 2005</th>
<th>Last Year 2018</th>
<th>Current Year 2019</th>
<th>Future Year 2021</th>
<th>Comments, Links, Additional Information, and Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Coal</td>
<td>1,545</td>
<td>975</td>
<td>830</td>
<td>830</td>
<td>Provide a link to charts or additional information if available. The capacity values are based on Minnesota Power Regulated owned installed Capacity (*&quot;CAP&quot;) for dispatchable resource and name-plate capacity for Minnesota Power Regulated owned non-dispatchable renewables.</td>
</tr>
<tr>
<td>1.2</td>
<td>Natural Gas</td>
<td>96</td>
<td>101</td>
<td>101</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3</td>
<td>Nuclear</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.4</td>
<td>Petroleum</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td>Total Renewable Energy/Resources</td>
<td>186</td>
<td>712</td>
<td>709</td>
<td>709</td>
<td></td>
</tr>
<tr>
<td>1.5.1</td>
<td>Biomass/BioGas</td>
<td>72</td>
<td>57</td>
<td>55</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>1.5.2</td>
<td>Geothermal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5.3</td>
<td>Hydropower</td>
<td>115</td>
<td>122</td>
<td>121</td>
<td>121</td>
<td></td>
</tr>
<tr>
<td>1.5.4</td>
<td>Solar</td>
<td>12</td>
<td>11</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5.5</td>
<td>Wind</td>
<td>522</td>
<td>522</td>
<td>522</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.6</td>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>1,732</td>
<td>1,783</td>
<td>1,640</td>
<td>1,640</td>
<td></td>
</tr>
</tbody>
</table>

*Note: All emissions values have been adjusted to only reflect the carbon emissions associated with electricity used to serve Minnesota Power energy customers. See footnote at the bottom.*

### Use the data organizer on the left (i.e., the plus/minus symbol) to open/close the alternative generation reporting options

#### 2.1 Owned Net Generation for the data year (MWh)

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Baseline 2005</th>
<th>Last Year 2018</th>
<th>Current Year 2019</th>
<th>Future Year 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1.1 Coal</td>
<td>8,595,030</td>
<td>6,442,894</td>
<td>4,160,011</td>
<td>4,240,353</td>
</tr>
<tr>
<td>2.1.2 Natural Gas</td>
<td>0</td>
<td>14,392</td>
<td>10,109</td>
<td>11,094</td>
</tr>
<tr>
<td>2.1.3 Nuclear</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.4 Petroleum</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.5 Total Renewable Energy/Resources</td>
<td>526,227</td>
<td>2,169,903</td>
<td>2,282,209</td>
<td>2,294,194</td>
</tr>
<tr>
<td>2.1.5.1 Biomass/BioGas</td>
<td>38,064</td>
<td>9,977</td>
<td>21,190</td>
<td>0</td>
</tr>
<tr>
<td>2.1.5.2 Geothermal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.5.3 Hydropower</td>
<td>488,164</td>
<td>566,238</td>
<td>620,006</td>
<td>509,739</td>
</tr>
<tr>
<td>2.1.5.4 Solar</td>
<td>0</td>
<td>16,744</td>
<td>14,070</td>
<td>17,906</td>
</tr>
<tr>
<td>2.1.5.5 Wind</td>
<td>0</td>
<td>1,546,044</td>
<td>1,637,013</td>
<td>1,966,148</td>
</tr>
<tr>
<td>2.1.6 Other</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2.1.7 Sales</td>
<td>-2,675,398</td>
<td>-5,331,775</td>
<td>-3,021,087</td>
<td>-1,468,105</td>
</tr>
<tr>
<td>TOTAL</td>
<td>6,440,860</td>
<td>5,095,224</td>
<td>3,441,242</td>
<td>5,081,479</td>
</tr>
</tbody>
</table>

### Use the data organizer on the left (i.e., the plus/minus symbol) to open/close the alternative generation reporting options

#### 2.2 Purchased Net Generation for the data year (MWh)

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Baseline 2005</th>
<th>Last Year 2018</th>
<th>Current Year 2019</th>
<th>Future Year 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2.1 Coal</td>
<td>2,101,209</td>
<td>901,678</td>
<td>674,539</td>
<td>723,918</td>
</tr>
<tr>
<td>2.2.2 Natural Gas</td>
<td>53,243</td>
<td>18,229</td>
<td>10,624</td>
<td>0</td>
</tr>
<tr>
<td>2.2.3 Nuclear</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.4 Petroleum</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.5 Total Renewable Energy/Resources</td>
<td>614,057</td>
<td>605,583</td>
<td>645,939</td>
<td>5,338,548</td>
</tr>
<tr>
<td>2.2.5.1 Biomass/BioGas</td>
<td>49,677</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2.2.5.2 Geothermal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.5.3 Hydropower</td>
<td>561,346</td>
<td>303,574</td>
<td>345,094</td>
<td>1,791,792</td>
</tr>
<tr>
<td>2.2.5.4 Solar</td>
<td>0</td>
<td>1,959</td>
<td>1,663</td>
<td>15,489</td>
</tr>
<tr>
<td>2.2.5.5 Wind</td>
<td>0</td>
<td>299,582</td>
<td>256,268</td>
<td>1,411,268</td>
</tr>
<tr>
<td>2.2.6 Other</td>
<td>1,190,608</td>
<td>3,915,884</td>
<td>5,440,804</td>
<td>1,514,215</td>
</tr>
<tr>
<td>2.2.7 Sales</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>4,159,116</td>
<td>5,440,974</td>
<td>6,791,906</td>
<td>5,496,701</td>
</tr>
</tbody>
</table>

### Use the data organizer on the left (i.e., the plus/minus symbol) to open/close the alternative generation reporting options

#### 3 Inverting in the Future: Capital Expenditures, Energy Efficiency (EE), and Smart Meters

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Baseline 2005</th>
<th>Last Year 2018</th>
<th>Current Year 2019</th>
<th>Future Year 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Total Annual Capital Expenditures (nominal dollars)</td>
<td>$1,790,000</td>
<td>$197,700,000</td>
<td>$218,816,000</td>
</tr>
<tr>
<td>3.2</td>
<td>Incremental Annual Electricity Savings from EE (MWh)</td>
<td>40,501</td>
<td>72,480</td>
<td>67,669</td>
</tr>
<tr>
<td>3.3</td>
<td>Incremental Annual Investment in Electric EE Programs (nominal dollars)</td>
<td>$3,605,706</td>
<td>$9,011,446</td>
<td>$8,281,773</td>
</tr>
<tr>
<td>3.4</td>
<td>Percent of Total Electric Customers with Smart Meters (at end of year)</td>
<td>20%</td>
<td>56%</td>
<td>63%</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>4,159,116</td>
<td>5,440,974</td>
<td>6,791,906</td>
</tr>
</tbody>
</table>

### Use the data organizer on the left (i.e., the plus/minus symbol) to open/close the alternative generation reporting options

#### 4 Retail Electric Customer Count (at end of year)

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Baseline 2005</th>
<th>Last Year 2018</th>
<th>Current Year 2019</th>
<th>Future Year 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Commercial</td>
<td>20,763</td>
<td>23,804</td>
<td>24,035</td>
</tr>
<tr>
<td>4.2</td>
<td>Industrial</td>
<td>860</td>
<td>380</td>
<td>379</td>
</tr>
<tr>
<td>4.3</td>
<td>Residential</td>
<td>116,072</td>
<td>122,537</td>
<td>122,929</td>
</tr>
</tbody>
</table>

*Historical data from EIA Form 861: https://www.eia.gov/electricity/data/eia861/|

## Emissions

### 5 GHG Emissions: Carbon Dioxide (CO2) and Carbon Dioxide Equivalent (CO2e)

**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.

<table>
<thead>
<tr>
<th>Reference</th>
<th>Description</th>
<th>Baseline 2005</th>
<th>Last Year 2018</th>
<th>Current Year 2019</th>
<th>Future Year 2021</th>
<th>Comments, Links, Additional Information, and Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1.1.1</td>
<td>Total Owned Generation CO2 Emissions (MT)</td>
<td>8,944,412</td>
<td>3,142,517</td>
<td>1,210,947</td>
<td>2,782,868</td>
<td>we estimate the additional GHG equivalents by adding a factor of 1:0.02 onto the CO2 values</td>
</tr>
<tr>
<td>5.1.1.2</td>
<td>Total Owned Generation CO2 Emissions Intensity (MT/Net MWH)</td>
<td>1.388</td>
<td>6.027</td>
<td>0.552</td>
<td>0.548</td>
<td></td>
</tr>
<tr>
<td>5.1.2</td>
<td>Total Owned Generation CO2e Emissions (MT)</td>
<td>8,962,301</td>
<td>3,140,802</td>
<td>1,210,399</td>
<td>2,788,434</td>
<td></td>
</tr>
<tr>
<td>5.1.2.1</td>
<td>Total Owned Generation CO2e Emissions Intensity (MT/Net MWH)</td>
<td>1.390</td>
<td>0.618</td>
<td>0.353</td>
<td>0.549</td>
<td></td>
</tr>
<tr>
<td>5.2</td>
<td>Carbon Dioxide (CO2)</td>
<td>2,137,922</td>
<td>739,871</td>
<td>244,530</td>
<td>537,152</td>
<td></td>
</tr>
<tr>
<td>5.2.1.1</td>
<td>Total Purchased Power CO2 Emissions (MT)</td>
<td>2,137,922</td>
<td>739,871</td>
<td>244,530</td>
<td>537,152</td>
<td></td>
</tr>
<tr>
<td>5.2.2</td>
<td>Total Purchased Power CO2 Equivalent Emissions (MT)</td>
<td>2,137,922</td>
<td>739,871</td>
<td>244,530</td>
<td>537,152</td>
<td></td>
</tr>
<tr>
<td>5.3</td>
<td>Total Owned + Purchased Power Carbon Dioxide (CO2)</td>
<td>10,117,950</td>
<td>3,882,383</td>
<td>954,899</td>
<td>2,319,020</td>
<td></td>
</tr>
<tr>
<td>5.3.1.1</td>
<td>Total Owned + Purchased Power Carbon Dioxide Emissions (MT)</td>
<td>10,117,950</td>
<td>3,882,383</td>
<td>954,899</td>
<td>2,319,020</td>
<td></td>
</tr>
<tr>
<td>5.3.2</td>
<td>Total Owned + Purchased Power CO2 Equivalent Emissions (MT)</td>
<td>10,117,950</td>
<td>3,882,383</td>
<td>954,899</td>
<td>2,319,020</td>
<td></td>
</tr>
<tr>
<td>5.5</td>
<td>Fugitive CO2 emissions from natural gas distribution (MT)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Not Forecast</td>
<td>This is not a parameter we calculate / track / report</td>
</tr>
<tr>
<td>6 Nitrogen Oxide (NOx), Sulfur Dioxide (SO2), Mercury (Hg)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.1</td>
<td>Total Nitrogen Oxide (NOx)</td>
<td>18,437</td>
<td>3,761</td>
<td>2,147</td>
<td>2,207</td>
<td>Boswell, Lakin, and Taconite Harbor only</td>
</tr>
<tr>
<td>6.2</td>
<td>Total Sulfur Dioxide (SO2)</td>
<td>24,528</td>
<td>2,896</td>
<td>524</td>
<td>487</td>
<td>Boswell, Lakin, and Taconite Harbor only</td>
</tr>
<tr>
<td>6.3</td>
<td>Total Mercury (Hg)</td>
<td>108.3</td>
<td>8.0</td>
<td>4.9</td>
<td>4.9</td>
<td>Boswell, Lakin, and Taconite Harbor only</td>
</tr>
</tbody>
</table>

### Resources

<table>
<thead>
<tr>
<th>Reference</th>
<th>Description</th>
<th>Baseline 2005</th>
<th>Last Year 2018</th>
<th>Current Year 2019</th>
<th>Future Year 2021</th>
<th>Comments, Links, Additional Information, and Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1</td>
<td>Total Number of Employees</td>
<td>1,170</td>
<td>1,092</td>
<td>982</td>
<td>Not Forecast</td>
<td>ALLETE / MFP only (no SWU)</td>
</tr>
<tr>
<td>7.2</td>
<td>Total Number of Board of Directors/Trustees</td>
<td>9</td>
<td>12</td>
<td>10</td>
<td>Not Forecast</td>
<td>ALLETE / MFP only (no SWU)</td>
</tr>
<tr>
<td>7.3</td>
<td>Total Women on Board of Directors/Trustees</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>Not Forecast</td>
<td>ALLETE / MFP only (no SWU)</td>
</tr>
<tr>
<td>7.4</td>
<td>Total Minority on Board of Directors/Trustees</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>ALLETE / MFP only (no SWU)</td>
</tr>
<tr>
<td>7.5</td>
<td>Employee Safety Metrics</td>
<td>5.0</td>
<td>1.7</td>
<td>1.9</td>
<td>Not Forecast</td>
<td>ALLETE / MFP only (no SWU)</td>
</tr>
<tr>
<td>7.5.1</td>
<td>Recordable Incident Rate</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Not Forecast</td>
<td>ALLETE / MFP only (no SWU)</td>
</tr>
<tr>
<td>7.5.2</td>
<td>Lost-time Case Rate</td>
<td>1.3</td>
<td>0.3</td>
<td>0.3</td>
<td>Not Forecast</td>
<td>ALLETE / MFP only (no SWU)</td>
</tr>
<tr>
<td>7.5.3</td>
<td>Days Away, Restricted, and Transfer (DART) Rate</td>
<td>2.1</td>
<td>0.4</td>
<td>0.7</td>
<td>Not Forecast</td>
<td>ALLETE / MFP only (no SWU)</td>
</tr>
<tr>
<td>7.5.4</td>
<td>Work-related Fatalities</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Not Forecast</td>
<td>ALLETE / MFP only (no SWU)</td>
</tr>
</tbody>
</table>

### Additional Metrics (Optional)

*The emissions and generation data provided in the EEI Sustainability has the electricity removed associated with off-system sales - this electricity sold into the market or bilaterally that did not serve Minnesota Power customers. The removal of electricity associated with off-system sales provides the most accurate portrayal of CO2 emissions from electricity used to serve Minnesota Power customers.*
Cautionary Statement on Forward-Looking Statements

Statements in this report that are not statements of historical facts are considered “forward-looking” and, accordingly, involve risks and uncertainties that could cause actual results to differ materially from those discussed. Although such forward-looking statements have been made in good faith and are based on reasonable assumptions, there can be no assurance that the expected results will be achieved. Any statements that express, or involve discussions as to, future expectations, risks, beliefs, plans, objectives, assumptions, events, uncertainties, financial performance, or growth strategies (often, but not always, through the use of words or phrases such as “anticipates,” “believes,” “estimates,” “expects,” “intends,” “plans,” “projects,” “likely,” “will continue,” “could,” “may,” “potential,” “target,” “outlook” or words of similar meaning) are not statements of historical facts and may be forward-looking.

In connection with the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, we are providing this cautionary statement to identify important factors that could cause our actual results to differ materially from those indicated in forward-looking statements made by or on behalf of ALLETE in this report, in presentations, on our website, in response to questions or otherwise. These statements are qualified in their entirety by reference to, and are accompanied by, the following important factors, in addition to any assumptions and other factors referred to specifically in connection with such forward-looking statements that could cause our actual results to differ materially from those indicated in the forward-looking statements:

+ Our ability to successfully implement our strategic objectives;
+ Global and domestic economic conditions affecting us or our customers;
+ Changes in and compliance with laws and regulations;
+ Changes in tax rates or policies or in rates of inflation;
+ The outcome of legal and administrative proceedings (whether civil or criminal) and settlements;
+ Weather conditions, natural disasters and pandemic diseases, including the ongoing COVID-19 pandemic;
+ Our ability to access capital markets, bank financing and other financing sources;
+ Changes in interest rates and the performance of the financial markets;
+ Project delays or changes in project costs;
+ Changes in operating expenses and capital expenditures and our ability to raise revenues from our customers;
+ The impacts of commodity prices on ALLETE and our customers;
+ Our ability to attract and retain qualified, skilled and experienced personnel;
+ Effects of emerging technology;
+ War, acts of terrorism and cybersecurity attacks;
+ Our ability to manage expansion and integrate acquisitions;
+ Population growth rates and demographic patterns;
+ Wholesale power market conditions;
+ Federal and state regulatory and legislative actions that impact regulated utility economics, including our allowed rates of return, capital structure, ability to secure financing, industry and rate structure, acquisition and disposal of assets and facilities, operation and construction of plant facilities and utility infrastructure, recovery of purchased power, capital investments and other expenses, including present or prospective environmental matters;
+ Effects of competition, including competition for retail and wholesale customers;
+ Effects of restructuring initiatives in the electric industry;
+ The impacts on our businesses of climate change and future regulation to restrict the emissions of greenhouse gases;
+ The impacts of laws and regulations related to renewable and distributed generation;
+ Pricing, availability and transportation of fuel and other commodities and the ability to recover the costs of such commodities;
+ Our current and potential industrial and municipal customers’ ability to execute announced expansion plans;
+ Real estate market conditions where our legacy Florida real estate investment is located may not improve; and
+ The success of efforts to realize value from, invest in, and develop new opportunities.

Additional disclosures regarding factors that could cause our results or performance to differ from those anticipated by this report are discussed in Part I, Item 1A. Risk Factors of ALLETE’s Annual Report on Form 10-K for the year ended December 31, 2020. Any forward-looking statement speaks only as of the date on which such statement is made, and we undertake no obligation to update any forward-looking statement to reflect events or circumstances after the date on which that statement is made or to reflect the occurrence of unanticipated events. New factors emerge from time to time, and it is not possible for management to predict all of these factors, nor can it assess the impact of each of these factors on the businesses of ALLETE or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statement. Readers are urged to carefully review and consider the various disclosures made by ALLETE in reports filed by ALLETE with the Securities and Exchange Commission that attempt to identify the risks and uncertainties that may affect ALLETE’s business.
Human Rights Statement

Integrity: We Must Each Do Our Part

We are responsible for upholding the company’s integrity. We must always act responsibly, honestly, and ethically under all circumstances. We uphold the human rights of others.

ALLETE values and advances diversity, equity and inclusion in the workplace. The Company is committed to equal opportunity, and is intolerant of discrimination and harassment.

Our policies and procedures, Code of Business Conduct, general business practices, and compliance with applicable laws demonstrate our respect for the human rights of all those with whom we interact on behalf of the Company. We also endeavor to respect the human rights of all those who support our business by providing goods or services to the Company. Our core values reflect this commitment, but more importantly, we demonstrate it through our actions.

These standards of conduct apply to all employees, officers and directors of ALLETE and its subsidiaries and business divisions. It also applies to representatives, agents and contractors doing business on our behalf. We encourage our suppliers, vendors, and others with whom we do business to respect this standard.

ALLETE provides a variety of reporting processes in which an individual may report concerns, including our anonymous ALLETE Integrity Hotline. Reported matters will be investigated and appropriate corrective action shall be taken. ALLETE has strict policies prohibiting retaliation against anyone who cooperates in an investigation or reports a concern in good faith.

ALLETE’s Integrity & Compliance Leadership Committee provides oversight of compliance program policies and the Code of Business Conduct. The Committee monitors the effectiveness of the Integrity Hotline process and responses, establishes procedures to ensure alleged compliance and Integrity violations are appropriately investigated and addressed, and reports findings annually to ALLETE’s Board of Directors.

ALLETE ethics and integrity hotline, 866-776-6951.

Our Commitment
As a Company, ALLETE commits to:

+ Supporting individuals’ right to safe and healthy working conditions. We foster a safe and healthy work environment so that we may all remain unhurt at the end of the day.
+ Cultivate a work environment that requires honesty and the highest ethical standards.
+ Ensure that individuals are treated with fairness, dignity and respect.
+ Encourage diversity of thought to foster a culture of mutual respect, trust, and collaboration.
+ Make workplace decisions and actions, including those related to fair wages and benefits, without regard to a person’s protected class.
+ Support and encourage employee growth and development.
+ Fairly compensating workers for their work and ensuring that wages comply with local laws regarding minimum wage, wage payment, overtime and work hours. We provide a competitive wage to our employees, relative to industry standards and labor market drivers, and in accordance with the terms of negotiated collective bargaining agreements.
+ Respect freedom of association and the right to collectively bargain.
+ Encourage and support community engagement.
+ Communicate our human rights expectations and take corrective measure if we believe that supplier products and services are directly related to human rights violations.
+ Support non-profits that serve our communities through donations, foundation grants, scholarship programs, volunteer time off programs, and employee contributions of time, talents, financial resources, etc.
+ Partner with non-profit organizations to close opportunity and achievement gaps to help individuals and communities grow and thrive.
+ Assist the economic development in our region by capitalizing on resources, connections and experience for expansion and relocation projects in our service areas.
References

