



# Destination **2050**

Building the Future

CORPORATE  
RESPONSIBILITY  
**REPORT**

## Forward-looking Statements

Except for the historical statements contained in this report, the matters discussed herein are forward-looking statements that are subject to certain risks, uncertainties and assumptions. Such forward-looking statements, including the 2019 EPS guidance, long-term EPS and dividend growth rate, as well as assumptions and other statements are intended to be identified in this document by the words “anticipate,” “believe,” “could,” “estimate,” “expect,” “intend,” “may,” “objective,” “outlook,” “plan,” “project,” “possible,” “potential,” “should,” “will,” “would” and similar expressions. Actual results may vary materially. Forward looking statements speak only as of the date they are made, and we expressly disclaim any obligation to update any forward-looking information. The following factors, in addition to those discussed elsewhere in this Annual Report on Form 10-K for the fiscal year ended Dec. 31, 2018 (including the items described under Factors Affecting Results of Operations; and the other risk factors listed from time to time by Xcel Energy Inc. in reports filed with the SEC, including “Risk Factors” in Item 1A of this Annual Report on Form 10-K hereto), could cause actual results to differ materially from management expectations as suggested by such forward-looking information: changes in environmental laws and regulations; climate change and other weather, natural disaster and resource depletion, including compliance with any accompanying legislative and regulatory changes; ability of subsidiaries to recover costs from customers; reductions in our credit ratings and the cost of maintaining certain contractual relationships; general economic conditions, including inflation rates, monetary fluctuations and their impact on capital expenditures and the ability of Xcel Energy Inc. and its subsidiaries to obtain financing on favorable terms; availability or cost of capital; our customers’ and counterparties’ ability to pay their debts to us; assumptions and costs relating to funding our employee benefit plans and health care benefits; our subsidiaries’ ability to make dividend payments; tax laws; operational safety, including our nuclear generation facilities; successful long-term operational planning; commodity risks associated with energy markets and production; rising energy prices; costs of potential regulatory penalties; effects of geopolitical events, including war and acts of terrorism; cyber security threats and data security breaches; fuel costs; and employee work force and third party contractor factors.

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## Who we are

Every day we power millions of homes and businesses across eight Western and Midwestern states. Our customers can count on us to be there 24/7 with safe, reliable energy. But, what we provide goes much deeper than that.

Based in Minneapolis, we are a recognized industry leader in delivering renewable energy and in reducing carbon and other emissions, efforts that have put us on a path to a more sustainable energy future. Through a growing range of innovative solutions, we continue to empower customers with energy options and alternatives to support their goals and objectives.

Destination 2050 is all about delivering on our bold vision for a carbon-free future. We are the first major U.S. energy provider to announce an aspiration to serve customers with 100% carbon-free electricity by 2050.

In a rapidly changing industry, we are taking a smart and thoughtful approach to how we produce and deliver energy, looking for better ways to serve our customers and anticipate their needs and expectations. Through our efforts, we are not just preparing for the future we are building it, today.

### Our Vision

We will be the preferred and trusted provider of the energy our customers need.

### Our Mission

We provide our customers the safe, clean, reliable energy services they want and value at a competitive price.

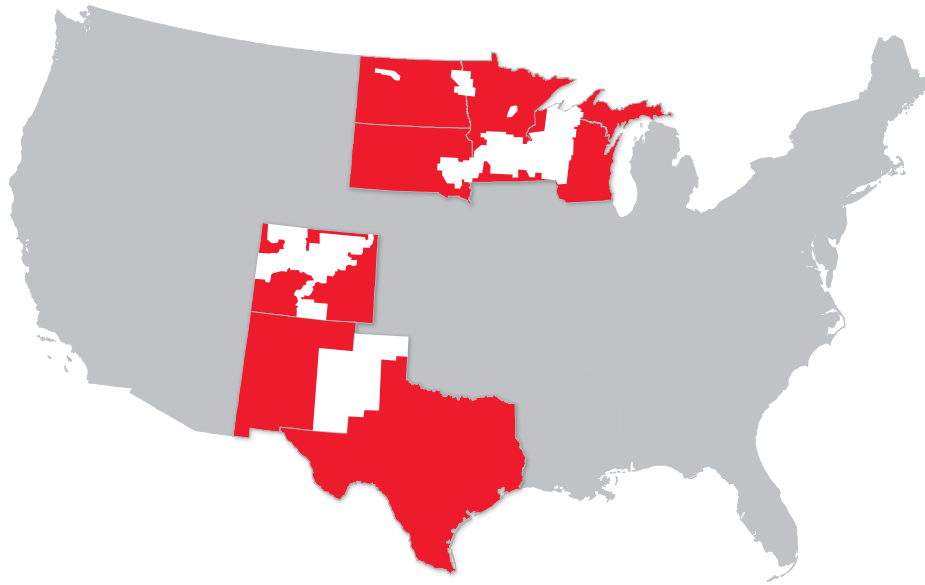
### Our Values

Our values reflect our core beliefs — who we are, how we conduct our business and the importance of our customers. They guide us in our work and in our interactions with each other. We are Committed, Connected, Safe and Trustworthy.



### **Our Service**

Xcel Energy is a major U.S. regulated electric and natural gas delivery company with four utility subsidiaries. We serve 3.6 million electric and 2 million natural gas customers across parts of Minnesota, North Dakota and South Dakota (Northern States Power Company-Minnesota); Wisconsin and Michigan (Northern States Power Company-Wisconsin), Colorado (Public Service Company of Colorado); and Texas and New Mexico (Southwestern Public Service Company).





## Message from the CEO

### To Our Stakeholders:

For decades, the fundamental role of energy providers was simple: keep the lights on. But as energy has become more central to people's lives, expectations are far greater. Today our customers and communities depend on us to do much more — especially when it comes to leading the transition to clean energy and confronting the risk of climate change.

At the end of 2018, we became the first energy provider in the country to announce plans to serve customers with 100% carbon-free electricity by 2050. The theme of this report — Destination 2050: Building the Future — describes our bold vision for a carbon-free future while delivering the reliability and affordability that our customers need and expect.

### A Carbon-free Energy Future

Clean energy matters to our stakeholders. It matters to us too. We've been at the forefront of the clean energy transition for the last 15 years. Since 2005, we've reduced carbon emissions by 38%, and the confluence of changing customer preferences, declining prices of clean technologies and the latest climate reports have accelerated our plans.

On our way to Destination 2050, we established a new interim goal to reduce carbon emissions produced from the electricity that serves our customers by 80% in 2030. We believe we can reach this 2030 target by using existing technologies. Removing the last 20% of carbon from the grid will require advances in technology to develop carbon-free, always-on energy sources. But I'm optimistic and believe we can get there.

To reduce carbon as quickly as possible without impacting reliability and affordability, we expect to continue our Steel for Fuel strategy of building large-scale renewables that deliver both economic and environmental benefits. We currently have a dozen wind farms under development with more on the drawing board. We also expect to expand our use of large-scale solar farms that provide the best consumer value. By 2030, we project renewable sources will generate at least 60% of our electricity. In addition to these renewables that serve all customers, we support customers who want more now by providing options to subscribe for up to 100% renewable energy through unique programs like Renewable\*Connect in Colorado, Minnesota and Wisconsin.

Meanwhile, we have plans to retire four coal units in the early to mid-2020s — two in Minnesota and two in Colorado. Altogether, we are retiring half of our coal-fueled generation by 2026 — and are evaluating the feasibility of additional early retirements. As our energy mix changes with more renewables and less coal, we will continue to use more carbon-friendly natural gas as a bridge that supplies the back-up capacity to help integrate more renewables. We also plan to operate our carbon-free nuclear plants through their licensing periods in the early 2030s.

The easiest way to reduce carbon is to never produce it in the first place. We offer more than 150 energy efficiency programs to help our customers reduce their bills. In fact, five of those programs recently were acknowledged among the best in the country by the American Council for an Energy-Efficient Economy.

Companies like Xcel Energy are uniquely positioned to leverage our carbon-reducing expertise to other sectors of the economy. We're focusing our initial efforts on transportation, as we have several pilot projects under way to help make it easier for customers to purchase electric vehicles and produce 70% less carbon than gas-powered vehicles — and the results will get even better as we continue to transition away from fossil fuels. We have announced a \$25 million investment in Minnesota to develop infrastructure needed to improve home charging and public charging capabilities and plan to expand these efforts soon to other states.

### **Building Stronger Communities**

Just as EVs are beginning to gain traction, coal units are heading in the opposite direction. However, decisions to shut down a coal plant have significant ramifications to the employees who work there, along with the communities that benefit from the tax base.

Announcing plans years in advance is crucial to give these important stakeholders enough time to prepare for the change and provide economic development assistance where possible. A great example comes from Becker, Minnesota, where we announced the closure of two units at the Sherco Generating Plant. We have worked behind the scenes to provide economic development assistance to the local community through the construction of a natural gas-powered plant onsite, which will make up for lost generation, and to attract businesses. This includes Northern Metals Recycling, which is relocating from Minneapolis to Becker, and a large Google data center, pending approval.

As a local business, we're mindful of local spending that helps drive local economies. Last year nearly 70% of our purchasing was with businesses located in our service territory and 12% of our purchasing was with businesses owned by women, minorities or veterans. In addition, some of the projects we invest in, such as transmission lines and wind farms, create hundreds of local construction jobs and significant tax base.

Of course, we are also building the future by working with communities to help them reach their clean energy goals. We have partnered with several communities through our Energy Future Collaborations and Partners in Energy programs to help them reach their clean energy and sustainability goals.

This is in addition to providing reliable and affordable energy that our customers expect. These, along with a strong commitment to public safety, are table stakes in our industry. Last year, we delivered electric reliability that remains in the industry's top one-third, kept bills under the level of inflation and delivered our best-ever performance in gas emergency response. Another way we positively impact our communities is through our dollars and time. In 2018, the Xcel Energy Foundation and our employees donated more than \$11 million and volunteered 90,000 hours with a focus on STEM education, economic sustainability, environmental stewardship and access to arts and culture.

### **Building our Future Workforce**

To best serve our customers and solve tomorrow's energy challenges, we continue to build and train our workforce for the future. We are one team comprised of 11,000 employees. We recently refreshed our corporate values to better align with how we approach our jobs each day. Through a bottom-up approach, employees embraced our four values — Safe, Committed, Connected and Trustworthy — and demonstrate them each day when they come into work.

Through our performance management, professional development and recognition programs, we align employee responsibilities with our three strategic priorities: Leading the Clean Energy Transition, Enhancing the Customer Experience and Keeping Bills Low.

Employee safety is a core value for our organization and is at the forefront of everything we do. Although we achieved first-quartile employee safety in 2018, we had a few significant injuries. As a result, we re-doubled our safety precautions and expanded our communications efforts.

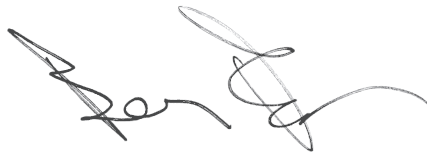
We are committed to hiring and retaining a diverse workforce. Thirty-four percent of our new hires were female, which is just slightly below first-quartile performance. Our hiring of people of color slightly increased to 24%, but remains short of our goals. We began developing customized diversity plans in five business areas, and we expect to build on that program in 2019. We also set a record with 66 high school interns and were named Employer of the Year by St. Paul-based Right Track, a youth training program.

### **Building the Future**

Powering homes and businesses, driving economic development, supporting our communities and protecting the environment are fundamental to how we do business. We embrace the trust our customers place in us and our responsibility to deliver solutions to improve their lives. As you read our Corporate Responsibility Report, you will learn more about our progress and plans for building the future and fulfilling our economic, environmental and community responsibilities.

Thanks for your partnership on this important journey.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ben Fowke', with a stylized flourish at the end.

Ben Fowke  
Chairman, President and CEO





## Corporate Responsibility Governance

How we define, govern and align corporate responsibility with our strategic priorities

For more than a century, Xcel Energy has had the privilege of serving customers and operating in hundreds of communities across its eight-state service territory. We have accomplished this by never losing sight of our responsibilities and the understanding that our success is uniquely tied to the success of those we serve.

## Building the Future, Today

Our corporate vision is to be the preferred and trusted provider of the energy our customers need. To fulfill this, we view our success today and in the future not simply as a measure of profit but equally as our broader impact on the public good. We have a tremendous obligation and opportunity to power people's lives and possibilities with energy that they can trust to be safe, affordable and progressively clean. We work every day to deliver on these requirements for customers and other stakeholders through our focus on the following environmental, social and governance responsibilities.

### Environmental Responsibility

#### Managing natural resources and protecting the environment

We are committed to minimizing and carefully managing our environmental impacts and providing transparent disclosure. As an early adopter of renewable energy, we are leading the clean energy transition and managing the risk of climate change through our bold vision to serve customers with 100% carbon-free electricity by 2050. By reducing carbon emissions, we also decrease other environmental impacts, such as air emissions, waste and water use. Our communities can count on us to protect the environment, and this includes supporting stewardship and conservation projects through our community investment — projects that further enhance and preserve the places where we live, work and do business.

## **Social Responsibility**

### **Supporting the people and places we serve**

We serve people, helping to run their homes and businesses and providing comfort and convenience. We continually strive to create value by offering products and services that our customers want and need, and operating in a way that protects the public and drives economic growth. We support our local communities as a partner in economic development, by assisting customers in need, and giving of our time, talent and financial resources. Building stronger communities is fundamental to our business.

### **Running a successful business and cultivating a strong workforce**

Now more than ever, we are investing in the processes, technology and clean energy that will enhance our service for the future, while maintaining reliable, affordable energy. Our focus is on continuous improvement. This means carefully managing costs and a responsible supply chain, encouraging innovation and ensuring a secure and resilient energy grid for the future. As an employer, we provide a safe and rewarding workplace, one that values people and their contributions and reflects the diversity and strengths of our communities. We operate in a rapidly changing industry, driven by new technologies and evolving customer expectations. Cultivating a workforce that is equally dynamic, highly skilled and customer focused is one of our most important investments.

## **Governance**

### **Maintaining strong governance practices**

Our proven track record of strong financial and operational performance is rooted in a foundation of sound corporate governance and oversight. It starts at the top through a board that is diverse, engaged and experienced. With a strong independent lead director, 12 of our 13 board members are independent and five self-identify as female and/or minority. Together, they bring the diverse perspectives and experience our company needs to be successful. Through annual strategy sessions and other best practices, we effectively manage risks and opportunities, including those related to our environmental and social responsibilities. Throughout Xcel Energy, we continue to foster a culture of compliance and ethical business conduct — one that is founded in our values: Connected, Safe, Committed and Trustworthy.

Throughout our Corporate Responsibility Report, we demonstrate our leadership and progress in fulfilling our social and environmental responsibilities. We cover performance across 24 issues that are associated with these responsibilities and that are important to our industry and to those we serve. We put special emphasis on 10 focus areas that our stakeholders identified as being of most interest to them through a survey conducted in early 2017.

## **Aligning Corporate Responsibility with Corporate Strategic Priorities**

Through our strategic planning process, the board of directors and executive leadership team identified three strategic priorities that represent the keys to our continued success in achieving our vision to be the preferred and trusted provider of the energy our customers need. These priorities include:

- Lead the clean energy transition
- Enhance the customer experience
- Keep bills low

Strong alignment exists between these strategic priorities and our corporate responsibility. The table below demonstrates this alignment to our corporate responsibility focus areas.

	Strategic Priorities	Corporate Responsibility Focus Areas
Social Responsibility	<b>Enhance the Customer Experience</b> <ul style="list-style-type: none"> <li>• View our work through customers' eyes</li> <li>• Make it easy for customers to do business with us</li> <li>• Offer products and services that our customers value</li> <li>• Help strengthen our local communities</li> </ul>	<b>Affordable Energy.</b> Transform our cost structure to become more efficient and customer focused, while investing in projects that reduce fuel and other expenses for customers.
	<b>Keep Customer Bills Low</b> <ul style="list-style-type: none"> <li>• Carefully manage our costs</li> <li>• Continuously improve how we work to improve efficiency without compromising safety or reliability</li> <li>• Keep total bill increases at or below the rate of inflation</li> </ul>	<b>Reliable Energy.</b> Deliver strong system reliability and outage response capabilities.
		<b>Public Safety and Employee Safety.</b> Ensure individuals living and working near our facilities are aware of potential hazards and respond safely to them.
Environmental Responsibility	<b>Lead the Clean Energy Transition</b> <ul style="list-style-type: none"> <li>• Serve customers with cleaner, reliable energy through increased ownership of wind and solar generation and continued operation of our nuclear fleet.</li> <li>• Invest in the grid, including advanced technologies and transmission that enable more renewable energy</li> <li>• Reduce carbon and other emissions, improving environmental performance</li> <li>• Encourage and help enable the electrification or implementation of low-carbon solutions in other industries</li> </ul>	<b>Energy Efficiency.</b> Support customers and the communities we serve in attaining their energy conservation goals.
		<b>Renewable and Advanced Clean Technologies.</b> Increase the use of economic renewables and position the power grid as a platform for new energy services.
		<b>Greenhouse Gas Emissions and Air Quality.</b> Continue to pursue a cost-effective clean energy strategy to reduce carbon and other air emissions.
	<b>The Foundation of All Our Efforts</b>	
	<b>Corporate Governance.</b> Ensure sound corporate governance and a culture of compliance by focusing on strong practices, independent oversight and shareholder rights.	

## Corporate Responsibility Governance

Corporate responsibility is embedded throughout our organization and integrated into our governance processes. With strong leadership from our board of directors and executive management team, along with engaged leaders and organizations across the company, we are able to effectively manage risks and opportunities and drive strong performance across a spectrum of corporate responsibility issues.

The table below describes key aspects of our corporate governance that cover corporate responsibility.

<b>Board Oversight</b>	<p>Our board of directors, led by the chairman, president and CEO, oversees corporate responsibility-related issues and initiatives.</p> <ul style="list-style-type: none"> <li>• Board committees and responsibilities related to corporate responsibility include: <ul style="list-style-type: none"> <li>– The Governance, Compensation and Nominating and Audit committees oversee respectively the Code of Conduct and corporate compliance.</li> <li>– The Operations, Nuclear, Environmental and Safety Committee oversees environmental strategy and compliance, safety and operational performance, customer service levels and all aspects of excellence in delivering electricity and natural gas service to customers.</li> <li>– The Finance Committee oversees our clean energy investments, investor relations and financial health.</li> </ul> </li> <li>• The board follows a regular meeting schedule that ensures it is able to consider and address key issues, including those related to corporate responsibility. In addition, it conducts an annual strategy session to consider new and emerging trends, consult with outside experts and assess current strategies and initiatives.</li> </ul>
<b>Executive Oversight and Management</b>	<p>The executive team plans and executes on strategies designed to achieve Xcel Energy's priorities, including corporate responsibility-related issues and initiatives.</p> <ul style="list-style-type: none"> <li>• The executive team is responsible for the strategic direction of the company and sets key initiatives, including growth plans, the clean energy strategy and other corporate responsibility efforts. They consider evolving customer trends and preferences, industry and technology needs affecting our business, developments in the external landscape and policy considerations.</li> <li>• Strategies and key initiatives are crafted and executed to strike a balance between reliability, affordability and environmental impact.</li> <li>• Our executive compensation is tied directly to company performance, specifically reliability, cost management, customer satisfaction, public and employee safety, achievement of carbon emission reduction goals and financial performance.</li> </ul>
<b>Business Area Management</b>	<p>While the entire organization supports our corporate responsibility efforts, specific issues are directly tied to individual areas to manage. We use effective performance management techniques and compensation design to align employees around successful execution of our goals and efforts.</p> <ul style="list-style-type: none"> <li>• General Counsel: Ethics and compliance</li> <li>• Corporate Secretary: Governance, ethics and compliance, strategic planning and disclosure</li> <li>• Operations: Energy affordability and reliability, fuel diversity, advanced grid and environmental performance</li> <li>• Customer and Innovation Office: Energy efficiency, customer programs and satisfaction, economic development, security and emerging technology</li> <li>• Human Resources: Labor practices, safety and community giving</li> <li>• Financial Operations: Risk management, investor relations and disclosure</li> <li>• Nuclear Operations: Nuclear generation, safety and waste management</li> </ul>
<b>Operating Companies</b>	<p>Our operating companies execute on our corporate strategy and develop and implement plans that address corporate responsibility and fulfill our economic, environmental and community responsibilities.</p> <ul style="list-style-type: none"> <li>• Operating company staff engages with stakeholders to help ensure mutual priorities and goals are addressed.</li> <li>• Policy staff develops strategy and engages on energy policy issues, including climate change, environmental policy and sustainability strategy.</li> <li>• Resource plans are developed and analyzed for meeting customers' future energy needs and achieving clean energy and other stakeholder priorities.</li> </ul>



## Stakeholder Engagement

As a regulated, public utility we can only be successful if we have insight into the needs and priorities of those who our business relies on and serves. Because of this, we regularly engage with our stakeholders and seek opportunities to better understand their interests, concerns and emerging trends. The feedback we receive from these interactions helps to inform our business plans and strategies.

Xcel Energy's stakeholders are those individuals and groups who affect or are affected by our business operations. They fall within the following general categories:

- Customers
- Employees
- Communities, including local government officials, non-profits and community organizations, and advocacy groups
- Legislators and regulators
- Investors

Our stakeholder engagement is far-reaching and transparent, with regular, ongoing business interactions and special meetings, presentations and proceedings before our state public utilities commissions. Our account management and state and local affairs and community relations teams have always engaged with large customers, city and county governments, influential organizations and individuals, state legislators and policy makers to discuss important service and energy-related issues and projects. We annually report on our lobbying and political contributions, which are governed by corporate policy. We also have a strong presence in our service territory through our community giving and volunteer support of community initiatives and programs.

In addition to our regular, ongoing engagement, we conducted a special survey in 2017 to better understand our local stakeholders and their priorities related to corporate responsibility. Results from the survey helped to inform the content and focus for this report, as well as our efforts in general.

### How We Engage

The table below outlines our regular, ongoing engagement with stakeholders and our response to stakeholder interests.

Stakeholder group	Engagement	Key interests	Our response
<b>Customers</b>	<ul style="list-style-type: none"> <li>• Customer Contact Center</li> <li>• Key account managers</li> <li>• Personal account representatives for customers in need</li> <li>• Customer advocate process</li> <li>• Surveys and focus groups</li> <li>• Customer communications and account information</li> <li>• Special events and meetings</li> </ul>	<ul style="list-style-type: none"> <li>• Energy service start and stop</li> <li>• Service reliability and timely outage response</li> <li>• Electric and natural gas safety</li> <li>• Energy affordability and money saving opportunities</li> <li>• Easy billing and online account management</li> <li>• Information privacy</li> <li>• Neighborhood construction or repair work</li> <li>• Renewable and clean energy</li> </ul>	<ul style="list-style-type: none"> <li>• Public safety materials, programs and advertising</li> <li>• Extensive energy-saving programs and tips</li> <li>• Online account management programs and the Xcel Energy app</li> <li>• Online outage map and improved outage communications</li> <li>• Construction project communications</li> <li>• Data privacy process</li> <li>• Renewable choice programs</li> <li>• Clean energy leadership and strategy</li> </ul>

Stakeholder group	Engagement	Key interests	Our response
<b>Employees</b>	<ul style="list-style-type: none"> <li>• Leadership meetings</li> <li>• Employee meetings and webcasts</li> <li>• Bargaining unit negotiations and communications</li> <li>• Employee surveys</li> <li>• Employee Communications</li> <li>• Quarterly performance connections</li> </ul>	<ul style="list-style-type: none"> <li>• Market-based compensation and benefits</li> <li>• Professional development</li> <li>• Communication</li> <li>• Recognition</li> <li>• Community involvement</li> <li>• Engagement in energy policy</li> </ul>	<ul style="list-style-type: none"> <li>• Total Rewards statement and tools, such as My Financial Future planning tool</li> <li>• Connect4Performance performance management</li> <li>• Professional development resources and tuition reimbursement</li> <li>• I Deliver and Innovator recognition awards</li> <li>• New employee orientation</li> <li>• Print, electronic and video communications</li> <li>• Volunteer activities and paid-time-off program</li> <li>• United Way campaigns and matching gift program</li> <li>• Business Resource Groups</li> <li>• Diversity and inclusion education</li> <li>• Wellness programs</li> <li>• Grassroots political events and political action committees</li> </ul>
<b>Communities</b>	<ul style="list-style-type: none"> <li>• Project-specific stakeholder meetings and open house events</li> <li>• Community relations staff</li> <li>• Partnerships and local memberships</li> <li>• Franchise agreements</li> <li>• Presentations and speaking engagements</li> <li>• Sponsorships and community events</li> <li>• Volunteer projects</li> </ul>	<ul style="list-style-type: none"> <li>• Public safety</li> <li>• Project input and communication</li> <li>• Community giving</li> <li>• Economic development and jobs</li> <li>• Support for community goals</li> <li>• Renewable and clean energy</li> <li>• Energy efficiency</li> </ul>	<ul style="list-style-type: none"> <li>• Public safety programs</li> <li>• Project communications</li> <li>• Xcel Energy Foundation giving and United Way campaigns</li> <li>• Employee volunteer programs and community board support</li> <li>• Programs for customers in need</li> <li>• Clean energy leadership and strategy</li> <li>• Renewable choice and energy efficiency programs</li> </ul>

Stakeholder group	Engagement	Key interests	Our response
<b>Legislators and regulators*</b>	<ul style="list-style-type: none"> <li>• Policy and legislative involvement</li> <li>• Governmental and regulatory staff</li> <li>• Regulatory filings and proceedings</li> <li>• Political action committees and grassroots employee events</li> <li>• Speaking engagements</li> </ul>	<ul style="list-style-type: none"> <li>• Affordable energy</li> <li>• Reliable energy service</li> <li>• Renewable and clean energy</li> <li>• Climate change and greenhouse gas emissions</li> <li>• Environmental protection</li> <li>• Responsible corporate governance</li> </ul>	<ul style="list-style-type: none"> <li>• Continuous improvement and cost management</li> <li>• Clean energy leadership and strategy</li> <li>• Renewable choice and energy efficiency programs</li> <li>• Corporate environmental policy and environmental management system</li> <li>• Voluntary emissions reduction initiatives</li> <li>• Highly rated corporate governance program</li> </ul>
<b>Investors</b>	<ul style="list-style-type: none"> <li>• Investor meetings, presentations and teleconferences</li> <li>• Participation at investor conferences</li> <li>• Website</li> <li>• Annual report, 10-K, 10-Q, proxy, financial press releases and other disclosures</li> <li>• Annual shareholder meeting</li> </ul>	<ul style="list-style-type: none"> <li>• Stock appreciation and company growth prospects</li> <li>• Meet earnings per share guidance</li> <li>• Meet long-term EPS and dividend growth objectives</li> <li>• Deliver a superior total shareholder return relative to our peer group</li> <li>• Solid credit ratings</li> <li>• Financing needs</li> <li>• Favorable regulatory environment</li> <li>• Transparency</li> <li>• Risk management</li> </ul>	<ul style="list-style-type: none"> <li>• Corporate strategy that includes a fair return on investment, utility business investment and stakeholder alignment</li> <li>• Clean energy leadership and Steel for Fuel strategy</li> <li>• Highly rated corporate governance programs</li> <li>• Investor relations communications and mobile app</li> </ul>

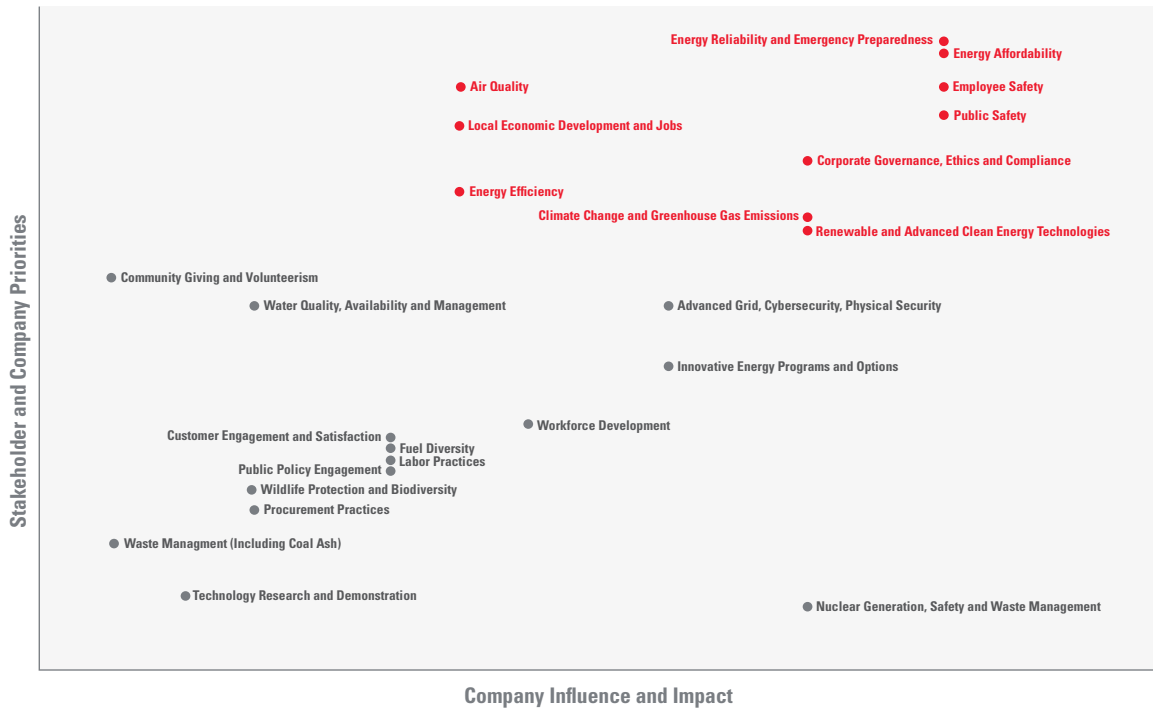
## Identifying Areas of Focus for Corporate Responsibility

Based on stakeholder engagement, research and participation in a number of industry and sustainability forums, we have identified 24 major corporate responsibility issues for Xcel Energy. These issues closely align with the sustainability issues facing the entire electric sector, as identified through an extensive study conducted by the Electric Power Research Institute's Energy Sustainability Interest Group — of which, Xcel Energy is a member.

In early 2017, using the Global Reporting Initiative methodology to guide us, we conducted an online survey with nearly 1,000 stakeholders to understand which issues are currently most important to the individuals and organizations within our service territory, as well as within our own organization. The results are provided in the chart below.

While all of these issues are important, we consider the issues highlighted in red to be focus areas. They reflect the current priorities of our stakeholders and for our company where we can have a meaningful impact. Consequently, to the extent we are successful in addressing and managing these issues, we will be delivering real value.

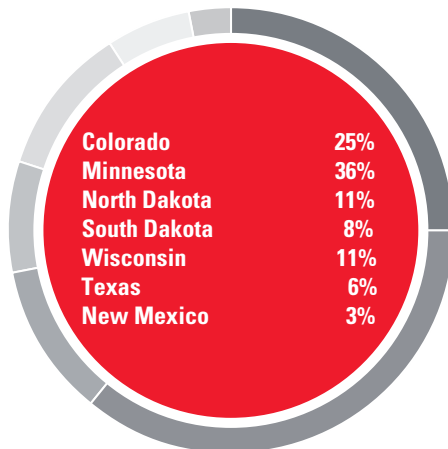
## Corporate Responsibility Focus Areas



## Methodology for Corporate Responsibility Survey

The corporate responsibility survey was conducted internally and designed to have stakeholders identify their top priorities for Xcel Energy's corporate responsibility efforts. Xcel Energy's executive leadership also answered the survey to understand our internal priorities. Altogether, the survey was distributed to nearly 1,000 internal and external stakeholders across our eight-state service territory. Approximately 26% of potential respondents participated. The respondents represented a good mix of our local stakeholder categories and our service territory.

Respondent by State



Respondent by Stakeholder





The survey was based on the 24 corporate responsibility issues we identified for our company. These issues were based on our experience through regular stakeholder engagement, research and participation in a number of industry and sustainability forums. Many of these issues align with industry research conducted by the EPRI Sustainability Interest Group.

Throughout the survey, respondents were asked to prioritize the corporate responsibility issues in different ways and had the opportunity to identify new issues. First, the respondents ranked their priority issue within five categories. These are the responses shown in the graph in the section above. Second, respondents listed their top five corporate responsibility issues without any categories. Lastly, respondents could add new issues and describe any sustainability goals that their own organizations may have and how Xcel Energy could help meet those goals.

Xcel Energy corporate responsibility issues and definitions, including 10 identified focus areas highlighted below.

<b>Advanced Grid, Cybersecurity, Physical Security</b>	Upgrading the power grid with advanced technologies to improve reliability and security; protecting important systems and infrastructure from unauthorized access or attack; drilling emergency scenarios both with and without external stakeholders to ensure effective response to potential events
<b>Air Quality</b>	Reducing air emissions other than greenhouse gases from our operations, including nitrogen oxides, sulfur dioxide, mercury and particulate matter, both through emissions controls and fleet transformation
<b>Climate Change and Greenhouse Gas Emissions</b>	Managing and reducing the greenhouse gas emissions from our operations, including carbon dioxide, methane and sulfur hexafluoride (SF6) through fleet transformation
<b>Community Giving and Volunteerism</b>	Giving both time and money to local nonprofit organizations; supporting energy assistance programs for customers in need
<b>Corporate Governance, Ethics and Compliance</b>	Ensuring adherence to the rules, practices and processes that direct and control our company; setting ethical expectations and values and monitoring adherence to applicable laws and regulations
<b>Customer Engagement and Satisfaction</b>	Working with customers to understand their needs and improve the service and products we provide; ensuring a positive customer experience with interactions that are focused, simple and transparent; meeting our scorecard objective of building customer loyalty
<b>Employee Safety</b>	Adopting, enacting, and promoting effective programs that protect the health and safety of employees and contractors
<b>Energy Affordability</b>	Ensuring electricity and natural gas bills are affordable for consumers
<b>Energy Efficiency</b>	Providing programs to help customers take control of their energy usage and save money, including traditional rebate programs and advanced home solutions
<b>Energy Reliability and Emergency Preparedness</b>	Providing electricity and natural gas with few to no interruptions; being prepared to quickly repair outages caused by storms or other incidents
<b>Fuel Diversity</b>	Minimizing dependence on any one energy source by using a diverse mix of sources to generate electricity
<b>Innovative Energy Programs and Options</b>	Offering programs that give customers choice over their energy sources, such as helping them access more wind and solar power or helping them fuel electric or natural gas vehicles
<b>Labor Practices</b>	Adopting responsible practices related to employee pay, benefits and equal opportunity
<b>Local Economic Development and Jobs</b>	Working with the community to attract and support new business development and economic growth

<b>Nuclear Generation, Safety and Waste Management</b>	Maintaining Xcel Energy's nuclear fleet that provides reliable, carbon-free electricity, in a way that ensures safety and emergency preparedness; safely handling and storing solid waste from nuclear generation
<b>Procurement Practices</b>	Doing business with responsible, local and/or diverse suppliers for the equipment, materials and services we purchase
<b>Public Policy Engagement</b>	Engaging and collaborating with policymakers and providing input on proposed legislation and regulations
<b>Public Safety</b>	Providing education to prevent accidental contact with electric power lines and natural gas pipelines; protecting the public around our facilities and facility operations; ensuring effective emergency response to public safety issues around our facilities
<b>Renewable and Advanced Clean Technologies</b>	Increasing electricity generation from clean, renewable energy sources, including wind farms and solar power plants; deploying advanced technologies to reliably manage higher levels of wind and solar energy
<b>Technology Research and Demonstration</b>	Participating in projects to test advanced energy technologies that have potential for providing customers with new products and services in the future; supporting industry research efforts through financial contributions, staff involvement and demonstration projects
<b>Waste Management</b>	Preventing and reducing waste produced from our operations, including coal ash; reusing or recycling waste instead of disposing of it in landfills; operating power plants fueled by waste
<b>Water Quality, Availability and Management</b>	Ensuring the availability of water for electricity generation and all other users; protecting water quality
<b>Wildlife Protection and Biodiversity</b>	Avoiding or minimizing impacts to protect species and their habitats; supporting raptor habitat and providing education and conservation opportunities on raptors
<b>Workforce Development</b>	Maintaining a workforce of the right size and skill profile, includes our talent management strategy and diversity and inclusion efforts; engaging in community efforts to develop pipeline of future employees; providing competitive employment opportunities and supporting diverse business resource groups



## About this Report

**Publication Date:** May 2019

**Reporting Period:** Jan. 1 – Dec. 31, 2018

**Date of Previous Report:** May 2018 (for 2017)

**Reporting Cycle:** Annual

**Report Boundary:** Xcel Energy and its four regulated subsidiaries

**Contact Point:** [corporateresponsibility@xcelenergy.com](mailto:corporateresponsibility@xcelenergy.com)

Xcel Energy's annual Corporate Responsibility Report focuses on the company's environmental and social contributions, and is built on 24 issues that we have identified as important to our stakeholders and company.

This year marks the 14th year we have published the report. Our first Corporate Responsibility Report (formerly known as the Triple Bottom Line report) was published in April 2005, with the contents covering the 2004 calendar year. The report is published online, and to raise awareness for it, we print a highlights brochure that is distributed at our annual shareholders' meeting and at other events throughout the year.

### How to Use this Report

Our ongoing goal for this report is to improve transparency and to meet the different information needs of the stakeholders that use it. With this in mind, we provide different levels of information.

- The *CEO Message* from Xcel Energy's chairman, president and CEO, Ben Fowke, discusses our role in serving communities and our priorities and annual performance.
- The *2018 Highlights* page provides an introduction to Xcel Energy and a high-level look at our environmental, social and economic contributions for the year.
- The *Library of Briefs* offers a deeper discussion of our approach to managing specific topics — the content of the briefs covers the 24 corporate responsibility issues we identify in the Corporate Responsibility Governance section of the report.

- The *Corporate Responsibility Governance* section describes our corporate responsibility and how we govern it, along with our stakeholder engagement and 24 issues underpinning this report. It also demonstrates the alignment between with our corporate responsibility focus areas and corporate strategic priorities.
- For those interested in the numbers, we provide a *Performance Summary* that is a list of disclosures and also the *GRI Standards Content Index*.
- A full copy of the report, which includes all the content from this website, can be downloaded as a PDF. Past reports can be found in the report archive online.
- Xcel Energy publishes an Edison Electric Institute (EEI) environmental, social, governance and sustainability report, a new industry report that provides information in a measurable and consistent format for investors.
- Throughout the report, we also provide links to more information published in other corporate reports, such as the 2018 Annual Report, 2019 Proxy Statement or online at [xcelenergy.com](http://xcelenergy.com).

### **Global Reporting Initiative Guidelines**

Xcel Energy continues to base its Corporate Responsibility Report on Global Reporting Initiative (GRI) guidelines, which we have used since 2008. This year's report is based on GRI's Standards in accordance with the Core option and the Electric Utilities Sector Supplement. We have tried to meet the intent and follow the standards as closely as possible; however, there are instances where we track information for disclosure differently or not at all, based on our company or stakeholder information needs.





Customers and communities





Our customers today are asking us to do more, and we have the opportunity to deliver on their evolving expectations and help to build the future of our industry.

Customer engagement, satisfaction and energy affordability

## Earning customer satisfaction and trust

Each and every time our customers engage with us, we want to make it easy for them and deliver a positive, best-in-class experience.

We understand that energy is a necessity in people's lives. Above all else, to earn their satisfaction and trust, we must first deliver on our responsibility to provide safe, reliable and affordable energy that is increasingly clean. This also means being there when customers need us most — whether they are experiencing a service outage, struggling to pay a bill or looking for ways to better manage their energy use.

Enhancing the customer experience is a strategic priority for Xcel Energy, and to fulfill it, we are focused on improving all levels and points of service for customers. We constantly manage the systems, processes and people we have in place to meet different customer needs and circumstances, and we are expanding the products and services we offer to support our customers even more.

### 2018 Results

- As we continue to focus on improving the customer experience during an outage, we worked to improve our internal processes in 2018. This included training employees on when and how to update estimated restoration times to provide customers with more timely and accurate information, coupled with reporting to emphasize process adherence. This ongoing effort is showing up in customer satisfaction perceptions. We moved ahead of 12 utilities in our peer set of 56 utilities from 2017 to 2018, placing us in the upper second quartile for outage communications.

- We continue to foster a workforce culture where all employees take ownership in ensuring a dependable, easy, enjoyable and personal experience for our customers. We launched Customer Experience Training, with more than 3,000 employees completing the in-person sessions that focus on: building a customer-centric mindset, ownership and personal accountability, and taking action. The goal is for all employees to complete the training in the next several years.
- Xcel Energy's average annual residential energy bills continue to be below the national average. Our average residential electric bills from 2009 to 2018 are 26% lower than average, and from 2008 to 2017, our natural gas bills are 14% lower than average.
- We provided approximately \$51.9 million to customer energy assistance programs for the year that helped almost 198,000 individuals and families throughout our service area.

## The Regulatory Compact

We operate under carefully regulated conditions that are determined in part by state public utilities commissions — a governing body that regulates the rates and services of utilities such as ours. In exchange for the exclusive right to provide electricity and natural gas services in certain regions, we agree to the following regulatory compact:

- **Duty to serve:** We cannot pick and choose our customers. We will provide service to any residence or business within our service territory that requests it under reasonable terms and conditions.
- **Cost of service pricing:** We cannot arbitrarily raise prices to levels beyond our costs. Pricing for our services is regulated by the costs we incur to deliver them.
- **Resource planning process:** Every few years, we go through a process to determine the resources necessary to serve customers' future energy needs. Resource plans must be reviewed and approved by regulatory commissions, and stakeholders can provide input on the plans through a public process.

In return, we are granted the ability to recover our costs of doing business and earn a reasonable rate of return. Although, this rate of return is not guaranteed — we have only the opportunity to earn it. To operate effectively in a closely regulated business like ours, it is imperative that we stay in sync with the current demands of the public and our policy makers.

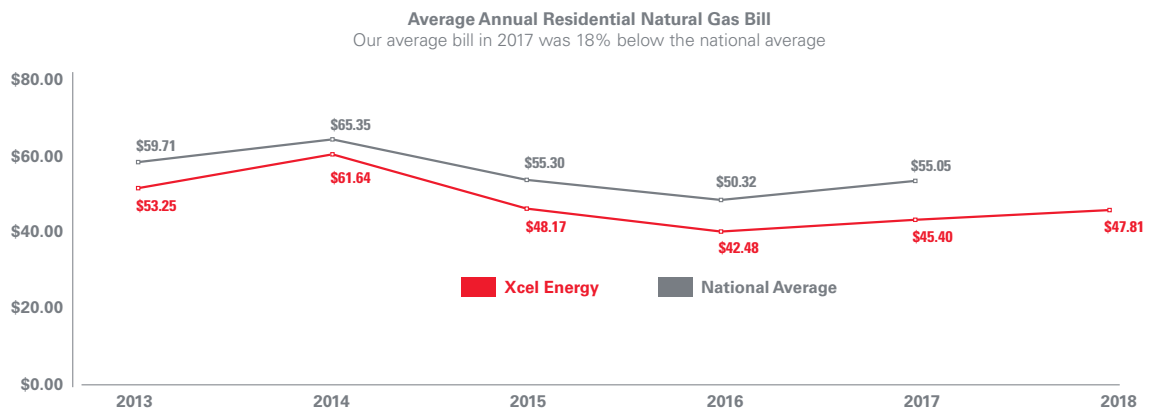
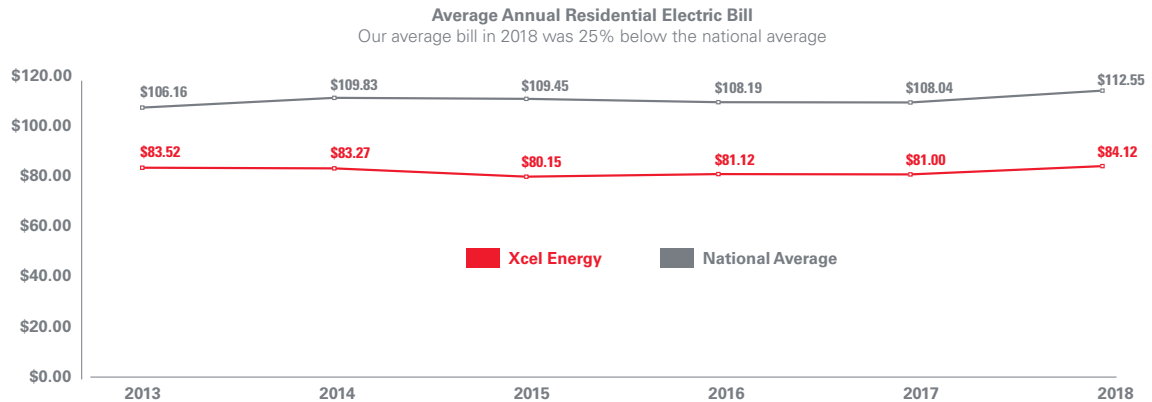
## Managing Customer Energy Bills

We continue to focus on the cost of service to deliver on our company's priority to keep energy bills low for customers. We saw an uptick in Xcel Energy's average residential electric and natural gas bills in 2018, although we continue to have among the lowest average residential bills in the country. We calculate that Xcel Energy customers over the past decade have spent \$3,365 less on electricity and \$1,007 less for natural gas compared to the national average.

Xcel Energy's lower than average customer bills are likely but not exclusively the result of:

- Our comprehensive portfolio of energy efficiency programs, as well as changing codes and standards that result in more efficient buildings and appliances
- Company-wide disciplined cost management
- Investments through our Steel for Fuel strategy, which calls for adding clean, renewable projects at a cost that is offset by the future fuel savings
- Growth in on-site or rooftop solar panels
- Increases in multi-family housing construction
- Weather differences, which can increase or reduce average bills for the year

## Xcel Energy Comparison of Average Monthly Bills



Based on EIA bill trend data reported each year by utilities and revised by EIA in early 2019. Represents Xcel Energy annual average of monthly bills, excluding taxes and franchise fees; annual national natural gas bill information is not yet available.

## Measuring Customer Satisfaction

We monitor customer perceptions of the company and our performance through several tools. The two most notable are the J.D. Power & Associates Electric Utility Customer Satisfaction studies and the customer transactional satisfaction studies that we implement with our partner, MaritzCX.

J.D. Power & Associates implements an industry-wide benchmark that provides details of our relationship with residential and small- to medium-sized business customers and how that compares to industry peers. For the residential electric study, we improved from low second quartile in our peer set in 2017 to high second quartile in 2018. Residential customers provided the most positive feedback in the areas of quality and reliable electricity service, efforts to develop energy supply plans for the future and total monthly cost of electric service. With business customers, Xcel Energy ranked in the second quartile in our peer set in 2018. Our highest satisfaction scores among business customers were for efforts to develop supply plans for the future and for actions to take care of the environment.

We also continue to demonstrate strong performance at our customer contact centers. Through regular transactional surveys in 2018, 85% of residential and business customers reported that they were satisfied with their transaction involving an agent at our contact centers. Similarly, more than 86% of customers reported their problem or issue was resolved on the first call to Xcel Energy. Our Customer Care organization sets annual goals with satisfaction and first call resolution, and we met or exceeded both of these in 2018.

## Customers in Need

We work with state and local agencies and advocates for low-income customers to provide energy assistance to those in need. Our Personal Accounts department helps to monitor and assist customers who have medical needs or who are struggling to make their monthly energy payments. They can assist and make energy bills more affordable to income-qualified individuals and families by promoting special energy efficiency programs, arranging payment plans and providing energy assistance resources.

Our support of energy assistance includes:

- Public policy and advocacy supporting efforts on the state and federal level for funding of Low-income Home Energy Assistance Programs (LIHEAP)
- Funding for state and local energy assistance agencies and energy weatherization programs
- Encouraging our customers to contribute to statewide fuel funds via their Xcel Energy bills
- In-kind marketing and public relations to support energy assistance organizations and advocates for low-income customers

We encourage customers who are having trouble paying their bills to contact us to develop a payment plan and determine if additional assistance is available. In Minnesota and Colorado, we have medical exemption or affordability programs for low-income customers with special medical needs to help them with their utility bills.

We only disconnect service as a last resort if we are unable to resolve the issue or arrange a payment plan. For customers behind on their payments, we typically send a reminder notice 33 days after the unpaid bill is due and a disconnection notice 64 days after the original due date. In 2018, we disconnected service to a total of 64,635 customers. The majority of these customers were reconnected within 72 hours of the disconnect after they arranged payment plans or paid their bills in full. Heat-affected disconnections are not performed in our five Upper Midwest states during the heating season. In each of our states, our Customer Care leadership has the authority to suspend disconnections during extreme weather or other emergency situations.

## Scam Awareness

Nationwide and internationally scammers continue to target utility customers, trying to take their money. Utility scam activity first spiked in 2014, and since then, we have combatted the problem by making technology changes and raising awareness to expose the tactics of scammers and help customers protect themselves.

Customer losses were down 8% in 2018 compared to the previous year, while the reported number of scam attempts was up, indicating customers may be increasingly informed around the danger scammers present. Since we formally began to address the issue, customer losses are down by more than half.

We are able to track both in-person and phone-based scam attempts thanks to the reports of customers. When we learn of heightened scam activity in specific locations, we promptly contact local media and use our social media channels to release information and alert customers. The data we collect is also used in partnership with law enforcement to investigate possible larger scam efforts and trends across our territory, with the ultimate goal of shutting down scammers. Xcel Energy security alone has shut down more than 250 phone numbers used by scammers to target our customers.

In addition, we joined Utilities United Against Scams in 2016, a collaborative of more than 100 utilities across the United States. Members share leading practices and updates about how scams are affecting their customers, as well as ideas and updates on what they are doing to spread awareness. The group was instrumental in establishing an annual awareness day — National Utilities United Against Scams Day — which takes place on the third Wednesday each November.

## **Data Privacy**

Xcel Energy takes seriously our responsibility to protect company information, including the confidential information that we generate and receive about our operations, customers, employees, contractors and vendors. Our corporate policies and standards regarding information management and protection are designed to maintain the trust of the individuals and organizations we do business with.

We operate in a highly regulated industry that requires the continued operation of sophisticated information technology systems and network infrastructure. In the ordinary course of business, we use our systems and infrastructure to create, collect, use, disclose, store, dispose of and otherwise process information. Our employees and contractors are trained on information management and protection requirements.

Our Enterprise Security Services group helps ensure the protection of company information across all business units. This organization includes four main branches: Cyber Security, Enterprise Resilience, Physical Security and Security Governance and Risk Services. In addition, we have established a Cyber Defense Center and an Enterprise Command Center designed to investigate, respond, mitigate and remediate incidents and vulnerabilities that may involve company information.





Serving our customers involves working to keep them safe. We continuously promote public safety campaigns to raise awareness around the hazards associated with natural gas and electricity.

## Public safety

# Raising safety awareness

Our goal is for everyone who lives, works or gathers near our facilities to be aware of possible hazards and how to respond safely to them.

Ensuring the safety of our employees, customers and the public is a responsibility we take very seriously. To do this, we have comprehensive outreach programs that promote safe behavior among our customers, communities, emergency responders and third-party workers.

Ultimately, we aim to prevent accidents that can result in serious injury or death, property damage, costly repairs or fines and decreased service reliability. Most serious accidents involving the energy we deliver happen because someone directly or indirectly makes contact with an overhead electric line, digs into an electric or natural gas line, or fails to respond safely to the warning signs of a natural gas or electric emergency.

### 2018 Results

- Our company delivered its best-ever public safety performance during the year. We surpassed our annual target of 1.30 or fewer excavation damages per 1,000 locate requests by more than 8% as the number of third-party dig-ins to underground pipes and wires continued to decline and responded within an hour or less to 87% of customer calls associated with a suspected natural gas leak or other emergency.
- We opened new training villages in Minnesota and Colorado that will provide 600 to 800 employees and community emergency responders with the opportunity to train in a realistic setting. The villages can simulate more than 40 different types of natural gas leaks and recreate incidents that have occurred across the country.
- Customer recall of our safety advertising and perception of our commitment to public safety continue to steadily increase, as measured by customer survey responses.

- An advertising partnership among utilities to promote calling 811 before digging resulted in nearly 1.1 million total message impressions in April 2018 — national safe digging month.
- Xcel Energy linemen Kellen Schmidt and Scott Knight were instrumental in changing Minnesota's Move Over law, which now requires drivers to slow down or move over when approaching utility, construction and emergency vehicles stopped along two-lane roads.

## Public Safety Awareness Efforts

Raising awareness about the dangers associated with activities near overhead and underground electric and natural gas lines is no easy task. We send direct mail to thousands of customers each year and offer free safety materials through fulfillment programs and partner organizations. We also offer online safety resources for emergency responders, public officials, elementary educators, students and their parents, and third-party workers.

We employ the following tactics to raise public safety awareness:

- Advertising
- Broadcast media appearances and outreach
- Email communications
- Event appearances
- Mailings
- Social Media
- Sponsorships
- Trainings and meetings
- Websites

### Advertising

Xcel Energy's Always Delivering campaign launched in mid-2016 and continued to carry public safety messages throughout 2018. While the campaign uses simple language and consistent, entertaining visuals, as well as subtle humor and a friendly approach, we adjusted safety language to be a bit more serious and even more direct to make a quicker connection to our critical safety messages.

Advertising continues to be one of our most successful tactics for raising safety awareness. With an objective to reach as many customers as possible, we extended our campaigns to run year-round in 2018 and concentrated on high-impact media, such as television, radio and digital advertising. As a result, we increased total number of impressions by approximately 50%.

### Outreach to Specialty Audiences

Throughout the year, we also focus awareness efforts on audiences that are influential or play an important role in supporting public safety. These audiences include:

- Emergency responders, such as firefighters and law enforcement, who may be first to respond to electric and natural gas emergencies
- Third-party contractors who may come into contact with power lines or natural pipelines as part of their jobs, including construction, roofing and tree care professionals, as well as agricultural workers and those who do excavation work
- Educators, including principals and superintendents, and teachers and students in second through sixth grades

We have fulfillment programs that annually distribute tens of thousands of brochures, booklets, DVDs, videos, posters, activity sheets, visitor cards or other materials tailored to educate and inform these audiences of safety practices and hazards. Many of these communications are provided in both English and Spanish. We also direct these groups to use our e-SMART worker and e-SMART kids websites, as well as the Responding to Utility Emergencies online training that we sponsor.

In addition to materials and online resources, we provide in-person trainings and conduct numerous emergency drills for local emergency responders, and offer school and community safety presentations. There is an online course to encourage and train Xcel Energy employees who want to volunteer as Public Safety Ambassadors and conduct public safety presentations or participate in community events.

## Public Safety Campaigns

Our public safety campaigns are targeted at communicating outreach messages in four key areas, including:

- Calling 811 before digging
- Staying at least 10 feet away from overhead lines to be safe
- Recognizing and responding to a possible natural gas leak
- Keeping natural gas meters clear of snow and ice

### Call 811 Before You Dig

Accidental third-party excavation damage to underground electric and natural gas facilities not only interrupts service for our customers unnecessarily, it is a significant safety concern and remains the biggest threat to our natural gas distribution systems. Xcel Energy is a member of the Common Ground Alliance, a member-driven association committed to saving lives and preventing damage to underground infrastructure by promoting effective damage prevention practices. The association's most prominent initiative is the national 811 phone number that people can call to have underground utility lines marked before they dig.

Some of our outreach efforts to promote 811 in 2018 included:

- Launching an advertising partnership in Colorado and Minnesota. Together with Colorado 811, Centerpoint Energy and Gopher State One Call, we created a cohesive, separately branded message for calling 811 before digging.
- Sending semi-annual bill inserts with details about the importance of maintaining customer-owned service lines, and updating the semi-annual natural gas safety bill insert to include this information, so that this message will now be delivered quarterly.
- Participating in the National Excavator Initiative video as a subject matter expert for calling 811 and safe digging practices. Xcel Energy was joined by peer utilities, locate and excavation companies along with heavy equipment providers and operators.
- Collaborating in lighting the Lowry Bridge in Minneapolis green for National 811 Day, as well as Xcel Energy's Hiawatha and Midtown substations in Minneapolis.
- Participating in the third annual Colorado 811 5K run, which included a post-run safety event with electric safety demonstrations and bucket truck rides, local emergency responders, Red Cross information and games. The number of registration spaces was increased again in 2018 and registration was full before race day.
- Sponsoring JJ Harrison, the 811 Rodeo Clown, with over 1 million FaceBook followers.
- Participating in and sponsoring the Colorado Mock Line-strike Drill attended by more than 300 excavators and emergency responders.
- Sponsoring the Cold Zone Hazmat Conference in Minnesota for 200 attendees from seven states.

## **Electric Safety**

Contact with electricity can result in serious injury or even death. We continually work to engage and educate the public, urging them to stay away from equipment, such as overhead lines, underground lines, downed power lines and damaged electrical equipment.

Some of our outreach efforts in 2018 included:

- Conducting dozens of public electric safety demonstrations featuring the Power Town arcing display.
- Conducting electric safety demonstrations at the Minnesota State Fair for our 29th year. We had 72 employees volunteer nearly 200 hours to educate approximately 30,000 fair attendees about electric and natural gas safety and calling 811 before you dig.
- Including safety messaging with our press releases and social media during severe weather.
- Providing thousands of electric and natural gas safety pamphlets at public safety events throughout our service territory.

## **Natural Gas and Pipeline Safety**

While keeping the public safe is a core value for Xcel Energy, it is also a requirement when it comes to natural gas pipeline safety. We must meet the American Petroleum Institute Public Awareness Programs for Pipeline Operators Recommended Practice 1162. This involves taking steps to increase awareness about the safety of our facilities and energy service that build trust among stakeholders, including customers, communities, investors, employees, public officials, at-risk workers, educators and the industry.

We annually distribute materials through our membership with the national nonprofit Pipeline Association for Public Awareness and our participation in state-specific pipeline associations, as well as Minnesota's Community Awareness Emergency Response association. Through these organizations in 2018, we helped distribute more than 111,000 safety guides, books and newsletters to excavators and to public and emergency officials in states where we have natural gas distribution and transmission pipelines. We also participated in and helped sponsor many pipeline emergency responder meetings in our states and provided additional, in person pipeline safety trainings to hundreds more emergency responders.

Twice a year, we send safety information designed to share details about staying safe around natural gas to all of our natural gas customers with their bills. The bill inserts include a special mercaptan scratch-and-sniff badge that helps to educate customers on how a natural gas leak smells. Customers that receive electronic bills can request the insert with the mercaptan scratch-and-sniff badge.





Increasingly, as the communities we serve take control of their energy futures, we are supporting and encouraging their efforts through unique energy services, collaborations, partnerships and economic development assistance.

## Economic development and jobs

### Partnering with communities

We play a valuable role in supporting local economies as an energy provider through our electric and natural gas service and our partnership.

With our ongoing investment in infrastructure — the plants, pipes, poles and wires that make up our business — we generate tax revenue, purchase goods and services and employ local workers. But, our connection and contribution to local economies goes much deeper than this.

By working side-by-side with local chambers of commerce and economic development organizations, we provide energy expertise and a valuable service that can help attract and retain area business. After all, for many businesses, energy is an important consideration for where they locate — it may be their largest expense or the focus of corporate sustainability goals. By offering a complete package of energy solutions, including a comprehensive portfolio of renewable and energy-saving options, along with competitive prices and outstanding service reliability, we are helping our communities successfully compete for business, something that supports all of our bottom lines.

#### 2018 Results

- Through our focus on economic development, we generated and supported over 85 new business prospects for our communities in 2018. Of those, nine located and began doing business within our service area, supporting nearly 1,950 jobs and \$750 million in capital investment.
- We filed a plan with regulators in early 2019 to provide renewable energy to a proposed Google data center to be located on Xcel Energy property adjacent to our Sherco Generating Plant in Becker, Minnesota. Consistent with transition plans developed in partnership by the company, Becker and Sherburne County, the project will add tax base and generate jobs for the community affected by the planned retirement of the plant's two oldest coal units. If approved, the Minnesota Department of Employment and Economic Development estimates the project will result in nearly 2,000 construction jobs, 50 full-time jobs and general economic growth of almost \$150 million.

- Xcel Energy supported legislation in Colorado that was adopted to support economic development and new customer growth in the state. It allows utilities to offer negotiated, economic development rates to customers that require a new minimum electric load of three megawatts. The legislation also allows utilities to expand already authorized renewable programs to provide up to 20 megawatts of renewable energy for a customer that meets the criteria under the economic development rate program.
- Since 2014, Partners in Energy has worked with 37 communities to develop energy action plans — 20 in Minnesota and 17 in Colorado. Working with these communities to provide outreach delivered strong results for the year, including more than 49,000 participants in Xcel Energy efficiency programs and 15,500 participants in renewable energy offerings.
- We signed Memorandums of Understanding to establish Energy Future Collaborations with eight communities in Colorado. Customers in these communities represent approximately 32% of our retail load in the state, and the communities reflect a cross-section of the varied municipalities we serve — from rural to urban and mountain locations.

## Xcel Energy Direct Economic Impacts

### 2018 Economic Value Generated (in millions)

<b>Total revenues</b>	\$11,537
<b>Electric utility revenues</b>	\$9,719
<b>Natural gas revenues</b>	\$1,739
<b>Other operating revenues</b>	\$79

### 2018 Economic Value Distributed (in millions)

<b>Electric fuel and purchased power costs</b>	\$3,854
<b>Cost of natural gas sold and transported</b>	\$843
<b>Employee compensation, including wages and benefits</b>	\$1,983
<b>Property tax payments</b>	\$442.9
<b>Franchise fees</b>	\$190.8
<b>Community investment</b>	\$63.1
<b>Interest charges and financing costs</b>	\$652
<b>Dividends paid</b>	\$730

## Energy Future Collaborations: A Proactive Partnership Approach

Through Energy Future Collaborations, Xcel Energy is taking a new approach and uniting the specific energy goals of communities with our company's services and expertise to achieve shared objectives. The proactive collaborations are aimed at addressing a wide range of priorities, including how best to:

- Advance specific reduction carbon and renewable energy targets
- Reduce a city's carbon footprint
- Maximize energy efficiency programs
- Support economic development
- Integrate emerging energy-related technologies into area homes and businesses



The relationship-driven approach taps into many existing Xcel Energy programs and offerings but also focuses on uncovering creative solutions to new ideas and needs. From Xcel Energy's standpoint, not only do we develop a more meaningful relationship with some of our largest customers — our communities — but the collaborations provide an opportunity to inform key leaders and community members about our business and significant initiatives. Ultimately, the collaborations can help increase support for company initiatives that support community goals, such as the Colorado Energy Plan and the company's carbon reduction vision.

We have signed Memorandum of Understandings (MOU) for Energy Future Collaborations with eight diverse communities including: Alamosa, Breckenridge, Denver, Lakewood, Louisville, Lone Tree, Nederland and Westminster. We also believe the collaborations can be replicated with other cities and towns throughout Colorado, as well as in other jurisdictions.

With the MOUs in place, the company and the communities develop work plans involving a number of projects, along with objectives, timelines, resources required, funding needed, metrics for success, reporting measures and ultimate deliverables. We have finalized work plans with six of the eight communities and are on track to complete the other plans this year. An important point about the new framework is that the MOU guiding principles allow flexibility, but also protect nonparticipants from things like cost shifts.

## Partners in Energy

Xcel Energy has a program and special team to support communities in achieving clean energy, economic development and energy conservation goals. The effort, known as Partners in Energy, started in fall of 2014 and is targeted at communities with the objective of helping them identify their future energy goals and develop strategic plans to drive activity. We then provide the resources to put the plan into action, supporting communities as they implement projects designed to achieve their goals.

Local governments play a larger role in choices around energy, and through the program, we can work with communities to support development and implementation of energy action plans that they own. Partners in Energy is unique in that it provides the opportunity to connect directly with community officials and organizations to help them meet their goals, leveraging our entire portfolio of energy solutions including efficiency, renewable and even payment programs. Typically, a community brings ideas and resources, while Xcel Energy offers direction, guidance and project management. We learn what communities prioritize and identify potential gaps where we can provide products to meet their needs and help them reach their goals. In return, the partnerships help to raise awareness and increase participation in Xcel Energy's current conservation and renewable energy offerings.

An energy action team is a group of local residents, business owners or energy stakeholders who work to develop the community's energy action plan and oversee its implementation. They are often the local leaders who work with Partners in Energy while connecting with their community. Action plans are based on community needs, resources, leadership commitment and the local vision for energy use in the future. Strategies to gain local support may include educational workshops, outreach at local events and promotional outreach including newsletters or personal canvassing — all approaches designed to gain recognition, participation and spread awareness to local residents.

Each community determines its goals, and we work together to drive success. We also help communities to track and report progress. In 2018, we expanded to reach and support even more communities through the following improvements:

- Planning services broadened to assist communities that did not have the need or resources to develop a full energy action plan.
- In-person programming was introduced to deliver educational resources to community leaders while providing opportunities to network and learn from the experience of others.
- The program's online presence was expanded to give participants a place to access their individual community documents, plus other resources critical to making informed choices around energy in today's rapidly changing energy landscape

## Focus on Economic Development

Xcel Energy is leading local economic development activities in the communities it serves. We start by providing a competitive solution that meets customer needs. This includes offering outstanding reliability and customer service, combined with favorable pricing on our nationally recognized renewable energy and efficiency options.

We have developed strong partnerships with local, state and regional economic development organizations to support opportunities for customer and economic growth. In 2018, our Corporate Economic Development team attended more than 35 national conferences and industry events to promote economic development opportunities across our service area. This work focused on developing relationships to expand business development in all eight states where we operate.

We continue to focus on serving top industry clusters that represent the leading employers and capital investors within our service area.

These include:

- Aerospace and defense contractors
- Data centers
- Refrigerated storage warehouse and distribution
- Food and beverage processors
- Industrial manufacturing
- Medical device, instrument and supply manufacturing
- Oil and gas

Our team tracks trends that affect the growth of these industries to identify new service options and programs that can facilitate continued growth of these key industries. We develop deep-dive customer analytic reports to better understand individual customer needs and create individualized action plans that can enhance our relationship with these customers. We host Business Expansion and Retention meetings with key accounts to strengthen our existing relationships and explore matters that are of mutual interest that go beyond energy. Through these efforts, we can explore new product offerings and promote policies that anticipate customers' future needs.

Our Certified Site program provides business prospects with real estate options to increase their speed to market in locating their operations. In 2018, an inventory of 41 certified sites was identified throughout our eight states. These sites have undergone rigorous review of more than 120 data points to attract business development. We work directly with site representatives including landowners, developers, municipalities and economic development organizations to develop the data and complete the certification process. A nationally recognized site selection expert reviews the reports and validates the data and its significance for identifying prominent real estate options for potential users. Information on Xcel Energy's Certified Sites is available on [xcelenergy.com](http://xcelenergy.com).

## Minneapolis Clean Energy Partnership

The city of Minneapolis, Xcel Energy and CenterPoint Energy teamed up to form a novel Clean Energy Partnership (CEP) in 2014 in support of the city's Climate Action Plan and 2040 Energy Vision. Now in its fifth year, the partnership continues to build on a long history of collaboration to explore innovative approaches and enhanced outcomes in energy efficiency and the use of renewable energy in Minneapolis and create longstanding community impacts. The partnership provides a leadership framework through which the city and utilities can work together to prioritize, plan, coordinate, implement, market, track and report progress on clean energy activities in the city.

The Clean Energy Partnership has approved the following priorities:

- Achieve energy efficiency in the industrial, commercial and residential sectors
- Make clean energy accessible through financing tools
- Make the city more sustainable or resilient through increased local renewable energy

The 2019-2021 work plan was approved by the board in late 2018. Xcel Energy partnered with the city on pilot projects including, developing a plan to decrease city enterprise energy consumption 10%, installing electric vehicle infrastructure to enable earlier transition of city fleet, and a focused effort to work with our business customers. We are also working with the city to build a community solar garden with a focus on low-income subscribers where we will target energy efficiency efforts to decrease the energy usage of the solar garden subscribers. The partnership continues to explore equitable access to clean energy jobs through study and project implementation, and we are working on energy disclosure tools to help the city implement new energy requirements.

We continue to help the city progress towards its clean energy goals through our precedent setting transition to a cleaner generation mix as well as by helping city residents and businesses save energy and increase options in our renewable choice programs. According to the partnership's latest annual report, released in mid-2018, citywide greenhouse gas emissions are down 20.4% from 2006 levels, exceeding the city's 2015 reduction goal of 15%.



Our total community investment in 2018 was \$63.1 million, including energy assistance, charitable giving and paid volunteer programs.

## Community giving and volunteerism

# Corporate citizenship

We are committed to making a positive impact — as an energy provider, environmental steward, good neighbor and community advocate.

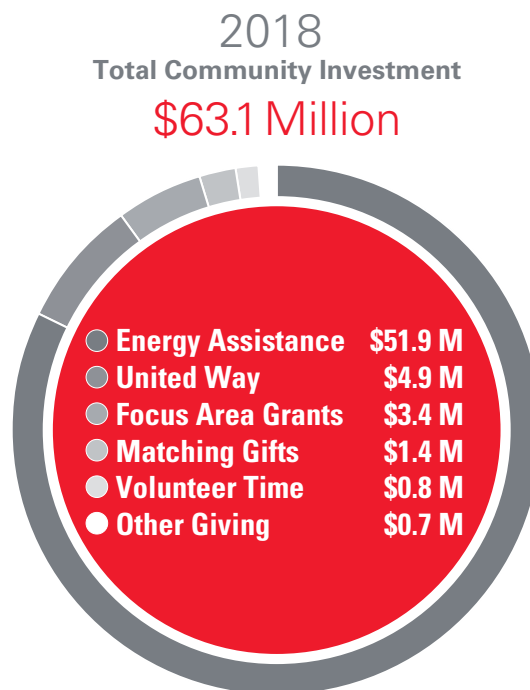
Xcel Energy serves hundreds of cities and towns across eight states. Through our active investment in their infrastructures and the energy we provide, we are literally connected to and serve as an integral member of those communities.

We understand our company's success is directly tied to the success of our communities. That is why investing in them through charitable giving and sharing our time and talents is fundamental to how we do business.

### 2018 Results

- Xcel Energy employees volunteered more than 90,000 hours and served on over 400 community, chamber and nonprofit boards. During the past year, we improved our tracking of volunteer and board participation because we use the information to measure community engagement.
- Through programs funded by our focus area grants, more than 450,000 students benefitted from science, technology, engineering and math education — an essential field of study for our future workforce and for the economy as a whole.
- The Xcel Energy Foundation contributed \$60,000 to relief efforts following the Lake Christine, Spring Creek and other wildfires that burned almost 120,000 acres in Colorado in early summer. The funds helped to replace damaged equipment for the fire departments and other emergency responders who managed the wildfires.

- For National Philanthropy Day, the Association of Fundraising Professionals recognized the Xcel Energy Foundation as an Outstanding Foundation that is demonstrating an exceptional commitment through its strategic financial support and its encouragement and motivation of others to take leadership roles in philanthropy and community involvement.
- The Amarillo Branch of the National Association for the Advancement of Colored People (NAACP) honored Xcel Energy with its Diamond Jubilee for the company's support of its efforts. In this Texas community, we have funded and presented scholarships as part of the NAACP's spring scholarship luncheon for more than a decade and have consistently sponsored the group's educational and fundraising programs.
- Junior Achievement of Northwest Wisconsin recognized Xcel Energy as its Outstanding Community Partner of the Year for the company's commitment to helping area youth with financial literacy, work readiness and entrepreneurship. The organization serves a district of approximately 18,000 students in classrooms across 20 Wisconsin counties, most of which Xcel Energy serves.
- Xcel Energy was nominated as Corporate Supporter of the Year by the Black Data Processing Associates (BDPA) Twin Cities chapter. The award recognizes the efforts of corporations that support BDPA's mission to increase participation of people of color in the information technology field. For a number of years, we have provided the organization with financial support, volunteers and internship opportunities.
- Xcel Energy was a recipient of a Colorado Business Committee for the Arts Award, a statewide recognition that honors companies and individuals for their outstanding partnerships and engagement with the arts. We were nominated by several of our arts and culture grant partners including Cleo Parker Robinson, Dairy Arts Center, 40 West Arts and the Alamosa Live Music Association, among others.



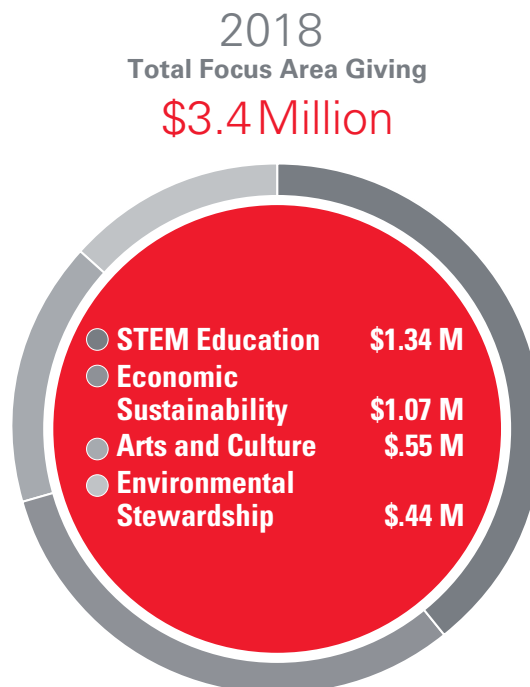
## Xcel Energy Foundation

The Xcel Energy Foundation is our company's charitable arm that oversees giving and volunteer programs. Its mission is to use the collective knowledge, resources and skills of our staff and colleagues to make a positive impact in communities throughout our service territory.

### The foundation generally focuses its support in four areas:

- **STEM Education (science, technology, engineering and math):** The economic growth and future of the communities we serve relies on the educational systems and programs that produce a quality workforce for tomorrow. Just like other businesses in the community, Xcel Energy's future success relies on having a workforce that is educated and well trained.
- **Economic Sustainability:** Employment levels directly impact a community's economic prosperity, and ultimately, quality of life. We believe that all of our customers should have the skills and opportunity to be successfully employed so we support organizations that promote workforce development and economic self-sufficiency.
- **Environmental Stewardship:** Our communities count on us to produce energy responsibly and to conserve natural resources. While we do all we can in our operations to meet these expectations, we can do more by supporting organizations and programs that work to protect and enhance the natural environment.
- **Arts and Culture:** Thriving arts and cultural activities are a key component to vibrant and strong communities. With a mission to help create desirable communities in which to live, we support programs that increase the opportunities and accessibility of arts and cultural programs to all.

In 2018, the Xcel Energy Foundation contributed over \$3.4 million in grants to promote our primary focus areas of STEM education, economic sustainability, environmental stewardship and access to arts and culture. Altogether, 380 nonprofit organizations received grants averaging about \$9,000 each.





## Employee Involvement

Our employees are active members of their communities, where they live and work. We support this commitment by offering a number of programs that encourage their involvement, including:

- **Volunteer Paid Time Off (VPTO):** Full-time employees are eligible for up to 40 hours per year to volunteer for nonprofit organizations in our service area to help strengthen the communities we serve.
- **Dollars for Doing:** The Xcel Energy Foundation matches each hour an employee volunteers with a \$10-per-hour contribution to the nonprofit, up to 100 hours annually per employee.
- **Volunteer Energy:** Groups of employees and retirees that volunteer together on a project are eligible for Volunteer Energy funding of up to \$1,000 annually, which goes to the associated nonprofit from the Xcel Energy Foundation, in appreciation for the volunteer effort.
- **Matching Gifts:** The Xcel Energy Foundation matches dollar for dollar any employee and retiree charitable donations of \$50 or more, up to \$750 for nonprofit organizations and up to \$2,000 for higher education institutions.
- **United Way:** the Xcel Energy Foundation sponsors an annual United Way campaign and matches the pledges of employees, retirees and contractors.
- **Day of Service:** Xcel Energy hosts a special volunteer day where employees demonstrate collectively their community spirit.
- **Board Service:** Throughout our service territory, we currently have hundreds of employees serving on nonprofit boards, with some employees serving on multiple boards.

## United Way Campaign

Xcel Energy has a long-standing tradition of supporting United Way and the community organizations it assists. Each year, we sponsor an employee campaign that for seven consecutive years has raised well over \$2.5 million annually in employee and retiree pledges, which the company matches.

The campaign is a fun and rewarding part of working at Xcel Energy, with a number of special fundraising events — from chili cook-offs to sport tournaments. This includes a popular “dress down” badge that employees can purchase which gives them a pass to wear jeans to work and significantly boosts fundraising.

Combined with the company match, the campaign in 2018 raised more than \$4.9 million to support United Way programs and hundreds of nonprofit organizations throughout Xcel Energy’s service territory. More than 4,000 employees and retirees contributed about \$2.72 million in pledges, surpassing the campaign goal by 7%.

In addition, employees in our Texas and New Mexico service area support United Way’s Day of Caring each spring. More than 70 employees volunteered in 2018 to lend a hand to complete improvement projects at several local nonprofit agencies.

## 2018 Day of Service

More than 4,600 employees, retirees and family members, along with some friends and customers, came together in September to volunteer to better their communities by participating in Xcel Energy’s eighth annual Day of Service. The volunteers joined together at 116 project sites across Colorado, Minnesota, South Dakota, North Dakota, Michigan and Wisconsin to dig, plant, paint, cut, sort, organize and much more on behalf of a variety of community nonprofit partners.

In total, the effort contributed approximately 13,800 volunteer hours to support our local communities, valued at more than \$429,000.

## Energy Education

We want our customers to know how their energy is produced and delivered. To help achieve this objective, we support energy education in a number of ways. Most of our major non-nuclear power plants provide public tours for their neighboring communities, and through our online Energy Classroom, we offer educational resources for teachers and students.

Through a special community program in New Mexico, we support solar energy education for customers and schools. Our solar education center in Roswell demonstrates different technologies for collecting sunlight to generate electricity. We own four photovoltaic systems located on partner sites that are available to help teachers with energy curriculum specifically developed for New Mexico classrooms.



Achieve our vision to serve customers with 100% carbon-free electricity, we will need cost-effective advanced technologies not yet available today.

## Innovative energy programs and technology research and demonstration

### Energy innovation

Rapidly evolving technology is changing customer preferences for more sophisticated products and services, and those customer preferences are driving change in how we serve our customers.

Within the next decade and beyond, we will have more change in our industry than we have experienced in the last half century, driven largely by technology. Through collaborations with researchers, technology developers, venture investors and others in our industry, we actively monitor and stay abreast of developments in emerging and advanced energy technology. We also have underway a number of pilot and demonstration projects that are testing the real-world application of cutting-edge technologies and are serving our customers today.

This work has become increasingly important because of our ambitious carbon reduction goals. To realize our vision for a carbon-free future, we will need clean 24/7 technologies to integrate high levels of renewable energy, as well as other advanced technologies.

Advanced technologies also make our operations more efficient, safer and cost effective. As powerful tools emerge to transform our work, they can reduce our costs, improve productivity and enhance the service we provide, benefitting our customers through their overall experience and the costs they pay.

#### 2018 Results

- We launched our first set of voice actions using the Google Assistant as a seamless way for customers to access information to improve energy efficiency in their homes. It is part of a new collaboration with Google to deliver tools that customers can use to manage energy use.
- In Minnesota, we announced plans to build on our clean energy leadership by investing more than \$25 million to increase access to electric vehicles (EVs), and help drivers and fleet operators start driving electric.

- In Colorado, we proposed and received approval for a residential demand response battery pilot. It will study the integration of batteries into utility systems, battery performance and customer preferences. We are seeking to work with two to four battery vendors and engage up to 500 customers during the pilot term, which will begin in late 2019 and continue for up to two years.
- We continue to gain valuable insights from our investment in Energy Impact Partners, which has now invested \$325 million in 25 companies that support a number of advancements from distributed energy resources to storage, electric vehicles, advanced data analytics, microgrid applications, cybersecurity and other clean energy technologies.
- Xcel Energy became the first public utility to receive permission from the Federal Aviation Administration to inspect transmission lines using drones flown beyond the operator's visual line of sight.
- We began piloting the use of bots to drive speed and accuracy in performing routine tasks within our Finance department, enabling employees to shift time to higher-value work.

## Advanced Grid Intelligence and Security

Through our Advanced Grid Intelligence and Security (Advanced Grid) strategic initiative, we plan to transform the grid into an intelligent, integrated network that securely, efficiently, reliably and safely integrates distributed energy resources.

We have started building Advanced Grid technology infrastructure in Colorado where regulators have approved the initiative. This includes:

- Upgrading to advanced meters for 1.5 million Colorado electric customers from 2019 to 2024.
- Installing Integrated Volt-VAR Optimization technology (IVVO) from 2017 to 2022 which allows customers' appliances to run more efficiently, and in turn, use less energy and potentially reduce monthly bills.
- Implementing the Field Area Network (FAN), a new communications network that provides the infrastructure necessary to enable two-way communications between intelligent devices on the grid — such as advanced meters — and the control center. These communications include automatically notifying us when customers lose or regain power, improving our ability to identify outages and more efficiently deploying repair crews. The FAN continues to be installed in the Denver metro area and the entire network will be complete by 2023.

We began deploying FAN advanced field devices in 2018 and implemented a secure, two-way private network that will function as the foundation for the technology in Colorado, as well as Minnesota, where we have regulatory approval for a time-of-use pilot that will launch in 2020. The network enables the secure flow of information between control centers, new advanced devices in the field and our customers.

The FAN infrastructure is critical for when we begin deploying advanced meters to Colorado and Minnesota customers in 2019. We plan to begin rolling out advanced meters to 13,000 Denver metro area customers in late 2019. Through the pilot in Minnesota, 17,500 meters will be deployed giving 10,000 customers from the Hiawatha West and Midtown area of Minneapolis and customers in the Westgate area of Eden Prairie the opportunity to save money by using electricity when it is less expensive to generate and deliver.

## Electric Vehicles

The future of transportation is dramatically changing, and as more electric vehicle options become available, a growing number of customers want to reduce their carbon footprint through the cars they drive. We are uniquely positioned to support our customers and communities and to work with electric vehicle (EV) stakeholders to make this change and ensure it truly benefits customers, the environment and the power grid we all rely upon.

Through our EV strategy, we are focused on:

- Raising awareness and increasing access to information on the benefits of EVs
- Helping reduce the upfront costs of infrastructure needed to charge EVs
- Establishing time-varying rates and smart charging technologies to ensure that EVs can charge as much as possible on low-cost, low-carbon energy

While EVs create a significant opportunity for drivers and fleet operators to save on fuel and other costs, barriers exist to wider-scale adoption, such as customer awareness, high up-front costs and the availability of charging infrastructure. We can help overcome these barriers by developing new services, piloting them and then rolling out our most successful ideas to customers on a broader scale.

We developed a portfolio of innovative pilots in Minnesota that will benefit drivers, customers and the environment. The initiatives and pilot programs focus in three main areas: home charging, public charging and fleet operations. This includes a two-year pilot in Minnesota to 100 residential customers that offers a turn-key approach to charger installations by reducing the upfront costs for equipment and providing off-peak pricing benefits. Future options could include a new subscription service that would provide drivers with a set bill for EV charging and equipment each month, and we are exploring dynamic digital tools to help customers understand all their options when it comes to vehicle choices, pricing options and charging solutions.

For public charging, our fast-charging-corridor pilot will seek to leverage public and private funds to increase the availability of fast-charging stations on highways and other major corridors. We are also working with the cities of Saint Paul and Minneapolis on a pilot to support a charging network for everyone, including those who may not own vehicles. Through a partnership with HOURCAR, a local, independent, nonprofit car-sharing service, Xcel Energy will support a new, all-electric, one-way car-sharing service and other innovative mobility services in the Twin Cities. This project is intended to increase access to the benefits of electric transportation, including those in low-income, underserved communities.

We also plan to make it easier and more affordable for large fleet operators like Metro Transit, the Minnesota Department of Administration and the City of Minneapolis to integrate electric vehicles into their fleets. We will provide the electrical infrastructure needed to charge the first eight of Metro Transit's electric buses and are looking to provide charging infrastructure for the State of Minnesota and the City of Minneapolis EV fleets and other customers over time.

We expect to expand our EV efforts to other states, and as we pursue our EV Plan, we are focused on these objectives:

- Empower customers with information, tools and options
- Increase access to electricity as a transportation fuel in an equitable manner
- Encourage efficient use of the power grid and integrate renewable energy
- Improve air quality and decrease carbon emissions
- Ensure reliability, interoperability and safety of equipment
- Leverage public and private funding opportunities
- Provide benefits to all customers, both EV drivers and non-EV drivers
- Ensure transparency and measure results



## Colorado Innovative Clean Technology Projects: Battery Demonstration Projects

Our Colorado Innovative Clean Technology program was first approved in 2009 to test emerging technologies intended to lower emissions. We have and continue to test several new technologies and evaluate their cost, reliability and environmental performance on a small, demonstration scale before determining whether to deploy them more widely for our customers.

We have two battery-storage demonstration projects currently under the program:

- As demand for solar energy at our customers' homes and businesses increases, we are examining how battery storage can help integrate higher concentrations of customer solar energy on our system. Through a project in Denver's Stapleton neighborhood, six homeowners have received Sunverge customer battery systems to test with their rooftop solar installations. We also have installed six larger grid battery systems, supplied by Northern Reliability, Inc., in right-of-ways or easements.
- Through a public-private partnership, Xcel Energy, Panasonic and Denver International Airport are collaborating to test a battery storage system that can both serve as a microgrid to provide backup power to Panasonic's Denver headquarters and to support Xcel Energy's grid at other times. As part of the project, Xcel Energy owns a 1.3 MW-AC solar carport installation and a 1 MW/2MWh lithium ion battery. Panasonic also owns a 0.20 MW-AC solar array located atop its building, which is tied into the system.

With both projects, we are testing various ways to operate the battery systems, and are evaluating and analyzing performance. Testing will be completed in 2020. We are finding that the battery systems perform well and are learning many things that will influence future battery system design and associated integration with our system.

## Drones

We are using unmanned aircraft systems or drones in a number of applications. From inspecting power lines to wind turbine blades and evaluating substations for equipment upgrades, drones are making these tasks easier, safer and helping to reduce costs.

We were the first in the nation to enter into a partnership for safety with the Federal Aviation Administration (FAA), and now hold one of five of the partnerships, along with GE, Amazon, Google, and Florida, Light and Power. In 2018, we increased the use of drones as we became the first public utility in the country to receive FAA permission to fly drones beyond the operator's visual line of sight and without a visual observer to inspect transmission lines. The flights, which began last summer and continued monthly through the year, are part of a program to prove the value of using unmanned aircraft to inspect critical infrastructure in the power industry.

As a regulated utility we are required to inspect electric transmission lines on a routine basis. Traditionally, we have conducted these inspections with helicopters and foot patrols. Using drones to inspect our 24,000 miles of electric transmission lines delivers value on many fronts, starting with ensuring reliability for our customers thanks to better data. It is also safer for employees, especially in remote mountainous areas, and less costly. As technology improves, the cost to operate drones continues to fall, which will save even more money for customers.

The program started in Colorado, and pending FAA approval, we plan to expand the transmission inspection program in other states in 2019.

## Energy Impact Partners

With the pace and scale of emerging technologies and changing customer interests, the energy industry is evolving in ways it never has before. Xcel Energy joined Energy Impact Partners in 2015 as an opportunity to better understand technology's impact on our business and to drive greater efficiency and innovation as we meet customer needs.

EIP is a collaborative, strategic investment platform that provides capital primarily to clean-tech companies that seek to optimize energy consumption and improve sustainable energy generation. Our planned \$50 million investment over five years represents a new era for us, where we move beyond clean energy implementation for our customers and into the clean-tech investment space.

Xcel Energy was an original participant in the collaboration that now includes more than 15 utility and industrial participants. By joining with peer companies, we gain greater visibility into the business models and technologies of promising companies and have the opportunity to influence emerging business models so that energy companies and third parties can collaborate and grow together. Also EIP brings together energy companies from around the world to share diverse, global perspectives and insights into policy and regulations, helping position us for new trends, rules and other requirements in the states we serve.

We are gaining insights that are helping inform our strategic decisions and how we conduct our business across the organization from energy supply to distribution, customer solutions and cybersecurity.

## Electric Power Research Institute (EPRI)

Through our long-time membership with EPRI, we gain insights into the challenges and opportunities for using advanced clean energy technologies and reducing carbon emissions. This includes EPRI's work on electric system resiliency, climate scenario analysis and greenhouse gas reduction goals, as well as integrating renewables, electric vehicles, combined heat and power, customer demand response and energy efficiency.

EPRI also informs our regulators and customers on technical and economic issues, opportunities and challenges related to the use of new grid technologies, including large-scale and customer-sited distributed energy resources, such as energy storage and distributed generation. In this collaborative research environment, we can engage with the industry, technology developers and other stakeholders who test and evaluate new technologies and products, develop tools and methodologies to analyze the effects of distributed energy resources on the power delivery network and optimize their use.

## GridNXT at SolarTAC

The Solar Technology Acceleration Center (SolarTAC) in Aurora, Colorado, is a world-class facility for demonstrating and validating advanced solar and distribution grid technologies in a real-world, grid-connected environment. Even before the project's grand opening in 2011, Xcel Energy recognized the potential benefit of the facility and signed on as an original founding member.

Our investment has paid off for customers. Not only have we tested important battery projects at the site, solar technologies fine-tuned at SolarTAC serve our customers in Colorado and New Mexico with more cost-effective, efficient solar energy. Through testing, solar developers were able to make adjustments for adverse weather conditions before installing the technology in our service areas.

To continue evolving with technology and developer needs, the 74-acre site has transitioned to become a test-bed for solar, storage and other distributed energy enabling products and components. GridNXT at SolarTAC now supports the demonstration of advanced technologies for integrating distributed generation and storage, including microgrid capabilities at the edge or end of the electric distribution system.



As we aim to reach our interim goal to reduce carbon emissions 80%, we anticipate renewable sources will generate about 60% of the electricity we provide in 2030.

## Renewable and advanced clean technologies

### Renewable energy

Xcel Energy operates in some of the country's best regions for producing wind and solar power, and we are putting these resources to work for customers.

Increasingly, the customers and communities we serve want their energy from clean, renewable sources, and we are delivering. Renewable energy plays a vital and growing role in our energy supply and future plans for meeting customer needs.

As wind and solar technologies continue to improve, prices decline, making it possible to operate a reliable, affordable power grid with significant levels of renewable generation. When it comes to managing cost and reliability, scale matters. We are focused on increasing the use of large-scale, universal wind and solar energy because these resources are significantly more economical and can provide energy for all customers at half the cost compared to smaller, distributed resources.

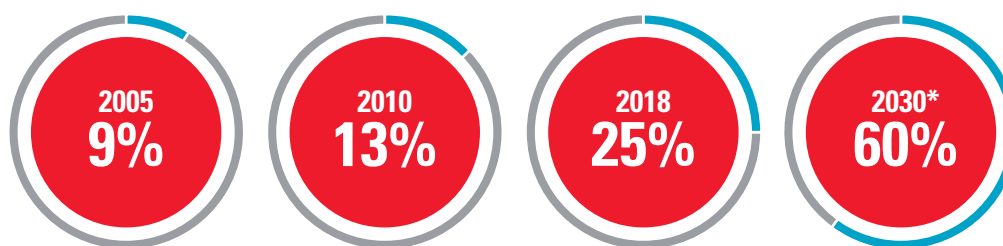
We also recognize that some customers want more renewable energy, beyond what is currently in our energy supply, including some of our business customers and communities that have set goals for up to 100% renewable energy. To meet this need, we continue to expand and improve our voluntary renewable choices, enabling customers to achieve their goals.

#### 2018 Results

- Since 2005, we have been a national leader in wind energy, and according to the American Wind Energy Association, are ranked the No. 2 utility wind provider with nearly 8% of the country's wind capacity on our system.
- Our new, 600-megawatt Rush Creek wind project was completed and is estimated to produce enough electricity to power approximately 325,000 homes annually. It is the largest project we have built and is among the largest in Colorado, with 300 Vestas wind turbines manufactured in the state. The project injected \$1 billion into Colorado's economy and is projected to help avoid 1 million tons of carbon per year.

- At year-end, we had 762 megawatts of large-scale, universal solar capacity and 7,288 megawatts of wind capacity — enough to power approximately 3.8 million homes. This includes 1,440 megawatts at wind farms we own.
- After its 2017 debut in Minnesota, our Renewable\*Connect® program quickly sold out during its 2018 launch in Colorado. Early in 2019, we successfully transitioned 100% of Windsource® subscribers in Wisconsin to Renewable Connect, demonstrating high engagement and satisfaction with this new option. As customer demand for Renewable\*Connect grows, we have proposed expanding the program in Minnesota and expect to propose an expansion in Colorado.
- Nearly 190,000 customers participate in renewable choice programs. Plus, we achieved a milestone of more than 1 gigawatt of distributed solar installed on our system since the programs began.
- The City of Eau Claire, Wisconsin, recognized Xcel Energy for making a difference and helping the city to become more sustainable through the company's efforts to increase renewable energy, efficiency and conservation.

**Renewable energy is a vital and growing part of our energy supply.**



\*Results are estimated and reflect potential scenarios that achieve 80% reduction in carbon emissions by 2030; actual system depends on various factors, including regulatory approval of future plans.

## Ramping Up Renewables: Steel for Fuel

Xcel Energy's Steel for Fuel strategy resonates with all types of stakeholders because it expands the company's renewable portfolio and delivers carbon-free energy without raising customer bills. Under the effort, we are adding renewable resources — the steel — at a net savings because the capital costs of the projects are more than offset by future avoided fuel costs.

### Delivering on the nation's largest multi-state wind investment

Several years ago, we announced the addition of 12 new wind farms across seven states, totaling 3,680 megawatts of new wind capacity, enough clean wind capacity to power about 1.7 million homes annually. All the projects have now moved from the approval to execution phase. When complete, we will own about 70% of the new capacity, more than quadrupling our company-owned wind portfolio.

Our Rush Creek wind project was the first to be completed in fall 2018, and we are now building three wind farms to be completed in 2019: Hale (478 megawatts) in Texas, Foxtail (150 megawatts) in North Dakota and Blazing Star I (200 megawatts) in Minnesota. Nearly all 12 projects will be online by year-end 2020 to take advantage of the full production tax credit. Only the Dakota Range wind project will be complete in 2021 and is still low cost despite qualifying for a partial tax credit.

All of these projects must be built from the ground up, except for one. For about 20 years we purchased power from the Lake Benton wind project in southern Minnesota. Now we plan to buy and operate the project as part of our wind fleet once it is rebuilt in 2019 with new, more efficient turbines. By repowering an existing wind farm such as this, we are able to take advantage of existing transmission and other infrastructure. It is one of the reasons Lake Benton could successfully compete in the bidding process against other wind projects.

### **The Colorado Energy Plan**

Under the Colorado Energy Plan approved by regulators in 2018, we will add 1,100 megawatts of wind energy from three new wind farms and the repowering of a fourth, existing wind farm. The projects include the 500-megawatt Cheyenne Ridge wind farm that we will construct and own. We will also add a 72-megawatt solar farm and three solar and battery storage projects, which combined incorporate 560 megawatts of large-scale solar and 275 megawatts of battery storage.

The solar-battery projects are located in different parts of Colorado, with one project in Adams County near the Denver metropolitan area and the other two in southern Colorado. The two projects in Pueblo County are the largest, with capacities of 100 to 125 megawatts and four hours of battery storage. They will help provide reliable generation capacity to replace coal power from nearby Comanche units 1 and 2, slated for retirement by 2026.

### **Economic benefits**

In addition to providing affordable, carbon-free electricity for customers, all of these projects support economic development. Our 12 new wind projects are expected to create 2,700 construction jobs, 150 full-time jobs and generate \$800 million in landowner lease and property tax payments over the lives of the projects. The Colorado Energy Plan is anticipated to inject \$2.5 billion into the state's economy, including \$1 billion from Xcel Energy.

### **Repowering plans**

We continue to seek new, economic opportunities to expand our wind portfolio and have asked regulators for approval to buy two older wind farms in southern Minnesota, which are currently being repowered with the latest wind technology. We have purchased power from the Jeffers and Community Wind North projects over the past decade under long-term agreements. Adding the refurbished wind farms with a capacity of 44 and 26 megawatts, respectively to our own energy portfolio further supports our clean energy transition and will save customers money compared to long-term purchases. If approved, we would close on the completed projects by year-end 2019. We plan to pursue similar opportunities in the future.

## **Renewable Choice Programs**

Just as customers want more control over their energy use, they also want more choice in how they engage with energy options. Our goal is to offer innovative solutions that enable our customers to meet their priorities around clean energy and the environment, while balancing these choices with the cost that all customers pay to support them.

We were an early adopter of voluntary green power back in 1998 with the introduction of our flagship program, Windsource. Since then, our program offerings have expanded to include options for community solar gardens, on-site solar and Renewable\*Connect — our newest offering.

Through Renewable\*Connect, customers can choose to make their energy up to 100% renewable through different contract options, such as month-to-month, five-year and 10-year terms. There is no equipment to install and customers can remain on the program if they move to a different home or business location within our service area.

Renewable\*Connect exemplifies innovation. We have combined our program and regulatory experience and customer input to design the program so customers retain the renewable energy credits and rights to renewable energy claims. Renewable\*Connect also keeps bills low for participating customers, while not increasing costs for nonparticipants. It is self-supporting through subscription fees, so nonparticipants don't pay more.



In Colorado, the program's energy is delivered from the new 50-megawatt Titan Solar facility, near Deer Trail, Colorado. The energy sources for the Minnesota and Wisconsin programs include the Odell Wind Farm and North Star Solar.

Participation in our other renewable choice programs continues to grow as well. In Minnesota, there were approximately 7,700 subscribers participating in our Solar\*Rewards Community® program at the end of 2018. With more than 500 megawatts of capacity from 170 participating solar gardens, the program is easily the largest community solar garden program in the country, although the purchase rate for this Minnesota solar energy is two to four times higher than what we would pay from more cost-efficient energy sources. Our Colorado community solar garden program was one of the first in the nation and also continues to grow, quadrupling in size between 2017 and 2019.

In Wisconsin, our Solar\*Connect Community® program is fully subscribed and continues to expand. A second community solar garden located in La Crosse began generating power for subscribers in March 2019 and a third project is expected to be built later during the year in Ashland. Once that project is complete, local gardens will be available to customers throughout our Wisconsin service territory. Similar to Renewable\*Connect, the incremental program costs are covered through subscription fees so that non-participating customers do not pay extra to make the program available.

Customers also continue to install more on-site solar, with our Colorado customers increasingly choosing to install solar panels without incentives through Solar\*Rewards®. Across all states, more than 7,600 solar systems were installed during 2018, adding 66 megawatts of additional on-site distributed solar. To reduce the impact of energy bills for customers struggling to make ends meet, we recently launched incentive options to test solar installations for income-qualified households in Colorado and Minnesota.

**We offer the following renewable choice programs that reflect our company's commitment to meeting the clean energy interests of customers.**

Program	Description	REC Attribution	MN	WI	ND	SD	CO	NM	TX	MI
Renewable*Connect	A flexible and affordable way to subscribe for up to 100% renewable energy	Participant	■	■			■			
Windsource	An easy, low risk way to subscribe to clean wind energy	Participant	■				■	■		■
Solar*Connect Community	Subscribe to a solar garden and get full rights to the solar claims, plus a bill credit for choosing solar energy	Participant		■				■*		
Solar*Rewards Community	Subscribe to third-party solar gardens and receive electric bill credit payments for solar energy produced	All Customers	■				■			
Solar*Rewards	Install your private on-site solar system and earn an incentive for transferring the RECs to Xcel Energy	All Customers	■				■	■**		
Net Metering	When you produce wind or solar energy through on-site equipment, you're able to retain RECs and sell any excess energy back to the grid	Participant	■	■	■		■	■	■	■

\*Solar\*Connect Community has been filed but not yet approved in New Mexico.

\*\*New Mexico Solar\*Rewards availability varies from year to year and is not currently available.

In addition to renewable choices, we started offering customers in Wisconsin a Certified Renewable Percentage as a way to let them claim the full benefit of our increasingly clean energy mix. We now retire Renewable Energy Credits (RECs) to cover the entire renewable energy portion of the electricity we deliver to customers in Wisconsin, beyond what we retire to meet Wisconsin's Renewable Portfolio Standard. Certified Renewable Percentage is not something customers enroll in or subscribe to but is a benefit they automatically receive. This enables customers to make renewable energy claims. For example, our commercial customers can claim the portion of renewable energy included in the Certified Renewable Percentage just by being an Xcel Energy customer.

We plan to propose the approach for regulatory approval in Colorado and Minnesota this year to begin offering customers the same benefit in these states.

## Integrating Wind and Solar Power

The significant wind and solar resources on our systems have fundamentally changed the way we operate. With each increase in renewable capacity, we have improved system operations, enabling our ability to incrementally grow the use of wind and solar power and achieve new system records.

Some of our operational improvements for accommodating more wind and solar energy include:

- **Adding more flexible backup generation.** As we retire aging coal plants, we are replacing some of the energy with more carbon-friendly natural gas generation, which can more efficiently and cost-effectively ramp up or down to accommodate variable, renewable generation.
- **Cycling coal offline and reducing minimum generation levels.** Once considered infeasible, we are turning off coal units to accommodate more wind generation and are reducing the time that units need to be offline before than can be restarted. Cycling off coal units and then turning them back on is much more challenging than with a natural gas unit because of all the systems involved, but our Operations team has studied the issues and is working to cycle coal units more efficiently and cost effectively, helping to reduce fuel use and emissions.
- **Negotiating greater flexibility from our natural gas suppliers.** These agreements allow us to efficiently use our gas generation resources to balance variable renewable generation, helping to increase system reliability and lowering customer costs.
- **Investing in transmission.** We are improving and building new transmission facilities that can deliver more wind and solar energy to customers.
- **Using control equipment.** We use set-point controls for wind farms in combination with automatic generation control of thermal units that lets wind farms operate at peak levels while fossil-fuel production is reduced.
- **Establishing a 30-minute flexibility reserve.** We previously carried one megawatt of reserve capacity for every megawatt of wind generation as backup in case winds suddenly dropped off. As our wind portfolio grew, we studied the maximum amount of wind energy typically lost within 30 minutes and were able to reduce this reserve, dramatically decreasing costs associated with carrying large wind reserves while maintaining system reliability.
- **Adjusting planned maintenance.** We now plan transmission and plant maintenance outages around times of the year when wind and solar production is lowest.

Generally, we find that wind and solar are very compatible resources for meeting customer needs. Our renewable generation works together fairly consistently to operate on average across all hours of the day.

While solar energy is relatively simple to forecast, wind generation has been notoriously difficult because of its variability. Most weather forecasting models are designed to generate information about winds near ground level rather than at 200 to 300 feet, where turbine hubs are located. Also, landscape features such as hills and trees can reshape wind speeds and directions, causing turbulence in ways that can greatly influence the amount of energy produced.

To improve on this, we began working in 2009 on a multi-year research and development project with the National Center for Atmospheric Research (NCAR) and its affiliate company Global Weather Corp. (GWC). Today the WindWX system helps utilities around the globe including Xcel Energy to make better commitment and dispatch decisions. It uses real-time, turbine-level operating data and applies sophisticated algorithms to forecast the amount of wind power that will be produced. Forecasts for a 168-hour period are provided every 15 minutes across Xcel Energy's entire service territory — from the hills of western Minnesota to the plains of eastern Colorado and the Texas Panhandle.

## Compliance with State Renewable Energy and Portfolio Standards

Xcel Energy is on pace to surpass established renewable energy requirements in the states we serve through at least 2030. New Mexico recently adopted the Energy Transition Act to set one of the most ambitious renewable portfolio standards in the nation. We are currently evaluating our compliance strategy with the increased targets that will be set by the law once it takes effect in June of 2019.

### Renewable Energy Requirements in Xcel Energy States

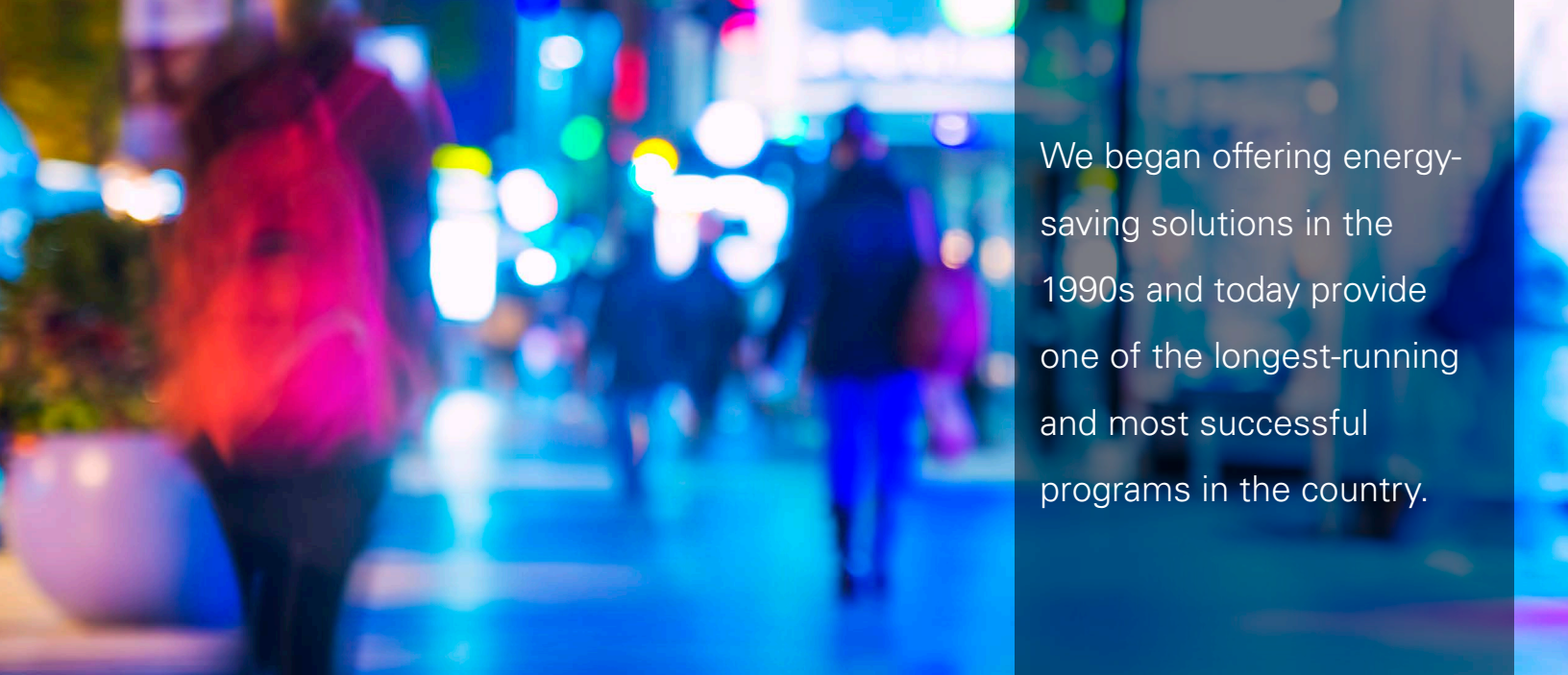
State	2018	Next Increase	Notes
<b>Colorado Renewable Energy Standard</b>	20%	30% by 2020	30% of retail sales by 2020, with 3% from distributed generation (DG), including at least 1.5% from retail net-metered DG resources and up to 1.5% from wholesale DG resources (defined as resources ≤30 megawatts located in Colorado that are not customer sited)
<b>Michigan Renewable Portfolio Standard</b>	10%	12.5% by 2019; 15% by 2021	Goal of 35% by 2025
<b>Minnesota Renewable Portfolio Standard</b>	25%	31.5% by 2020	30% of retail sales by 2020, with at least 24% from wind, plus 1.5% of retail sales from solar by 2020, with at least 10% from on-site solar 40kW or less
<b>New Mexico Renewable Portfolio Standard</b>	15%	20% by 2020	The New Mexico Energy Transition Act increases future goals of the RPS; in addition to the immediate goals, it sets a standard of 40% by 2025, 50% by 2030, 80% by 2040 and then 100% carbon-free electricity by 2045  Note: the Public Regulation Commission must consider the safe and reliable operations of the system and the prevention of unreasonable costs
<b>North Dakota Renewable and Recycled Energy Objective</b>		Voluntary	No RPS Requirement for North Dakota
<b>South Dakota Renewable, Recycled and Conserved Energy Objective</b>	10%	Voluntary	No RPS Requirement for South Dakota
<b>Texas Renewable Generation Requirement</b>	Statewide Goal	10,000 MW statewide by 2025 (goal achieved) & (non-wind goal: 500MW)	Xcel Energy's portion is approximately 3.3% of the statewide goal (the 3.3% is based on Xcel Energy Texas electric retail sales as a percentage of the total state electric retail sales)
<b>Wisconsin Renewable Portfolio Standard</b>	12.89%		

## Renewable Energy Credits

A renewable energy certificate or credit (REC) is created for every megawatt-hour of renewable electricity generated (1 REC = 1 MWh). RECS provide a mechanism to commoditize renewable energy attributes and are tracked in national commission-approved REC tracking registries. RECs can be disaggregated or separated from the underlying renewable energy and sold separately. Typically, RECs are traded to companies looking to claim green energy or transferred to other utilities to reduce compliance costs.

Xcel Energy uses RECs to satisfy compliance with state renewable energy standards throughout our service territory. Our company carefully tracks its REC ownership and works to comply with the rules and best practices around renewable energy claims. Only parties that own and retire RECs can claim to use the renewable energy, according to the Federal Trade Commission's Green Guides. However, renewable energy separated from or without the associated REC can retain its value and be used for compliance with environmental regulations.

In 2018, we continued to look for ways to increase the value of the renewable energy on our systems through the sale of RECs. In several states, Xcel Energy has more renewable energy on its system than is needed for compliance with renewable energy standards. Based on market opportunities and the projected shelf life of RECs, we sold more than 3.7 million RECs in 2018, about 3 million less than in 2017. The renewable energy that generated these RECs came from Colorado, New Mexico, Texas and the Upper Midwest. Our customers benefit by sharing portions of these profits associated with the sales. REC sales make up a minor portion of our REC holdings.



We began offering energy-saving solutions in the 1990s and today provide one of the longest-running and most successful programs in the country.

## Energy efficiency

# Encouraging Efficient Energy Use

Our comprehensive portfolio of energy solutions meets the individual needs and preferences of customers and gives everyone an opportunity participate — from large industrials to small businesses and customers living on fixed incomes.

Customers rely on the energy we provide for their comfort, security and convenience, but increasingly they want more control and new options for managing and using energy. We are paying attention to the market, listening to our customers and responding with new and improved solutions.

We continuously evaluate emerging technologies and program models, looking for opportunities to expand our portfolio of energy solutions and anticipate evolving customer needs and interests. Beyond our customer offerings, we continue to demonstrate leadership by incorporating energy efficient technologies and practices at Xcel Energy office buildings and service centers.

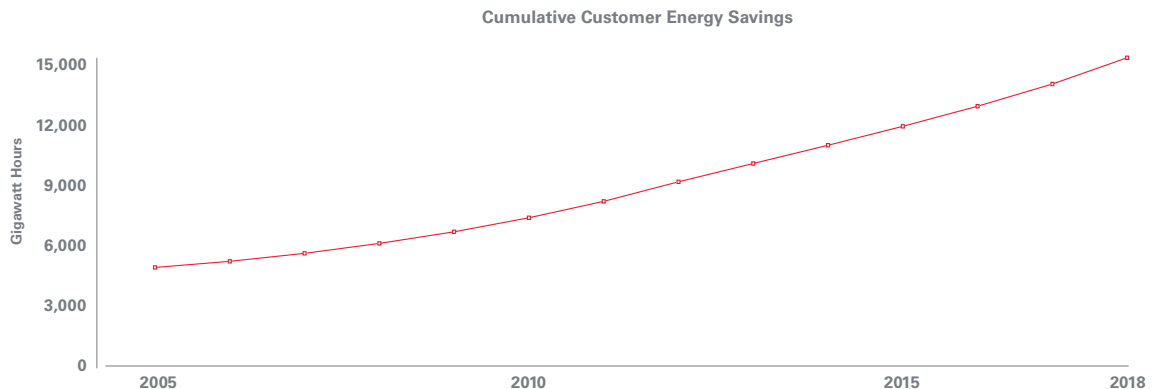
### 2018 Results

- Five of Xcel Energy's energy efficiency programs are recognized as being among the country's best, according to the American Council for an Energy-Efficient Economy (ACEEE). The following programs received the organization's Exemplary Program Award in early 2019: the Low-Income Program and Energy Design Assistance in Colorado, Home Energy Squad and One-Stop Efficiency Shop in Minnesota, and Partners in Energy in both Colorado and Minnesota.
- Our customers completed nearly 3.5 million electric and 1.4 million natural gas efficiency projects and received \$141million in rebates through our conservation programs. We had more than 42,000 customers participate in our load management or demand response programs.



- We launched five new demand response programs, which helped participating customers save money and provided flexibility in how we manage the power grid. Under the programs, customers reduce or shift their energy use during peak periods, helping balance the supply and demand of electricity. We have around 25 new programs set to launch between 2018 and 2021 and have installed a new system to track demand response use and effectiveness.
- Altogether, customers saved about 1,240 gigawatt hours of electricity for the year, equivalent to powering 160,000 average homes, and 1.6 million dekatherms of natural gas, enough to fuel 20,000 average homes. The annual energy savings through efficiency measures was enough to avoid about 780,000 tons of carbon emissions, equivalent to the annual carbon emissions from approximately 150,000 cars.
- Some of the states we serve provide incentives for achieving energy efficiency goals. Thanks to strong program performance, we earned more than \$41 million in incentives, exceeding our expectations.
- In early spring 2019, we hosted our annual Energy Expo for Colorado industrial, commercial and small-business customers. It featured teams of energy experts from Xcel Energy and outside organizations providing energy-saving ideas and opportunities for rebates and energy efficiency study funding. During the event, 13 businesses were recognized for outstanding efforts to save energy. These companies greatly lowered energy costs and reduced their impact on the environment. Altogether, they saved more than 33 million kilowatt hours of electricity in a 12-month period.
- Xcel Energy's Education and Outreach program promotes and encourages customer participation in our energy efficiency and renewable choice programs. During the year, we successfully expanded our efforts in Colorado, Minnesota and New Mexico. We reached more than 4.2 million people and generated over 19,800 targeted customer leads and 5,900 direct program sign-ups through event participation and community sponsorships. Some of our more notable partners include the Como Zoo in Minnesota, Denver Botanic Gardens, and sports teams — the Saint Paul Saints and Denver Outlaws.

**Since we began consistently tracking results in 1992, we estimate that the energy savings through our efficiency programs has avoided the need for 21 average-size power plants.**



## State-by-State Efficiency Programs and Performance

Xcel Energy's portfolio of over 150 electric and natural gas conservation programs continues to experience strong customer engagement and growth. We continued to help our customers achieve significant energy savings in 2018, meeting and exceeding savings goals in several key states. The following is a summary by state of overall performance and program offerings.

### Minnesota

2018 Approved Savings Goals of 433,694,480 kWh and 769,720 Dth	
Electric Projects	1,920,207
Natural Gas Projects	765,805
Total Spending	\$122,958,724
Electric Savings	680,448,447 kWh
Natural Gas Savings	913,240 Dth

In Minnesota, we offer residential programs that range from prescriptive rebates to in-home services providing energy-efficient materials and labor for installation. Consumer education is included with most of the residential programs to increase conservation awareness and encourage energy-wise choices and behavior in the home. We also offer services and products to help income-qualified customers reduce their energy use and ultimately lower their bills.

The business segment includes electric and natural gas commercial, industrial and small business customers. We offer a variety of programs that encourage business customers to save energy, lower their energy bills, reduce peak demand and minimize environmental impacts. The portfolio has three primary components, including prescriptive products focused on common equipment, custom products to encourage savings from unique situations, and study and educational products that help customers identify energy efficiency opportunities.

### North Dakota

Electric Projects	149
Natural Gas Projects	880
Total Spending	\$257,670
Electric Savings	16,426 kWh
Natural Gas Savings	12,697 Dth

We provide savings opportunities for North Dakota business customers through load management programs, as well as residential natural gas rebate programs and home energy audits.

## South Dakota

2018 Approved Savings Goal of 5,761,199 kWh	
<b>Electric Projects</b>	62,953
<b>Total Spending</b>	\$775,604
<b>Electric Savings</b>	6,057,290 kWh

Our energy efficiency portfolio for South Dakota customers is a mix of electric programs designed to encourage both residential and business customers to save energy and lower their energy bills in a variety of ways. We offer programs for lighting, load management and educational outreach for business and residential customers and continue to work with trade partners to promote our programs.

## Wisconsin

<b>Electric Projects</b>	153,135
<b>Natural Gas Projects</b>	152,758
<b>Total Spending</b>	\$9,872,298
<b>Electric Savings</b>	119,139,835 kWh
<b>Natural Gas Savings</b>	98,169 Dth

In Wisconsin, Xcel Energy participates in a statewide program called Focus on Energy that provides incentives to eligible residents and businesses for installing cost-effective energy efficiency and renewable energy projects. We retain a portion of the approved annual funding for our voluntary customer programs and to promote the Focus on Energy programs. We also use the funds for general conservation activities, advertising and energy efficiency education for residential customers, commercial customers and trade allies in our service territory.

## Michigan

<b>Electric Projects</b>	15,634
<b>Natural Gas Projects</b>	321
<b>Total Spending</b>	\$384,663
<b>Electric Savings</b>	1,292,727 kWh
<b>Natural Gas Savings</b>	6,170 Dth

We participate in a statewide program in Michigan called Efficiency United that educates residential and commercial customers about energy efficiency and offers cost-effective solutions and rebates for reducing energy use.

## Colorado

2018 Goals/Targets of 400 GWh and 573,136 Dth	
<b>Electric Projects</b>	793,208
<b>Natural Gas Projects</b>	449,006
<b>Total Spending</b>	\$107,385,072
<b>Electric Savings</b>	453,894,496 kWh
<b>Natural Gas Savings</b>	604,928 Dth

Our Colorado residential energy efficiency programs focus on cost-effective, direct impact products that target household appliances, HVAC and lighting. This effort is supplemented with educational services intended to further increase customer understanding and interest in conservation and energy efficiency. We also offer income-qualified customers products to analyze natural gas and electric consumption, and provide products, services and education designed to help lower energy bills.

Our business program — for commercial and industrial customers of all sizes — offers a broad portfolio of demand side management products designed to meet the needs of this varied segment. The portfolio has three primary components, including prescriptive products focused on common equipment, custom products to encourage savings from unique situations, and study and educational products that help customers identify energy efficiency opportunities.

## New Mexico

<b>Electric Projects</b>	371,298
<b>Total Spending</b>	\$10,685,496
<b>Electric Savings</b>	51,698,426 kWh

We offer a broad portfolio of programs to meet the needs of business, residential and low-income customers in our eastern New Mexico service territory.

## Texas

<b>Electric Projects</b>	145,992
<b>Total Spending</b>	\$3,610,230
<b>Electric Savings</b>	20,524,107 kWh

We offer our Texas customers energy efficiency programs through Standard Offer Programs and third-party Market Transformation programs. These programs are provided to residential, low-income, commercial and industrial customers.

## Conservation at Xcel Energy Facilities

Our building management practices support our commitment to the environment and the communities we serve. We own or lease more than 150 office building and service centers throughout our eight-state territory and strive to set an example with conservation. Similar to how we encourage customers to use energy more efficiently in their homes and businesses, we look for ways to save energy and water in our own facilities, especially when those opportunities reduce our costs and conserve resources.

We also go beyond conservation to incorporate a number of environmentally sound practices into our daily building management, including steps that ensure indoor air and water quality, green cleaning and the use of GREENGUARD Certified products and materials.

We proactively began managing our facilities to reduce environmental impact in 2008, and by the end of 2018, have accomplished the following:

- Saving more than 8 million kilowatt hours
- Conserving more than 173,600 therms of natural gas
- Reducing water usage by 4.7 million gallons

Through our energy management initiative, we plan to continue trying to identify and implement projects that reduce energy use and costs at our facilities while helping to reduce overall maintenance needs. Projects will consist of individual, standalone opportunities, as well as efforts to support and improve new construction, remodeling and HVAC replacement projects that are planned and approved. To do this, we review past facility energy audits with the company's annual capital budget to identify energy improvement opportunities to support.

### **LEED Certified Facilities**

Xcel Energy continues to seek LEED (Leadership in Energy and Environmental Design) certification for our facilities. We currently have 15 facilities that are LEED certified throughout the eight states where we operate. LEED is a U.S. Green Building Council certification program that recognizes sustainable building strategies and practices. To receive LEED certification, building projects satisfy prerequisites and earn points to achieve different levels of certification. LEED certification has four levels — Certified, Silver, Gold and Platinum — based on achievement in five areas: sustainable site development, water savings, energy efficiency, materials selection and indoor environment quality.





Company and workplace



100% of employees completed our annual Code of Conduct training in 2018. The code and related training outline expectations and provide employees the tools to do the right thing.

## Governance, ethics and compliance

# Corporate compliance and business conduct

For decades we have fostered a culture of compliance and ethical business conduct, striving to earn and maintain the trust of our stakeholders.

For more than 100 years, we have had the privilege of serving our customers and doing so with honesty and integrity. Because trust is so essential to our ongoing success, it is included in our corporate vision to be the preferred and trusted provider of the energy our customers need. To help deliver on this vision, we hold our employees, contractors and board of directors to the highest ethical standards and ensure their decisions are consistent with our values.

Every day we deliver safe, clean, reliable and affordable energy while holding ourselves accountable and acting responsibly. Through our commitment to doing what is right, we have established a reputation that our employees can be proud of and gives customers confidence in doing business with us.

### 2018 Results

- We revised our corporate values, putting new focus on who we are as a company today and who we want to be in the future. Through conversations across the organization, we asked ourselves what values will guide us for the years to come as we continue to evolve. Employees have responded positively to our renewed values of Connected, Committed, Safe and Trustworthy.
- We updated policy content in response to new or changing regulations and business practices. An example is our new, stand-alone anti-retaliation policy. While our Code of Conduct has always prohibited retaliation and protected employees who report concerns, we created a dedicated anti-retaliation policy to increase visibility of the company's expectations.

- We focused on educating leaders on how to respond to employee concerns and prevent, recognize and report retaliation. We held in-person compliance and ethics training, created a micro-learning training module and launched an e-learning course titled Compliance for Leaders.
- We completed a system refresh of Xcel Energy's allegation of wrongdoing case management system. This initiative included streamlining the hotline phone- and online-reporting intake form to make it easier for employees to report concerns, as well as simplifying the process of recording and monitoring progress on the investigations. These improvements drive consistency in reporting and enhance the employee experience.

## Ethical Foundation: Code of Conduct

Our Code of Conduct serves as the foundation for our Corporate Compliance and Business Conduct program. It guides everything we do — how we work together, make business decisions and interact with stakeholders. Our Code of Conduct also provides guidance for handling difficult judgement calls and reporting concerns.

The board of directors reviews and approves the Code of Conduct annually, ensuring top-level ownership for this foundational resource.

Employees at all levels, as well as contract workers and our board of directors, are expected to apply the Code of Conduct to their work with Xcel Energy. Code of Conduct training occurs annually and included in the training course is a statement of commitment. While contract workers are not required to take Code of Conduct training, they are required to perform services in accordance with the Code of Conduct as specified in the terms of their agreements with Xcel Energy.

## Corporate Compliance and Business Conduct Program

The focus of Xcel Energy's Corporate Compliance and Business Conduct program is to:

**Do What's Right: Report What *Seems* Wrong.**

### Sound Governance Practices

Xcel Energy's Board of Directors has overall authority for the Corporate Compliance and Business Conduct program, with key elements of oversight delegated to the Audit and Governance, Compensation and Nominating committees. Our Corporate Compliance and Business Conduct Council is comprised of leaders from across the company and ensures engagement with all employees.

The company's CEO sets a strong tone at the top and supports that tone in many ways including championing the values refresh and highlighting the company's commitment to compliance on webcasts and in-person at various team meetings. The chief ethics and compliance officer reports to the CEO, and also oversees the company strategy and corporate governance functions, enabling her to effectively drive company culture and values. The integration of these activities and responsibilities ensures that compliance is part of how we make decisions across the company.

### Policies, Training and Communications

Company policies, training and communications help employees understand expectations in order to make good decisions every day. Information about policies and expectations are shared through multiple channels and in multiple ways to ensure that they are a regular part of all employees' work experience.

Employees are responsible for knowing and following not only the Code of Conduct but also multiple other corporate policies associated with Corporate Compliance and Business Conduct. Training courses include content from corporate policies and other information that demonstrate how our values guide the way we do business. Employees use training information to ensure their actions protect and enhance the company's brand and reputation by working safely and effectively and complying with the many policies, laws, regulations and expectations governing our work.

Regular, consistent communications are designed to help employees do what's right. We use a variety of channels to reach employees across teams, such as emails, posters, videos, intranet news articles and in person discussions.

### **Issues, Investigations and Actions**

When things don't seem right, employees are encouraged to discuss concerns with their leaders. We know reporting a potential issue can be difficult, so we offer multiple reporting options that include contacting:

- Equal Employment Opportunity, Employee Relations or Workforce Relations
- The employee's next level of management
- The Compliance Hotline, available 24 hours a day and with the option to remain anonymous
- The Corporate Compliance and Business Conduct Office
- Legal Services
- The Xcel Energy Board of Directors


Employees working at our nuclear generating plants have additional reporting options that include completing a Nuclear Corrective Action Request form, reporting issues to the Employee Concerns program or contacting the Nuclear Regulatory Commission.

Our Compliance Hotline also offers employees the opportunity to ask questions about decisions they are unsure about.

As we follow up on reports, we conduct effective and timely investigations, take appropriate action and ensure employees are safe from retaliation. The Investigations Governance Committee oversees the investigation process and is comprised of the chief ethics and compliance officer, general counsel, chief financial officer and chief human resources officer.

When concerns are reported through the Compliance Hotline, the Corporate Compliance and Business Conduct Office assigns them to the appropriate business function to investigate based on allegation type. Business functions include Equal Employment Opportunity and Employee Relations, Workforce Relations, Legal, Security or Audit. These business functions also receive and investigate concerns reported through other channels. All reports are tracked and processed through a case management system that provides the company with a comprehensive view of allegations.





Our renewed corporate values lay the foundation for the culture we are building — one where we are Committed, Connected, Safe and Trustworthy.

## Workforce development

# Our people and culture

At Xcel Energy, our business and workforce are changing while customer expectations are rising — a dynamic that is driving us to become more innovative, competitive and customer focused.

Our workforce strategy begins with a mission to proactively attract, retain and develop the highest quality talent. We take a proactive approach to workforce planning and are identifying the skills we need to prepare and meet our future energy objectives, aligning our talent strategies to build diverse pipelines and identifying opportunities to retrain or develop our workforce.

We know our people are our greatest strength. That is why once employees are part of our team, we offer extensive training and engagement opportunities to develop their skills and talents and help them grow professionally, in addition to recognizing their achievements. We are also improving our leadership development programs, tools and resources to help ensure our leaders are effective in our changing environment. Through these efforts, our objective is to develop inspirational and courageous leaders that hold employees accountable for achieving results.

### 2018 Results

- More than 96% of employees participating in Connect 4 Performance met with their leaders for Quarterly Connections to discuss job performance, professional development and alignment with company goals and priorities.
- Internal candidates successfully filled 41% of our 2,318 job postings, and of employees newly hired to the company, 56% came from within the states we serve and nearly 24% had ethnically diverse backgrounds.



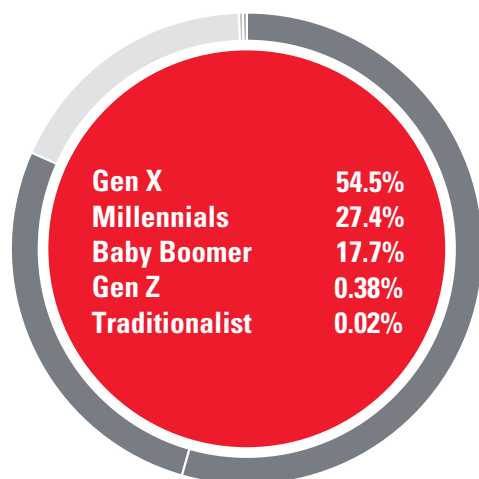
- Xcel Energy was named a Top Veteran-friendly Company by U.S. Veteran's Magazine for the fifth consecutive year, a Best for Vets employer by Military Times for the fourth consecutive year, and a Top-10 Military Friendly Employer by GI Jobs for the ninth consecutive year. We are included in Military Times' Best for Vets Index, and are honored to be a Most Valuable Employer for Military, according to Recruit Military. More than 10% of our new hires were veterans.
- For the third consecutive year, we received a perfect score on the Human Rights Campaign Corporate Equality Index and the designation as one of the Best Places to Work for LGBTQ Equality.
- Through a collaborative process that included feedback from employees throughout the organization, we renewed and streamlined our corporate values to reflect our core beliefs — who we are, how we conduct our business and the importance of our customers. We are Committed, Connected, Safe and Trustworthy.

## Workforce Profile

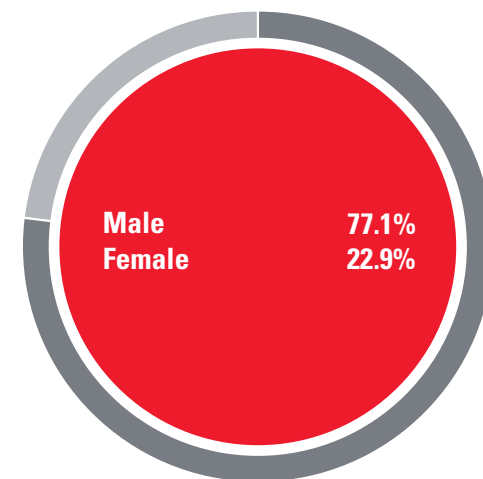
Bargaining		Non-bargaining		
<b>43%</b> <b>Bargaining</b>	<b>5%</b> <b>Temporary Craft</b>	<b>2%</b> <b>Temporary</b>	<b>38%</b> <b>Nonmanagement Professional</b>	<b>12%</b> <b>Management</b>

As of year-end 2018, Xcel Energy had 11,691 full-time, part-time and temporary employees.

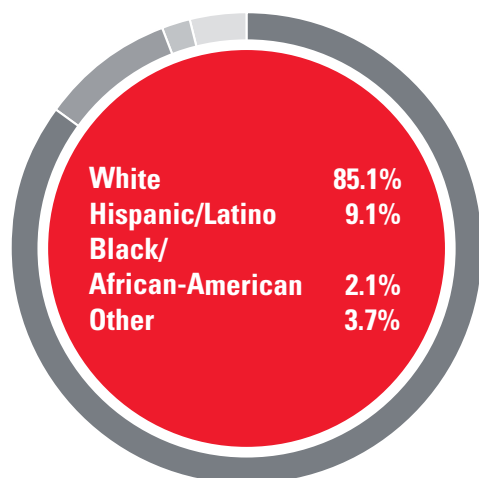
### Generational Age



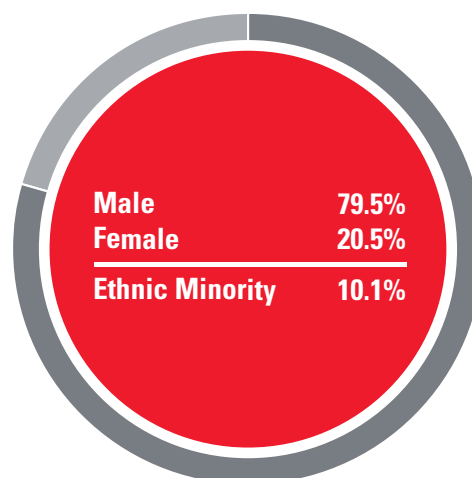
### Gender



## Ethnicity



## Management Gender and Ethnicity



The average employee turnover in 2018 was 9.9%. About 29.7% of turnover was the result of retirements, about 56.1% were resignations and the remaining 14.2% includes turnover for other reasons, such as unsatisfactory performance, misconduct, severance or death.

Our projections show that 27.9% of our workforce will be eligible for retirement over the next five years and 41% over the next 10 years. However, we do not expect all employees to retire once they become eligible.

## Workforce Planning and Analytics

Our strategic workforce planning models and process support leaders in using the opportunities that arise as a result of changes in our business objectives, including the workers required to complete budgeted work and turnover. By leveraging data and analytics, we are able to more accurately determine what the organization will need in terms of size and skill sets to achieve its objectives. The strategic workforce plan supports a more intentional approach to deploying solutions that will address our changing workforce.

In conjunction with this effort, we provide a Human Capital Report that helps leaders make data-based decisions. It is a dashboard that includes standard measures related to employee cost, performance management, and headcount and attrition trends. This information, combined with consultation with business partners, informs our leaders about their current workforce and predictive and statistical analysis provides insights into future impacts.

## Attracting Top Talent

To ensure a steady stream of qualified candidates for Xcel Energy's available jobs, we proactively engage with community and educational organizations to prepare a future workforce. We are focused on helping military veterans make the transition to civilian jobs through targeted recruitment and participation in the Hiring our Heroes program. To ensure we can best support our customers' needs, we are committed to having a diverse workforce that reflects the communities we serve.

## **Some of our targeted recruitment activities include:**

### **Educational Relationships**

We work with a number of colleges, universities and technical schools to provide an avenue to educate students on the opportunities for stable, well-paid jobs with energy providers like Xcel Energy. As a member of the Center for Energy Workforce Development (CEWD), we also help develop training and curriculum that prepares students for skilled jobs in the energy industry. Through our partnership with CEWD, we implemented the Legacy I-3 program for high school students in the Twin Cities to build a pipeline of diverse candidates.

### **Internships**

Through internships we ensure a pipeline for our future workforce needs. We hired 26 college interns into full-time positions with the company in 2018. We work with high schools throughout our Texas and New Mexico service areas, where we have the greatest needs. In Colorado, we have four programs in partnership with Denver Public Schools and Jefferson County high schools. In Minnesota, we continue our partnership with Step-Up Achieve and Right Track to hire high school summer interns. Through these programs, we had 60 high school interns in 2018.

### **Targeted Job Fairs**

We seek out employment events that help us successfully identify and hire qualified employees who are customer focused, curious and innovative. We maintain relationships with several schools and local organizations within our service territory that hold job fairs for diverse populations. Partnerships like this allow us to reach prospective employees to continuously improve our candidate pool.

### **Search Engines**

Xcel Energy markets its jobs on several key sites, including Indeed, LinkedIn and other social media platforms. In partnership with Professional Diversity Network and other industry and skill-specific boards, we target diverse, local talent and individuals that have specialized skills. We also work with local, community-based organizations to reach candidates throughout our service areas, reducing the need for candidate relocation and supporting our local economies.

### **Military and Veteran Outreach**

We remain focused on strengthening our strategic partnerships with military veteran organizations and engaging in activities that maintain our visibility as a preferred employer for veterans. Through military-specific marketing and communications efforts and participation in more than 35 job fairs that specifically target military veterans throughout our service territory, our commitment to hiring veterans and active duty reservists remains strong.

### **Diversity Outreach**

Through our partnerships with workforce centers in Minnesota, Colorado, Texas and New Mexico, Local Job Network and Diversity Minnesota, we are able to reach diverse job seekers in the places where they live and work. We also engage with diverse student groups such as National Society of Black Engineers, Society of Women Engineers, Society of Hispanic Professional Engineers and Society of Asian Scientists and Engineers to attract diverse entry-level employees.

## Diversity and Inclusion

We believe that a diverse and inclusive workforce makes our company stronger. Our commitment to diversity and inclusion goes beyond human resource policies and practices — it is an integral part of who we are, how we operate and how we see our future.

Our inclusive work culture embraces all employees and provides them with equal access to employment opportunities and development. To us, diversity is more than ethnicity, gender, age, race, national origin, disability, religion and sexual orientation. It includes differences in thought processes, educational backgrounds, work experiences, personalities, lifestyles and cultural backgrounds.

Each Xcel Energy employee is empowered to make a difference when it comes to creating an inclusive environment. We encourage our employees to remember that:

### **Diversity Exists: Inclusion is My Responsibility.**

#### **Diversity and Inclusion Education**

Xcel Energy's commitment to diversity and inclusion is instilled in employees from their first day on the job, as part of our new employee orientation program. Employees receive ongoing education in these areas, and in 2018, 813 employees and leaders throughout our service territory participated in a new half-day diversity and inclusion education session. The classes are designed to provide knowledge, insight and skills to manage diverse teams and create an inclusive culture. The company goal is to have 100% of employees through the program within three years.

#### **Business Resource Groups and the Council for Diversity and Inclusion**

Our 11 Business Resource Groups give Xcel Energy employees an inclusive and supportive venue to unite for personal and professional growth. They offer opportunities for cultural exchange and community outreach and helping solve business challenges. Additionally, through the Council for Diversity and Inclusion, leaders of our Business Resource Groups collaborate with leaders from our business areas to help address key challenges and achieve goals.

- **ECN (Employee Connection Network):** Connects new and existing employees and helps broaden all employees' understanding of Xcel Energy through networking opportunities, meet ups and community service events.
- **GCEEE (General Counsel Employee Excellence and Equality Committee):** Aids the general counsel in fostering a spirit of inclusiveness throughout the company.
- **GenNext:** Aims to support employees through employee education, collaboration and development.
- **GROW:** Identifies and implements innovative ideas and strategies for recruiting, developing, promoting and retaining women in non-traditional work roles in our Energy Supply business area.
- **MOVE (Military Ombudsmen for Veterans and Employees):** Sustains awareness on issues of interest to veterans and active military employees in our workforce and programs and policies that support the welfare of veterans and their families.
- **SAGE (Supportive Association for Gay/Lesbian/Bisexual/Transgender Employees):** Works to help the company become and remain a leader in this area of workforce diversity by addressing issues relating to sexual orientation and gender identification.
- **SOURCE (Strategic Organization Utilizing Resources for Career Enhancement):** Promotes career development, continued education, training and cultural awareness with a focus on African Americans.
- **Tribal Wind:** Supports diverse workforce initiatives and the Native American population through business initiatives such as recruiting, retention, professional development and cultural awareness.
- **WIN (Women's Interest Network):** Focuses on issues of interest to women, such as professional development and work/life balance.
- **!Xcelentej:** Increases visibility of Latino employees within the company and community while also promoting professional development and sharing Latino culture through awareness, inclusion and celebration.

- **XE WiN (Women in Nuclear):** Explores and develops programs that help all employees working within our nuclear organization to expand their leadership skills, network and create positive visibility for the nuclear industry within the communities we serve.

## Performance Management

Last year was the third year for Connect 4 Performance, our performance management approach for non-bargaining employees who make up over half of our workforce. Connect 4 Performance enables employees to align their individual goals with the priorities of Xcel Energy through simple, meaningful and frequent conversations with their leaders. Throughout the year, employees and leaders work together to identify opportunities that support employee professional development while helping achieve the company's strategic priorities. Employees are encouraged to record their development goals and regularly update and discuss progress and ideas with their leaders.

## Employee Engagement

After pausing from our traditional approach to measuring engagement through an annual survey, Xcel Energy spent 2018 developing a comprehensive plan to measure our employee engagement and sentiment. In 2019, we are introducing a new platform that allows employees to provide feedback digitally giving leaders real-time results. This new approach will provide us the flexibility to gather employee feedback at different career points and conduct pulse surveys on engagement.

We help employees stay engaged through a number of channels, including regular webcasts with our senior leadership team, an intranet site that is updated daily, a regular company news magazine for employees and retirees, rewards and recognition programs, company-sponsored volunteer opportunities and our annual Day of Service.

Employees are continuously encouraged to offer feedback to Xcel Energy leadership through a variety of methods. They can submit anonymous comments and questions during regular leadership webcasts and face-to-face meetings, and respond to blogs and articles that our leaders publish throughout the year.

## Workforce Relations

Xcel Energy is committed to providing all employees with a safe, rewarding workplace that values their contributions and ensures fair treatment. We respect our employees' right to organize if desired, and approximately half of our workforce is currently represented by unions.

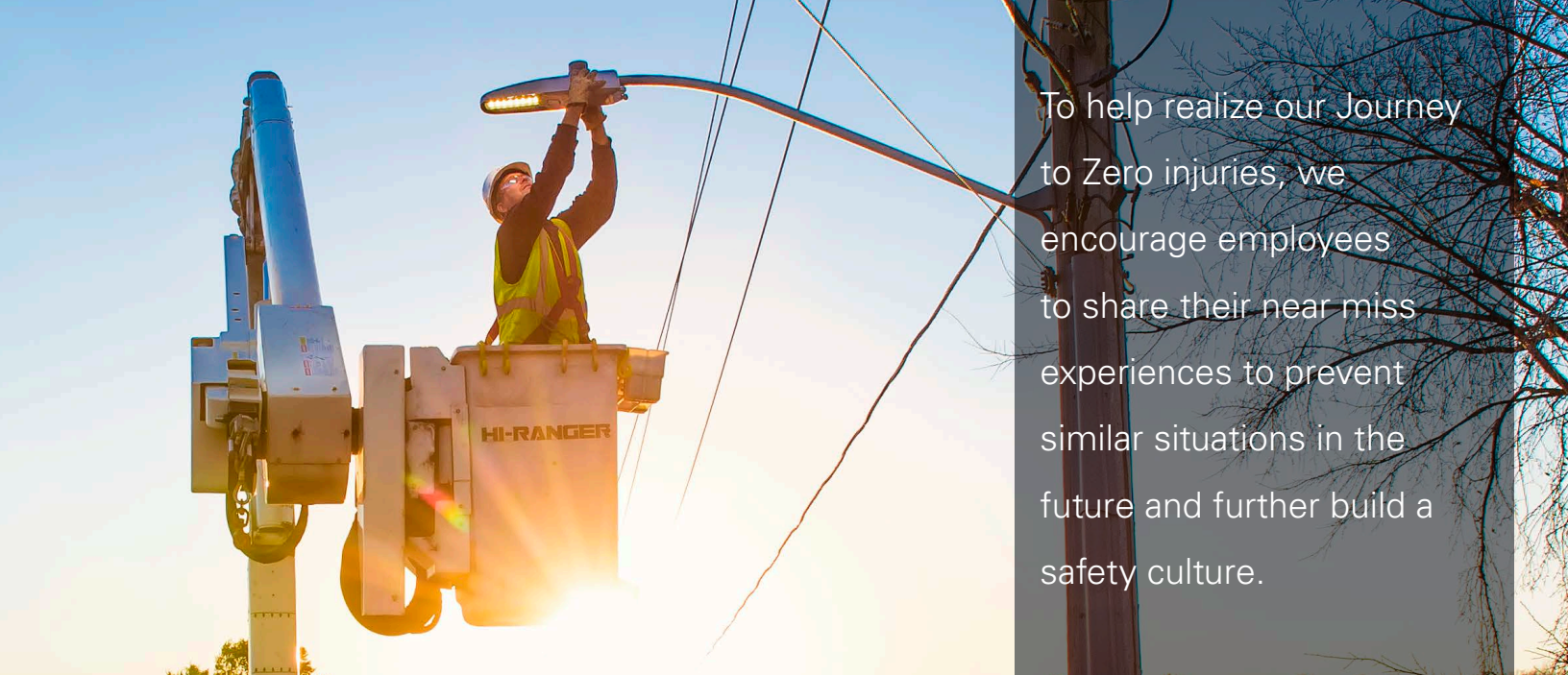
While each collective bargaining agreement is negotiated with a specific local union, we include equal opportunity clauses in all our bargaining contracts. We also operate in compliance with the policies and regulations established by the National Labor Relations Board, the statutes of the National Labor Relations Act and the guidance of the federal Department of Labor.

Xcel Energy recognizes that all parties benefit by coming together to achieve mutual goals, so we meet frequently with our unions to discuss new and ongoing issues. Employee safety is a mutual focus for both bargaining units and the company. Bargaining unit employees fully support and participate in the company's safety advisory councils, committees, training and other programs.

Interim bargaining has been used for the past 18 years to improve union relations and promote collaboration on business challenges that impact our operations and workforce. We also hold regular meetings between management and labor unions to address grievances with the goal of resolving issues between the parties.

In early 2018, Xcel Energy (Public Service of Colorado) reached an agreement with the International Brotherhood of Electrical Workers (IBEW), Local 111 the Union representing our employees in Colorado.





To help realize our Journey to Zero injuries, we encourage employees to share their near miss experiences to prevent similar situations in the future and further build a safety culture.

## Employee safety

# Our journey to zero

When we refreshed our corporate values in 2018 to reflect our core beliefs, there was never a doubt that staying safe would remain a top priority.

Given the nature of our business, our employees face numerous hazards while performing their jobs. That is why we continue to instill a culture that values safety through the work of our safety committees, company policies, and training and ongoing awareness campaigns.

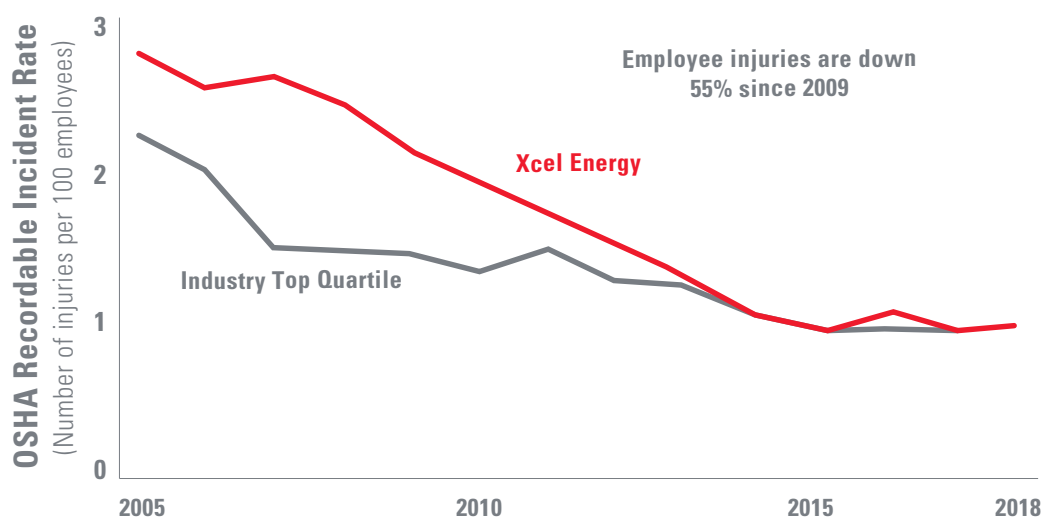
Our Journey to Zero is not just a slogan or program but is a commitment that all employees will return home from work injury free every day. It is about building a safer work environment by putting safety at the forefront of everything we do. Starting with top leadership, we continue to actively demonstrate support for safety throughout the organization. We strive to advance a safety culture through strategic behavioral safety programs and initiatives that encourage employees to take personal responsibility for their safety and the safety of others.

### 2018 Results

- Our employee safety performance ranks in the top-quartile for our industry. We have reduced OSHA recordable injuries by 55% and injuries classified as Days Away, Restricted and Transferred by 59% since embarking on our Journey to Zero.
- All contract employees receive safety training from their employers as a requirement of working with Xcel Energy. Plus, job briefings and job-site safety reviews occur daily. The total safety incident rate for contract workers in 2018 was down by almost 30%, even though the number of hours that contractors worked nearly doubled.
- We conducted Safety Leadership Training for all employees who are most at risk because they work directly with the delivery of electricity and natural gas.

- We continued to encourage employees to share their safety experiences and to learn from one another. Through a special campaign, we increased our near-miss sharing by 150% over 2017.
- The American Gas Association recognized our annual performance with the 2018 AGA Safety Achievement Award for excellence in employee safety.

**Our Journey to Zero commitment entered into its ninth year in 2018 and continued to make significant progress in keeping employees safe. Although, as the name of this effort implies, we won't be satisfied until 100% of employees go home injury free.**



## Managing Employee Safety

Xcel Energy has 21 corporate safety policies in place to address occupational safety and health issues. These policies apply to all company bargaining and non-bargaining unit employees, as well as contractors. Our policies cover a wide range of topics — from working in confined and enclosed spaces to preparing for and responding to emergency situations.

As part of our corporate values, and to protect our employees and the public, working safely is the first consideration while planning or performing work. It is the role of Xcel Energy management to foster, develop, implement and provide training and communication about safety programs that will help reduce occupational injuries and illnesses at work. We expect employees to report unsafe acts, behaviors or conditions to management in a timely manner so that we may address these safety concerns. Any retaliation against an employee who, in good faith, reports a safety violation or suspected violation is strictly prohibited. All employees are empowered to stop work if they see unsafe practices.

Our corporate safety organization manages implementation of regulatory compliance, provides technical consultation to business areas, tracks and communicates the company's safety performance, and fosters our safety philosophy and core value. The vice president of Safety and Workforce Relations leads this organization and reports to the chief human resources officer, who reports directly to the president, chairman and CEO. Xcel Energy's Operations, Nuclear, Environmental and Safety committee for the board of directors oversees the company's safety strategy and performance.

There are three key components to our safety and health culture that include:

- **Communication:** Within each business area, we verify that OSHA-required written programs are current and maintained at our facilities. Employees must be thoroughly briefed on site-specific hazards and protective measures prior to starting any job at an Xcel Energy operating facility or on electric and natural gas transmission and distribution lines and equipment. Finally, we establish a system of hazard analysis, which includes hazard identification and control in each business area, and we communicate this system to all affected employees.
- **Safety Committees:** Our safety committees are organized and represented by bargaining unit and non-bargaining unit employees and management. The expectations for these committees are outlined by management and periodically audited to track progress and effectiveness. Managers in each business area provide support for safety committee findings and recommendations that align with our corporate values.
- **Training:** Each business area and Corporate Safety develop training plans annually to include OSHA-required training and required elements of our Corporate Safety and Industrial Hygiene programs. We maintain thorough records of all training, including recording the names and dates of employees who complete required safety training.

We provide effective safety and health communications in various formats, including verbal instructions, written documents and posters, safety committee meetings and multimedia presentations, such as video and computer-based training. Through these various media, all employees have access to required safety and health training, policies, programs and safety manuals, as well as federal or state required communications. All Xcel Energy employees are expected to actively participate in the company's safety and health training and communications program.

## Safety Initiatives

We continued a number of important safety initiatives in 2018, while also launching new initiatives to help keep employees safe.

### 24/7 Safety

Our 24/7 Safety campaigns focus on maintaining a safety mindset around the clock, helping employees to be safe both on and off the job. The 2018 campaign focused on intervening when you see something unsafe and some of the common household and public hazards to watch out for.

### Ergonomics

Musculoskeletal Disorders (MSDs or strains and sprains and cumulative trauma disorders) are the leading type of injury at Xcel Energy, with sprains and strains representing more than 41% of our injuries. Several ergonomics training modules were initiated in 2018 to help improve this, including the Eyes on Ergo training module, Ergo Tips pocket guides and videos, prevention exercises and a Five-week Workplace Athlete Challenge.

### Near Miss Sharing

Sharing near misses with coworkers provides a learning opportunity that can prevent similar situations in the future. To encourage employees to share their stories, we do not pursue discipline for employees who report near misses, and we carried out a campaign in 2018 that included video testimonials, posters and articles.

### Safety Blitzes

After recognizing certain injury trends, company leaders set out to connect with employees to hear their views and suggestions about safety. Three safety blitzes were held in 2018 and a commitment was made by leaders to spend more time visiting with employees in 2019, as well.

### Safety Leadership Training

To help reduce serious life-changing incidents, the Safety Leadership Training program was conducted in 2018 for all at-risk employees. The program was designed to transform how employees view their role in safety because everyone is a leader when it comes to safety.

### **Safety Promise**

Xcel Energy's Safety department hosted a series of events in 2018 offering employees' families an opportunity to ask their loved ones to work safely on camera. The employees were then given the opportunity to make a safety promise on camera. These requests and promises were shared in various formats, encouraging everyone to make a personal commitment to their safety and the safety of those around them.

### **Slips, Trips and Falls**

Slips, trips and falls are avoidable, yet each year they make up a significant number of Xcel Energy's OSHA recordable injuries. We enhanced our Slips, Trips and Falls Toolkit in 2018 to include even more videos, training and guides detailing strategies for these incidents and minimizing the chance of injury when falling.



We follow best practices and benchmarking to develop pay, benefits and professional development programs that are market-competitive and attractive to current and prospective employees.

## Labor practices

# Total Rewards for employees

As our industry becomes more competitive, it is vital that we continue to offer current and prospective employees an attractive package of pay, benefits and professional development.

Xcel Energy is committed to providing employees with market-competitive compensation and benefits. We use best practices and benchmarking to ensure the programs we offer are aligned with the market and attractive to our workforce, while also finding ways to manage costs to keep our compensation and benefits programs financially viable.

We have reviewed and made changes to our contracts with benefit providers to help manage costs at their source rather than change plan design or increase cost to our employees.

### 2018 Results

- Forbes recognized Xcel Energy as one of the World's Top Regarded Companies and World's Best Employers, as rated by employees.
- We developed a new parental leave policy that allows non-bargaining employees up to an additional four weeks paid time off to care for a new addition — whether it is through birth, adoption or foster care.
- Employees participated in 440,000 internal learning opportunities as recorded through our Learning Management System.
- Our tuition reimbursement program supported 256 employees with their continuing education, with annual reimbursements totaling \$806,755.
- We identified 286 “ready now” successors to key positions around the company — potential successors that possess the necessary skills to make a seamless transition if needed into a role for which they have been identified.



## Employee Total Rewards

Xcel Energy's Total Rewards package includes base and variable compensation, along with benefits like health and well-being, retirement and pension, paid time off, recognition and talent development. We have a pay-for-performance philosophy, recognizing and providing larger rewards to our best performers. Base pay is influenced by job descriptions and external market pay data, as well as the employee's skills, experience and job performance. Bargaining unit employees are paid in accordance with their collective bargaining agreements.

Our annual incentive plan includes three award opportunities:

- Annual Incentive Program (AIP) Year-end
- I Deliver
- Innovator awards

These awards are given to exempt, non-bargaining employees who went above and beyond and who achieved results that were aligned with Xcel Energy's corporate goals. Our non-exempt employees are eligible for Spot-On bonus awards in recognition of above-and-beyond results in their responsibilities. Employees and leaders can also recognize one another through an online system, and when appropriate, give points-based awards that can be redeemed for merchandise and gift cards.

We provide a Total Rewards Statement that shows our employees the full value of the pay and benefits they receive. It offers a personalized snapshot of pay and benefits information, as well as links to additional program and service information. Employees can access their individual statements online.

## Benefits

A significant portion of our investment in employees is made through a benefits package that remains competitive in the marketplace. Offering a comprehensive approach to well-being, Xcel Energy provides programs that address the physical, emotional and financial welfare of employees.

We are committed to supporting the health of employees and offer a medical plan that provides comprehensive coverage, encouraging preventive care so health issues can be identified.

Our Employee Assistance Program connects employees with free, confidential support to resolve a variety of issues including mental health counseling, elder care, financial and legal advice.

Xcel Energy continues to offer defined benefit pension plan along with a 401(k) savings plan, which demonstrates our commitment to partnering with employees to meet their long-term financial goals. Unlike many employers who have frozen pension plans or reduced contributions to 401(k) accounts, we continue to contribute to these plans at market-appropriate levels to indicate our commitment to help employees save for the future.

## Xcel Energy Benefits Package for Eligible Non-bargaining Unit Employees\*

### Health Benefit Plans

- High Deductible Healthcare Plan (HDHP)
  - Reasonable and affordable premiums
  - Includes a Health Savings Account (HSA) employees can contribute pre-tax dollars
  - In aggregate, Xcel Energy pays approximately 75% of medical costs
- Dental plan
  - Xcel Energy offers a basic and enhanced dental plan
- Vision plan
  - Xcel Energy offers access to a vision plan
- Wellness Program
  - Financial incentives to encourage healthy lifestyles
  - Wellness coaching including tobacco cessation, weight management, diabetes management, onsite yoga and flu shots
  - Fitness center reimbursements

### Retirement Plans

- Pension plan
  - 5% cash balance plan for new employees and legacy formulas for other employees
  - 100% paid by Xcel Energy
- 401(k) savings plan
  - Savings Plan allows employees to save for their future through automatic payroll deductions (pre-tax, Roth 401(k) after-tax or a combination of both)
  - Variety of investment options (cash, bond and stock investments)
  - Company matching contributions

### Income Protection

- Life Insurance
  - Xcel Energy covers the full cost of basic life insurance
  - Offers voluntary supplemental and dependent life insurance coverage
- Paid Time Off
  - Xcel Energy covers the full cost of short-term and long-term disability for eligible employees

### Work/Life Balance Programs

- Employee Assistance Program (EAP)
- Paid Time Off
  - Vacation/PTO
  - Sick leave

- Transit pass subsidies
- Adoption assistance
- Parental leave allows employees up to an additional four weeks paid time off
- Flexible Spending Accounts
  - Dependent care
  - Medical
  - Transportation

### Professional Development Programs

- Tuition reimbursement
- Variety of internal and external development opportunities

\*Xcel Energy employees are eligible for benefits based on employee group and status (regular full-time and regular part-time non-bargaining). Bargaining unit benefits are based on the contract negotiated with the specific local union.

## Professional Development

Total Rewards is more than pay and benefits. It also includes providing employees opportunities for professional development. Xcel Energy is committed to professional development and maintaining an environment where learning and growth can occur. Employees are ultimately responsible for owning and managing their own professional development. However, we expect managers to encourage development through feedback, coaching and support.

With this in mind, we offer employees resources and tools to support their personal and professional development, including a Learning Management System (LMS), which provides e-learning, virtual and traditional training options. We also provide employees with development planning tools, assessments and suggestions for practicing new skills and behaviors.

### 2018 Professional Development Opportunities

Learning Programs	Opportunities
<b>Online Courses</b>	We offer an extensive catalog of online courses for employees to complete, ranging from technical and computer application training to professional and management training to compliance-related education and more. Some of these training programs are mandatory.
<b>Classroom Courses</b>	Employees can choose to attend a number of different training programs that are taught in person, ranging from safety and compliance-related classes to professional development classes to technical trainings. Depending on job responsibilities, some of these courses are mandatory.
<b>Career Development Assignment Program</b>	The Career Development Assignment Program is an intentional effort to support the development of high-performing employees through cross-functional experience aligned to business needs. Employees may be pre-identified through succession planning or, in some cases, the opportunity may be posted.

## 2018 Leadership Development Opportunities

Programs	Opportunities
<b>Succession Planning</b>	Talent Review identifies individuals who might be successors for critical positions at Xcel Energy. Through this systematic process, executives and managers discuss assessments regarding the long-term performance, leadership potential and career aspirations of their employees. Working in teams, they determine the developmental readiness of each employee, create customized development plans and identify talent gaps. Potential “ready now” successors are identified for key positions around the company. This ensures there are successors that possess the necessary skills to make a seamless transition into the role for which they have been identified. In 2018, about 202 key positions were identified and nearly 2,300 leaders and individual contributors were assessed during Talent Review.
<b>Coaching in the Moment</b>	Coaching in the Moment is a course that teaches leaders how to coach employees by using insightful observations, shifting their worldviews and empowering them to take meaningful action. Offered both in a classroom and online setting, this training is transforming how our leaders interact with their team members by helping them learn to resolve their own dilemmas.
<b>Leadership Essentials</b>	Leadership Essentials is an online portal accessible to all employees that features over 25 learning topics, such as managing relationships, influencing and development planning. Each topic contains informational content, practice activities, and links to curated internal and external resources such as helpful articles and videos.
<b>Leading the Call</b>	Leading the Call is a small cohort-based executive development program for high potential, senior leaders. A cohort will meet regularly over several months to engage on topics such as culture, leading change, self-awareness, cross-functional and enterprise thinking, and to prepare for the highest levels of leadership. To put learning into action, they also divide into small groups to address real business challenges. In 2018, a cohort of 17 leaders went through the program.

## Equal Employment Opportunity and Non-discrimination Policies

Our corporate Code of Conduct prohibits all forms of discrimination and promotes equal employment opportunities. We have Equal Employment Opportunity and Non-Discrimination policies in place that apply to all Xcel Energy operating companies and subsidiary companies. Xcel Energy provides equal opportunity in hiring, training, compensation, promotion, termination, transfer and all other terms and conditions of employment, without regard to race, color, religion, creed, national origin, gender, age, disability, veteran status, sexual orientation or any other protected class status in accordance with applicable federal, state and local laws.



Our electric reliability remains among the top-one third of U.S. electric utilities, with customers having electricity service on average 99.9% of the time.

Energy reliability, fuel diversity, nuclear generation, security, emergency preparedness and advanced grid

## Reliable and secure energy

We provide 24/7 convenience for millions of customers who depend on us for the fundamentals — reliable, affordable and safe energy from an increasingly cleaner mix of resources.

Above all else, our fundamental purpose is to provide customers with safe, clean, reliable and affordable energy. We continually invest to strengthen and upgrade our infrastructure — the generating plants, power lines, pipelines and other systems that serve customers. This includes diversifying our energy supply to provide energy from a reliable mix of resources while managing cost, environmental impact and making sure we don't depend too heavily on any one energy source. As we decide where to invest, we naturally consider projects that address all these considerations while providing the best overall value for all stakeholders — addressing the interests of regulators, policy makers, communities, customers and investors.

To run and maintain our system, we must also invest in our people to cultivate a culture of continuous improvement where we strive to work better and smarter for our customers. Among our operations employees, we have a mantra of getting better every day.

### 2018 Results

- Regulators approved our Colorado Energy Plan that is supported by a diverse coalition of stakeholders, including environmental groups, consumer advocates, municipalities and customers. Under the plan, we will retire 660 megawatts of coal-fueled generation and add 1,100 megawatts of wind, 700 megawatts of solar, 275 megawatts of battery storage and 380 megawatts of existing natural gas resources. We will own 500 megawatts of the new wind and all of the natural gas resources.

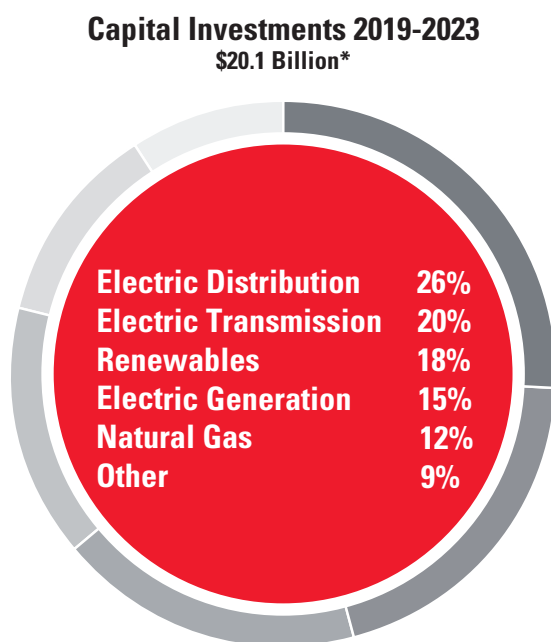


- We reached a \$650 million agreement to purchase the Mankato Energy Center, a 760-megawatt natural gas power plant. The plant currently provides power to our customers under a purchased power agreement with Southern Power, a subsidiary of Atlanta-based Southern Company. Purchasing the plant is a great value for customers because of the cost savings and operating flexibility it can provide as we transition to clean energy and reduce reliance on coal.
- We delivered the Rush Creek wind project on time and within budget. The 600-megawatt project is our largest constructed to date. We also made progress advancing eight other wind projects across seven states to different stages of development. Xcel Energy is building and will own the projects, totaling 2,550 megawatts of capacity. In addition, we expect to own an additional 470 megawatts of wind capacity from four projects that others are building or repowering.
- Under our Advanced Grid Intelligence and Security initiative, we deployed 100 network and more than 200 advanced distribution devices, and implemented a secure, two-way private network that will function as the foundation for advanced technology in Colorado and Minnesota. This work is just the beginning of the initiative that will upgrade the power grid to better serve customers and enhance our ability to efficiently restore power and improve reliability. The initiative will create a platform that provides enhanced visibility and control of the energy grid through the integration of modern information system technology and traditional distribution systems.
- Xcel Energy was one of several companies recognized with a special 2018 Emergency Assistance Award by the Edison Electric Institute. Approximately 200 of our line workers and support personnel traveled to Puerto Rico to help restore power following the devastation of Hurricane Maria.

## Investing for the Future

Over the next five years, we plan to invest \$20.1 billion in projects that, in addition to ongoing maintenance and repair, will improve energy production, strengthen the energy grid, ensure security and offer customers more options.

**We are investing in projects that offer the most value for customers.**



\*Includes the purchase of the Mankato Energy Center and the Jeffers and Community Wind North repowering projects, which are awaiting regulatory approval in 2019.

## System Resource Planning

We are required by some state regulatory commissions to regularly conduct a system resource planning process. The process varies by state, but generally begins with Xcel Energy filing a proposed long-term resource plan with the public utilities commission, which is then evaluated by regulators, as well as customer, environmental and community stakeholders. The plans assess the overall resources we need to serve the energy needs of our customers. The plans also discuss many other factors associated with our generation portfolio including transmission needs and our total load obligations, which are influenced by items like energy efficiency program goals.

Once the plan is approved, it may result in the need to add resources to serve our customers. We then typically release one or more requests for proposals, which may be general or targeted toward specific resources, such as natural gas or renewable energy. As the regulatory commissions decide on the resources to be acquired, our stakeholders have the opportunity to provide input.

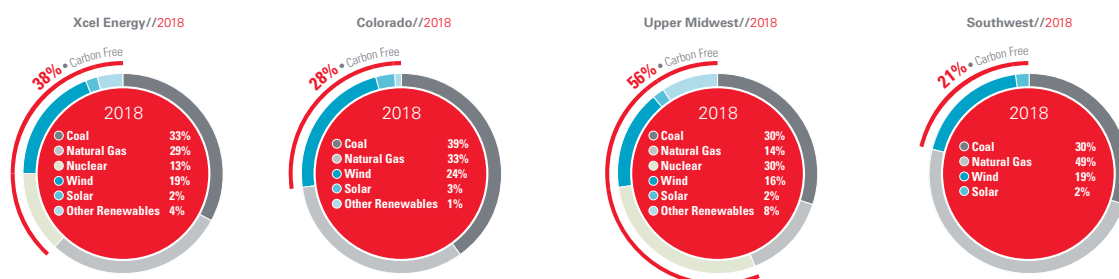
In Colorado, regulators approved the Colorado Energy Plan in August 2018, which completed phase two of our 2016 resource plan. We are now acquiring the new renewable, battery and natural gas resources that are part of the plan.

In the Upper Midwest, we are preparing to file a new resource plan in July 2019. We have announced our 2030 goal to reduce carbon emissions from the electricity that serves our customers 80% while maintaining reliability and keeping customer bills affordable. We are currently working with stakeholders on the upcoming proposal to achieve this goal.

In our southwestern states, we are only required to file a resource plan in New Mexico. In early 2018, regulators in New Mexico and Texas approved our plans to add 1,230 megawatts of new wind generation for the region in 2020. We are now implementing the wind projects, which are expected to meet customer energy needs while saving money long term through lower fuel and other costs. We anticipate filing updated resource plans in New Mexico as our system load requirements and generation portfolio continues to evolve.

## Our Energy Supply

Xcel Energy provides electricity from a diverse mix of energy sources, including coal, natural gas, nuclear and renewables. We delivered more than 102 million megawatt hours of electricity to customers in 2018 produced at Xcel Energy generating plants and purchased from third-party suppliers.



## Utility Operations

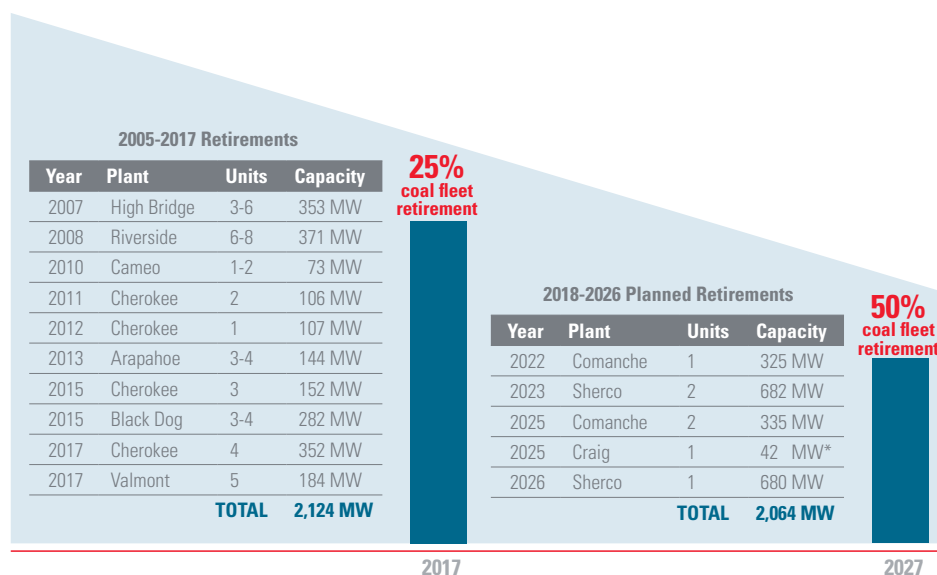
### Generating Electricity

We currently own 79 generating plants that operate across our eight-state service territory with more than 18,000 megawatts of capacity. Traditionally, our generation portfolio has depended on coal, but we are transitioning our energy supply away from coal to rely more on renewable energy and energy sources that enable renewable integration, such as flexible natural gas generation. We need technologies that can be dispatched to balance the peaks when customer use exceeds renewable generation and valleys when renewable generation exceeds customer use.

By 2026, we will retire 23 coal units under approved plans, representing approximately 50% of the coal-fueled capacity we own. When we file our proposed Upper Midwest Energy Plan in July 2019 for consideration with the Minnesota Public Utilities Commission, it will include additional coal retirements. We will propose closing the Allen S. King Generating Plant in 2028 and Sherco Unit 3 in 2030 — our last remaining coal plants in the region.

As we retire resources and replace them with new ones, we are making the transition responsibly and thoughtfully for the communities and employees who are impacted. To date, we have managed plant closures through attrition and employee transfers to different company work locations. For our communities, we continue to partner on economic development opportunities, and we expect the transition will also create new jobs and economic development opportunities throughout our service area.

**Xcel Energy's declining reliance on coal enables significant reductions in carbon and other emissions.**



\*Based on Xcel Energy's 10% ownership interest in Craig Unit 1.

We continue to invest in wind energy under our Steel for Fuel strategy, capitalizing on historic-low wind prices and available tax credits to install new wind farms — where the cost to build the projects is offset by future fuel savings. Xcel Energy is recognized as a national leader in wind energy. Currently, most of the wind power on our systems is contracted under long-term agreements with third parties, but that is changing under our Steel for Fuel strategy.

Our two nuclear generating plants in Minnesota play an essential role in our energy future, providing 1,657 megawatts of reliable, carbon-free capacity, enough to power 2.3 million homes. The plants delivered exceptional performance in 2018, generating more than 14.6 million megawatt hours of energy. It is a record for the plants, which produced power 96% of the time while reducing operating and maintenance costs by nearly 3%. Both plants also received the top rating under the Nuclear Regulatory Commission's Reactor Oversight Process that classifies the nation's nuclear reactors into categories based on safety. Our Monticello Nuclear Generating Plant was honored with the Institute of Nuclear Power Operations' Excellence Award for achieving an excellent rating on the plant's annual evaluation.

### **Delivering Power**

Xcel Energy operates nearly 21,000 miles of power lines and more than 1,200 substations and other equipment to safely and reliably deliver electricity to customers.

Transmission lines are a vital link to bring electricity over long distances from power sources to substations closer to homes and businesses. Xcel Energy is one of the fastest growing, investor-owned transmission systems in the country.

The following are notable projects in 2018:

- As part of the Power for the Plains initiative in New Mexico and Texas, we completed nearly 250 miles of new transmission. The largest effort was the new 90-mile 345-kV Hobbs-China Draw project in New Mexico that provides a new source of bulk power to meet growing electricity demand in Eddy and Lea Counties.
- We completed the 83-mile, 345-kV transmission line between Missile Site Substation and the new Pronghorn and Rush Creek II Substations. The new line carries power from the Rush Creek wind project to Colorado business and residential customers.
- In Minot, North Dakota the 20-mile Magic City-McHenry 230-kV transmission line and new substation went into service, providing another source of electricity and improving reliability for the area. Xcel Energy crews partnered with the U.S. Fish and Wildlife Partners for Wildlife program to plant 40 acres of pollinator habitat around the new substation.
- The La Crosse-Madison Transmission Line Project, also known as the Badger Coulee Project, was completed and energized in December 2018. The approximately 180-mile, 345-kV line provides electric system reliability to benefit western Wisconsin communities, the state of Wisconsin and the entire Upper Midwest region and provides access to lower-cost power and renewable energy.

In addition to these projects, we successfully started a critical rebuild project near Boulder in difficult terrain. In three days, we hauled and set 19 steel transmission structures by helicopter to rebuild a 110-year-old 115-kV line that runs between the El Dorado Substation and the NCAR Substation in Colorado. The line is located in Boulder Open Space in an area largely inaccessible to vehicles.

### **Fueling Homes and Businesses**

Xcel Energy is the tenth largest provider of natural gas service in the country, based on number of customers. We fuel the homes and businesses of approximately 2 million customers in Colorado, Michigan, Minnesota, North Dakota and Wisconsin, and also operate some gas transmission in South Dakota and Texas. Natural gas is an extremely safe and efficient way to heat homes, from both a cost and environmental perspective, especially in our cold weather service areas. With more than 2,200 miles of transmission and 35,000 miles of distribution pipelines already in service, we plan to add approximately 750 miles of new pipeline over the next five years.

To maintain safe and reliable gas service for everyone, we continue to upgrade and renew our natural gas pipelines and other equipment. We finished replacing all cast-iron pipes on our system in 2014. Low natural gas prices have made it possible to invest in our system and accelerate upgrades with minimal impact to customer bills.

Xcel Energy purchases natural gas from third-party producers to generate electricity and distribute to customers for use in their homes and businesses. Natural gas production is governed by federal, state and local regulations, with additional regulations under consideration. We expect all our suppliers to conduct their operations responsibly and in compliance with all regulatory requirements.

We can play an important role in ensuring natural gas is produced responsibly and as sustainably as possible. To help promote sustainable production upstream of our operations, we joined the Natural Gas Supply Collaborative — a group of the nation's large natural gas purchasers. Collaborative members have called for and are encouraging enhanced transparency from natural gas producers across 14 social and environmental metrics.

## **Vegetation Management**

Xcel Energy's Vegetation Management department manages millions of trees across more than 47,000 miles of distribution right-of-way and nearly 21,000 miles of transmission right-of-way throughout our service territory. For 24 years, the Arbor Day Foundation has recognized our company as a Tree Line USA utility for our commitment to proper tree pruning, planting and care.

We use industry best practices such as Integrated Vegetation Management, which encompasses a progressive system of information gathering and helps us develop compliant solutions for controlling vegetation near electric and natural gas facilities. The practice helps us achieve our vegetation management goals in an environmentally sensitive, socially responsible and cost-effective manner.

In addition, pruning methods comply with standards set by the American National Standards Institute and the Tree Care Industry Association, which are endorsed by the International Society of Arboriculture.

For our distribution and transmission lines, work is generally performed on a four- to five-year cycle. In Colorado, we have established a Mountain Hazard Tree Program that helps us stay ahead of the tree mortality caused by the Mountain Pine Beetle. Our practices seek to balance our customers' need for reliable energy while respecting the natural environment that surrounds our facilities. For example, we work with landowners to determine if trees and other vegetation can be deemed compatible with safe operation of our electric lines.

In our efforts to comply with governmental regulation and to better ensure electric system reliability, our transmission line vegetation management program emphasizes the removal of incompatible vegetation to promote long-term vegetation control. In many cases, this means removing trees in areas where trees had been pruned in the past.

We employ manual and mechanized clearing techniques, as well as responsible herbicide applications. All herbicides used are products registered by the EPA and the appropriate state regulatory agency. The herbicides are applied by licensed applicators.

## **Safety: Grid Resilience and Security**

As the use of technology and interconnected systems expands, the grid is increasingly subject to attack by those who might choose to do us harm, whether for criminal purposes or as part of an effort to undercut our national security. Ensuring our energy grid is secure from cyber and physical threats is an ever-evolving responsibility that demands our constant vigilance and is a top priority for Xcel Energy.

We continue to implement an array of efforts to increase preparedness and decrease vulnerability. Our Enterprise Security Services organization oversees coordination of all security efforts, including employee training and awareness, compliance with federal regulations and corporate security governance.

Through our state-of-the-art Cyber Defense Center, we monitor and protect our networks 24 hours a day, seven days a week. Our cyber security program is risk-based and uses known standards and best practices which encompass security controls that provide adherence to government and regulatory requirements. It includes "Defense-in-Depth" methodology that provides multi-layered safeguards to reduce or eliminate single points of failure and weakness.

While it is impossible to protect our systems and grid against every malicious attack, we are taking reasonable and prudent steps to prevent, detect and mitigate the impacts of an intrusion. We are hardening systems to limit opportunities for attack and deploying enhanced monitoring and detection systems to help us promptly identify any successful intrusion.



In 2018, we introduced the Enterprise Command Center, which provides constant monitoring for natural and man-made events that could be disruptive to Xcel Energy's ability to serve our customers, protect our assets and keep our employees safe.

We engage with other members of our industry, other segments of the economy and the government to engage in threat information sharing and test our combined capabilities to respond to an attack. Individually and in collaboration with other energy providers, we are working to prepare our employees and systems for responding to a successful attack by developing inventories of spare equipment and processes for preserving reliability in the unlikely event our key operational systems were to be compromised.

As part of our commitment to security, Ben Fowke, Xcel Energy chairman, president and CEO, is a member of the National Infrastructure Advisory Council, which advises the President on ways the nation can protect its critical infrastructure. He also participates in the Electric Sector Coordinating Council, which serves as the principle liaison between the federal government and the electric power sector on these issues.



We advocate for policies that support the needs of all customers while creating opportunities for Xcel Energy to invest in the grid and continue delivering energy that is safe, reliable, affordable and increasingly clean.

## Public policy engagement

### Public policy

Xcel Energy engages in policy and regulatory issues important to ensuring our ability to provide all customers with the energy service and products they want and value.

As the energy industry continues to undergo a significant transformation, it is essential that we participate in the policy developments that will determine our future, representing the interests of our company and its many diverse stakeholders. With more than a century of experience in meeting the energy and financial needs of customers, communities and investors, we aim to share our expertise with policy makers and elected officials to better inform and guide decisions that impact the service we provide.

While we may not always share the same positions, we participate in industry, trade, business and other associations to provide our perspectives and to learn from the perspectives and experiences of others. We discuss issues and solutions with policy makers on all levels — local, state and federal. We also provide informal input and formal testimony and comments on proposed legislation and regulation.

Our policy priorities focus on advancing research of new clean energy technologies and developing the right conditions that allow technologies to be seamlessly adopted by our existing system, once they are ready. To help facilitate or accelerate our industry transformation, we are exploring targeted incentives and the right mandates that will not increase customer costs.

#### 2018 Results

- When we announced the company's industry-leading carbon vision in late 2018, policy makers, community leaders and environmental advocates from around the country expressed their support for our new goals. We worked extensively with stakeholders on this commitment to help confirm our goals and advocate for the policy objectives for achieving them.

- We worked with public utilities commissions in all of our states to determine how cost savings associated with major tax reforms passed by the U.S. Congress in late 2017 will be shared with our customers. Overall, our average electricity rates were 0.2% lower in 2018 due to customer refunds associated with the Tax Cuts and Jobs Act.
- The President's National Infrastructure Advisory Council released its report on how the nation can best prepare for and recover from a catastrophic power outage. Xcel Energy's chairman, president and CEO Ben Fowke participates on the council, and we were significant contributors to the report, which examines how our nation can strengthen its long-term power outage prevention and recovery capabilities.
- The 2018 Farm Bill signed into law at the end of the year includes a provision that we supported to authorize the U.S. Forest Service to work with utilities to manage vegetation adjacent to transmission rights-of-way on federal lands. The program supports overall forest health and can help protect utility infrastructure from wildfires.
- The U.S. House of Representatives passed a bill in spring 2018 that allows for consolidated interim storage facilities and encourages the finalization of a permanent repository for radioactive waste from the nation's nuclear generating plants. We supported the bill and continue to work on a solution to this long-standing issue. In May 2019, our Chief Nuclear Officer testified in support of similar legislative proposals in the U.S. Senate.

## Public Policy Principles

Our energy landscape is evolving, driven by new technologies and customers demanding new energy options and a reduced carbon footprint. In this new landscape, we are striving to meet the interests of individual customers while continuing to deliver safe, clean, reliable energy at an affordable cost and creating opportunities for our company to invest in the grid. To meet the challenges ahead, we follow these four core principles as we support the transformation of our energy landscape.

- **Utilities are engines for innovation and deployment at scale.** The vertically integrated utility model with regulatory oversight is well-positioned to adapt to changing energy markets, new technologies, new customer preferences and community goals. This model provides inherent system value through efficiency, optimization and economies of scale that benefit all customers and balances the allocation of risks and benefits between the utility and its customers. As such, we are well-positioned to grow the market for value-added services — such as energy storage, microgrids, electric vehicles, and solar power — and to do so at scale and in a manner that benefits all customers.
- **We can enable greater customer choice without eroding fundamental rate design principles.** Ideally, rates should reflect the cost of service provided to a customer and continue to prioritize affordability because reliable, affordable energy is essential to a strong economy and protecting low-income customers. Matching rates to price signals moves the system to a more efficient state of operation and options like time-of-use pricing can incentivize customers to shift energy use to more desirable times.
- **The grid is our economy's greatest physical asset and utilities are its stewards.** More than a collection of wires, the grid is an integrated system of plants, wires, transformers, substations, control systems, and other equipment that is foundational to our economy. In our jurisdictions, the vertically integrated utility model — from supply to delivery — is the most effective way to economically maintain a reliable and secure grid and make the investments necessary to meet customer needs and achieve environmental goals.
- **Our economy will continue to electrify and utilities should be the architects of that transition.** There are clear signs that our economy is undergoing a transformation to greater and cleaner electricity usage, and through lower-carbon electricity and electrification, we can further reduce greenhouse gas emissions. The transition must be done as part of a thoughtful, deliberate, policy process — one that builds upon past utility successes and engages customers and communities who wish to actively participate.

Our society does not need a new business model for utilities in order to meet modern day challenges. We need a modernized version of the model that has been delivering for decades. The utility industry, and Xcel Energy as a leader in the industry, is well poised to meet these challenges in direct partnership with our regulators and our customers.

## Advocacy for Innovation and Developing Advanced Energy Technologies

We continue to engage in and work to address policy issues at all levels of government. One of those issues, and a significant objective for us going forward, is establishing a path for the development of advanced, carbon-free 24/7 technologies that we will need to fulfill our aspiration to serve customers with 100% carbon-free electricity by 2050.

Federal and state policies must support the development of new, carbon-free, 24/7 resources to complement our existing and growing portfolio of renewable energy, energy efficiency and demand response resources. We can also send clear signals to the market around price, capabilities and timing for when these technologies will be needed. In this way, utility resource plans provide the market signal — the state-level “technology pull” — from which the private sector and national laboratories and federal agencies can align their investments. This investment in further research and demonstration will help develop the carbon-free solutions we need at the cost and scale at which our sector will need them.

We are advocating for policies that help take advanced clean energy technologies from demonstration stage to commercialization by creating programs to manage cost and spread risk. In order for this to happen most effectively, it is important that developers leverage existing infrastructure and current market conditions. There is also opportunity to provide incentives for clean energy innovation and reducing barriers to new development. These incentives can be powerful mechanisms for deploying these technologies in the marketplace, but they require careful design. For that reason, we are working on policies that allow the efficient use of existing and new tax incentives.

## Political Contributions and Lobbying

Xcel Energy has a corporate policy that sets guidelines and rules for political contributions and to ensure all contacts with government officials meet legal and ethical standards.

Our board of directors, leadership and employees must comply with all federal laws restricting the making of political contributions or expenditure using corporate funds in connection with elections for federal offices. When communicating about matters involving Xcel Energy, the board of directors, leadership and employees must accurately convey corporate messages and support the Xcel Energy brand. Xcel Energy's Political Contributions Report provides corporate contributions and dues paid to trade associations.

## Employee Policy Engagement

Grassroots advocacy is important to Xcel Energy because our industry is so complex. Xcel Energy employees can help educate their friends, neighbors and community leaders by participating in:

- **Legislative Days:** We offer a special day at the capitol in each of our jurisdictions for employees to meet their elected officials and learn more about the legislative process.
- **Local events and meetings:** Employees can represent the company at community meetings and special events.
- **Political Action Committees:** Employees can voluntarily participate in seven different groups that are organized and run by employees.

### Political Action Committees

Xcel Energy sponsors seven Political Action Committees or PACs organized and run by employees, six at the state level and one at the federal level. Participation in the company's PACs is completely voluntary and is part of the engagement opportunities that we offer employees.

Each of the company-sponsored PACs has its own board of directors elected by its members that make contribution decisions. All of our PACs are strictly voluntary, and there are no employment benefits based upon participation. Each complies with all applicable local, state and federal laws.

### 2018 Xcel Energy Political Action Committee Activity

PAC	Employees Participating	Total Employee Contributions to PAC	Total Contributions Made to Candidates*
Colorado (Western PAC)	327	\$28,927	\$38,375
Minnesota**	329	\$48,705	\$44,700
North Dakota	24	\$1,945	***\$6,200
South Dakota	0	\$0	***\$3,900
Texas/New Mexico (SCOPE)	368	\$35,787	\$59,050
Wisconsin	342	\$36,614	\$27,488
XPAC (federal PAC)	389	\$246,220	\$253,000

\*Funds contributed by employees can accrue over multiple years and are not necessarily distributed in the same year they were contributed. Contributions vary by year and are typically lower in nonelection years or years when state legislatures are in session.

\*\*The state PAC in Minnesota is operated outside of Xcel Energy in accordance with state law that prohibits the use of corporate resources to support the PAC; although, payroll deduction is specifically permitted in Minnesota. Activity for the Minnesota PAC is only included in this report for transparency and informational purposes.

\*\*\*With the exception of 24 North Dakota state PAC-only contributors, all contributions made to both the North Dakota and South Dakota state PACs were made via funds transferred from the Minnesota state PAC in compliance with all federal, state and local campaign finance laws.





Through well-established processes and the regular monitoring of nearly 4,000 suppliers, we ensure the reliability and security of our supply chain.

## Procurement practices

# Supply chain management

Suppliers play a vital role in our company's ability to manage costs, operate efficiently and provide the ongoing service that our customers value.

We continuously look for ways to improve efficiency and reduce the cost of doing business through our supply chain processes. As we negotiate favorable prices or find ways to reduce waste, we pass the savings on to customers, helping to manage their energy costs.

Much of our spending on materials and services is with local businesses, which supports economic prosperity in the communities we serve. We also look for business partners that share our priorities around safety, diversity and environmental protection and that will adhere to our Code of Conduct.

### 2018 Results

- We spent \$533 million, directly and indirectly, with businesses owned by women, minorities or veterans, achieving our goal to spend 12.4% of total annual spending with diverse suppliers.
- Nearly 70% of our supply chain spending was with local businesses, totaling more than \$2.9 billion. While not all materials and services can be sourced locally, we build relationships and set targets to support our area economies.
- Through our supply chain, we saved approximately \$307 million, which was first-quartile performance in a benchmarking of peer utilities.
- The Hispanic Chamber of Commerce of Metro Denver named Xcel Energy its Corporate Advocate of the Year in early 2019 for the company's ongoing support and work with member companies. Three of our largest contractors in Colorado are chamber members, including Alvarado Construction, Campos EPC and Redeker Excavating.

## Supply Chain Process

Our central Supply Chain organization is responsible for the sourcing and procurement of goods and services, materials management, fleet management and accounts payable for all of Xcel Energy's operations. The group negotiates contracts for everything from day-to-day business necessities, such as office supplies and furniture, to capital items used to construct, operate and maintain our generation and transmission assets, including transmission poles and transformers. They develop supplier and contractor management strategies and policies, handle accounts payable and execute company-wide sourcing and procurement strategies.

We employ a systematic sourcing method to deliver needed materials and services to the right place at the right time for the right price. To select suppliers, we use a five-step sourcing process that includes: preparation, request for information, request for proposal, contract evaluation and negotiation, and implementation.

**Four key business objectives — each associated with specific initiatives — drive our supply chain strategy. These include:**

- Maximizing investment yield
- Achieving operational excellence
- Managing risks and opportunities
- Supporting community and environmental leadership

In 2019, we expect to spend approximately \$4.58 billion on materials and services that fall into 35 categories with more than 800 subcategories. These categories are used to determine risk, opportunity and negotiation leverage with suppliers. We have developed guidelines for bid analysis for all categories. Within these guidelines, up to 20% of the bid analysis weight can be allocated to social and environmental factors such as diversity, safety and environmental performance.

### 2018 Supply Chain Spending Categories

Battery	Engineering Services	Meters	Steel Structures
Boiler Systems	Environmental	MRO Materials	Transformers
Cable and Wire	Fleet	Other Plant Systems	Transportation Services
Chemicals Gases and Lubes	Gas Materials	Property Services	Travel Services
Circuit Breakers	HR and Benefits	Radiation Protection	Turbine and Generator Systems
Construction	IT and Telecom	Revenue Cycle	Vegetation Management
Consulting Services	Logistics Integrator	Safety	Wind
Dry Fuel Storage	Maintenance Services	Solar	Wood Poles
Electrical Materials and Equipment	Marketing and DSM	Staff Augmentation	

## Risk Management

Through our Supplier Qualification program, we use services such as Dunn & Bradstreet to regularly monitor all active suppliers for Office of Foreign Assets Control, Excluded Parties List System, OSHA and EPA violations, as well as criminal proceedings and disaster events. We assess suppliers' financial health, safety and use of diverse subcontractors before contracting with them, and suppliers who will have access to our confidential data must undergo a data security review.

Periodically, we conduct key risk assessments, looking at categories such as commodity price risk, supply continuity, quality and governance processes. We also design sourcing strategies that take into account multiple fulfillment locations and supply channels that can minimize potential supply disruptions in case of extreme weather or disaster-related events.

Our company works with a broad range of suppliers. The majority of our spending is with American suppliers, but we also do significant work with American-based affiliates of foreign suppliers and a small amount of work with foreign suppliers.

We have recently implemented a program for Security Vendor Risk Assessment that focuses on exposure to cyber, information and other security risks to Xcel Energy that could result from suppliers' access to our systems, confidential information and critical infrastructure. The requirement for this additional level of scrutiny is established in sourcing and contracting processes and involves a comprehensive testing of the supplier's security environment by our Enterprise Security Services team.

All contractors that provide services or materials at our sites are required to complete a contractor health and safety questionnaire and submit five years of safety-related performance data. Our contractor safety department reviews this data and may reject a contractor or require a safety improvement plan. We continue to monitor safety performance once a contract is implemented.

Tier	Annual Spending	No. of Suppliers	% of Annual Spend
<b>Tier 1</b>	More than \$10 million	77	73%
<b>Tier 2</b>	Between \$4-10 million	59	8%
<b>Tier 3</b>	Between \$1-4 million	211	10%
<b>Tier 4</b>	Less than \$1 million	3,382	8%

In addition, all contracts include a clause requiring suppliers to abide by equal employment opportunity and affirmative action mandates prohibiting discrimination on the basis of race, color, religion, sex, national origin, actual or perceived sexual orientation or gender identity of an individual, or physical or mental disability. All suppliers are expected to comply with our Code of Conduct, which is referenced in our standard agreement language and is made available to them upon request.

## Supplier Classifications

We classify our suppliers in four tiers based on a combination of overall supplier spend and their importance or risk to our operations. Critical suppliers provide essential materials and services required to support daily operations. Tier one suppliers, including those who are critical to our operations, are part of our Supplier Relationship Management program. The program enables us to build longer-term contracts with these strategic suppliers and implement continuous improvement initiatives to benefit both the supplier and Xcel Energy in terms of costs and operations. Suppliers are also tiered, based on their total spend.

We support suppliers in non-tier one spend classifications through collaborative initiatives and programs. For example, we are a founding member of the ITASCA-Project in the Twin Cities, which is dedicated to helping smaller local suppliers grow through procurement opportunities. The ITASCA-Project group is made up of chief supply chain personnel from large corporations, such as Xcel Energy, U.S. Bank, Target, United Health and General Mills, who meet monthly to discuss ideas for supporting the local economy by growing the capacity of small- and medium-sized businesses.

## Supplier Diversity Program

Our corporate policies underscore our commitment to supplier diversity by recognizing that it is in our best interest to encourage a broad base of supplier relationships. Using diverse suppliers contributes to the economic growth and expansion of the communities we serve. Our policy is to offer these businesses the opportunity to compete in our procurement for products and services. We develop and strengthen business relationships with diverse suppliers by:

- Conducting outreach efforts to seek, identify and encourage supplier diversity in our procurement processes
- Facilitating alliances and partnerships
- Educating businesses about our procurement and business processes
- Identifying and encouraging subcontracting (tier two) opportunities with major suppliers when direct participation is not possible

For 2019, we have set a goal of approximately \$575 million, or roughly 12.5% of total spending, to spend with diverse suppliers. Most of the recent increases in our goal have been associated with Xcel Energy's continued investment in renewable energy, especially in constructing new wind farms. Wanzek, one of our diverse suppliers, is constructing multiple new wind projects on our system.

We are an active member of the Edison Electric Institute's Supplier Diversity Best Practices Group, as well as the Mountain Plains and North Central Minority Supplier Development Councils, the Women's Business Enterprise National Council, the National Association of Women Business Owners, the National Veteran Business Development Council, National Gay and Lesbian Chamber of Commerce and most local chambers of commerce in our service territory.

### Annual Spending with Diverse Supplier


	2016	2017	2018
<b>Dollars Spent</b>	<b>\$401 million</b>	<b>\$378 million</b>	<b>\$533 million</b>
<b>% of Total Purchases</b>	<b>11.2%</b>	<b>10.5%</b>	<b>12.4%</b>





Environment





To live up to our commitment to protect the environment, Xcel Energy has a comprehensive management system that promotes environmental excellence and continuous improvement.

## Our policy and management approach

# Environmental management

At Xcel Energy, protecting the environment is a priority and expectation for all employees and contractors as part of their jobs.

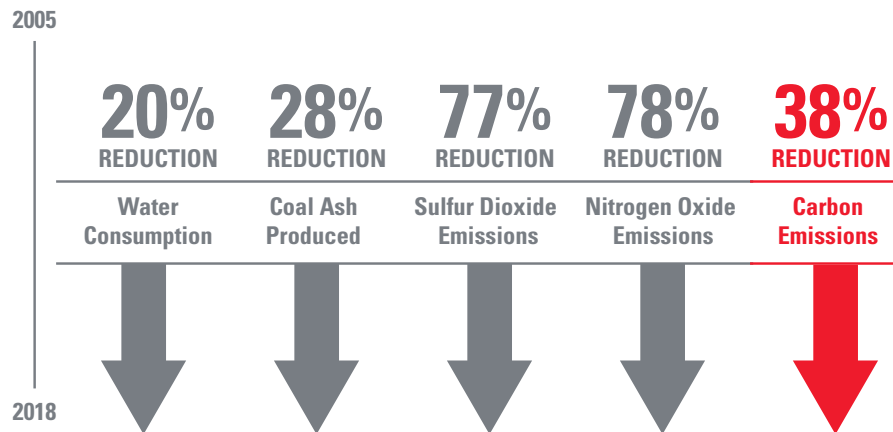
Every year we produce millions of megawatt hours of electricity and deliver millions of cubic feet of natural gas to serve our customers, fueling their homes and businesses. Our operations depend on natural resources — from fossil fuels to water and wind and solar — and they have an impact on the environment. It is an important relationship, and one that we are committed to managing carefully.

The customers and communities we serve depend on us and expect that through our daily operations we will protect our air and water, reduce waste and conserve natural resources.

### 2018 Results

- The Colorado Department of Public Health and Environment through its Environmental Leadership Program recognized Xcel Energy as a Gold Leader for the company's comprehensive Environmental Management System as well as its clean energy leadership and environmental stewardship.

**We have significantly reduced our environmental impact since 2005.**



## Environmental Policy

Xcel Energy's environmental policy lays the foundation for the company's commitment and approach to protecting the environment and sets expectations for aligning our business practices with this commitment.

Our policy is to pursue environmental excellence through our corporate strategy and daily operations, striving to demonstrate leadership by doing what is right and advancing initiatives that will benefit the environment. At the same time, it is important that we balance our environmental commitment with the ability to provide customers with reliable and affordable energy.

Examples of our environmental leadership include:

- Significantly reducing carbon emissions through our proactive clean energy strategy
- Reducing other air emissions beyond what is required by regulations
- Surpassing state-level renewable standards by adding more cost-effective wind and solar
- Offering customers a robust portfolio of energy efficiency and renewable choice programs to meet unique needs and interests
- Conserving and reducing water consumption through electric generation
- Establishing more than 2,000 acres of pollinator habitat on the land we manage

As part of our decision making, we consider opportunities to reduce emissions, eliminate waste and conserve resources, including taking additional steps to protect wildlife. We also regularly monitor our operations to ensure we are acting in an environmentally responsible manner, and if appropriate, take steps to improve our efforts. We support environmental research and development, as well as environmental projects and partnerships in our communities.

To fulfill the responsibilities of our corporate environmental policy, we have more than 40 policies and procedures that ensure our ongoing environmental performance and that help to foster our commitment to environmental excellence.

All Xcel Energy employees, as well as contractors and vendors, are expected to follow these policies, and our employees are trained and empowered to take responsibility for protecting the environment through their jobs.

## Environmental Principles

Engaging with stakeholders is essential to our work in addressing policy issues involving energy and the environment. As we engage on these matters with our regulators, elected officials, community leaders and others, we keep the following principles in mind:

- **Proactive solutions.** On behalf of customers, we have invested substantially in clean energy and environmental improvements. We continue to look for ways to proactively address environmental issues, especially when we can improve efficiency and reduce costs.
- **Rewarding leadership.** We believe that environmental and clean energy policy should appropriately recognize the environmental benefits of our proactive efforts made on behalf of our customers and communities.
- **Supporting technology.** Environmental and clean energy policy should drive forward the development of new, cost-effective technologies. As a national leader in wind, as well as energy efficiency and renewable choice programs, we are optimistic about the future opportunities that clean energy technologies present. Additionally, we are committed to owning these resources to improve the overall value and cost savings to our customers and stakeholders.
- **Efficiency and cost effectiveness.** The most efficient and effective response to environmental mandates is not always stack-by-stack or emission-specific compliance requirements. In some cases, compliance should be coordinated on a system-wide basis to maximize cost effectiveness and environmental benefits.
- **Flexibility.** Flexibility mechanisms, such as alternative compliance options and market-based environmental programs, should be incorporated into environmental rules. Flexibility yields real cost benefits to customers while maintaining environmental benefits.

## Environmental Management System

We have a comprehensive environmental management system designed to promote environmental excellence and ensure continuous improvement and compliance with all applicable environmental requirements. Although we have not used formal certification under ISO 14001, our environmental management system aligns with and enables the nine elements of the ISO 14001 standard, including: policies, responsibilities, environmental interaction, impacts, compliance, objectives and targets, monitoring and measurement, performance review and continuous improvement.

### Our management system provides:

Oversight	Board of Directors — Operations, Nuclear, Environmental and Safety Committee Chairman, president and CEO Executive Committee Environmental Policy department Environmental Services department
Risk analysis	Goals and performance indicators at corporate and operating levels Multidisciplinary teams for developing new compliance programs Environmental Audit program Regular risk assessments
Policies & procedures	Corporate environmental policy Formal, documented processes, procedures and standards Routine monitoring of new, evolving regulatory activity

Monitoring	Centralized and automated compliance tracking system that uses real-time data Monthly performance reporting Routine facility audits
Follow-up for compliance gaps	Tracking for corrective action and internal audit findings
Training and communication	New employee orientation Site and topic specific employee training and tracking Updates and information communicated through internal channels

## Compliance Results

We strive to operate in compliance with all federal, state and local rules and regulations. However, there are occasions when regulatory agencies issue notices of violation (NOVs) or other types of notifications of potential noncompliance for alleged exceedances of permit limits or regulatory requirements. These NOVs can result in fines or penalties. Often there can be disputes about the alleged noncompliance, and even when it is our view that we remained in compliance, settlements are often reached to avoid the transaction costs of litigation and to cooperate with the regulatory agencies.

Every year as part of our internal and ongoing efforts to self-identify and self-correct any potential noncompliance issues, we conduct our own facility audits.

### 2018 Compliance Activity

Activity*	2016	2017	2018
<b>Notices of Violation or Compliance Advisories</b>	<b>4</b>	<b>7</b>	<b>5</b>
<b>Penalties Paid</b>	<b>\$25,000</b>	<b>\$14,949</b>	<b>\$0</b>
<b>External Agency Audits or Inspections</b>	<b>83</b>	<b>64</b>	<b>71</b>
<b>Internal Audits Conducted to Ensure Compliance</b>	<b>99</b>	<b>95</b>	<b>94</b>

\*Because of the regulatory process and timing, penalties are not typically paid in the same year that Notices of Violation or Compliance Advisories are issued.

We received five notices of violation or compliance advisories in 2018 involving activities at our facilities. All were considered minor infractions and no penalties or fines have been assessed. Of the five incidents, two involved wastewater discharges and the others related to air emissions testing, drinking water sampling and regulated waste storage.

## Environmental Expenditures

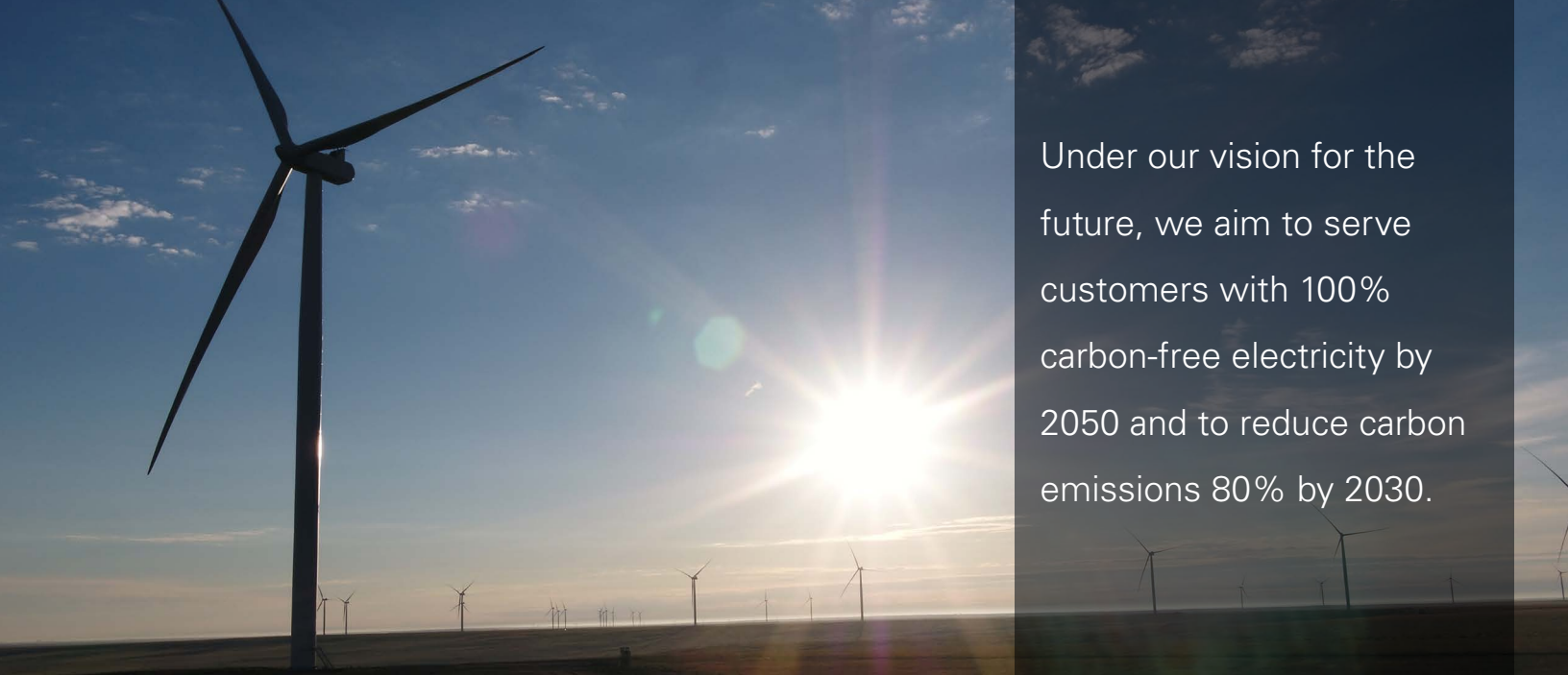
Environmental costs include payments for nuclear plant decommissioning, storage and ultimate disposal of spent nuclear fuel, disposal of hazardous materials and waste, remediation of contaminated sites and monitoring of discharges to the environment. As we have reduced emissions through the addition of environmental controls, the total costs of investing in and operating the controls has risen somewhat over time.

### Environmental Expenditures

Expenditure Type	2016	2017	2018
Operating and Maintenance	\$304	\$303	\$309
Capital	\$93	\$61	\$50

More detailed information regarding nuclear decommissioning and spent nuclear fuel disposal expenses is provided in our 2018 Form 10-K.





Under our vision for the future, we aim to serve customers with 100% carbon-free electricity by 2050 and to reduce carbon emissions 80% by 2030.

## Climate change and greenhouse gas emissions

### A carbon-free future

Energy is an essential service that powers the economy and provides comfort and security. As we lead the clean energy transition, we will ensure that customers have energy when they need it, at an affordable price.

We know that climate change is an urgent issue for many of our policy makers and investors and is a growing concern of our customers who want to help make a difference. It is a priority for us as well, and is the reason we were the first major energy company in the nation to announce a vision to serve customers with 100% carbon-free electricity.

Planning for this transition to a clean energy future today will allow us to deliver the products our customers want and achieve reductions that our policy makers and investors are increasingly demanding. By acting now, we increase our ability to achieve our goals while assuring that our system remains reliable and our energy service affordable.

#### 2018 Results

- We established our bold, new vision to provide customers with 100% carbon-free electricity by 2050 and to reduce carbon emissions 80% by 2030 from the electricity that serves our customers. To successfully make this transition, we must also maintain the reliable, affordable energy that customers expect.
- Climate modeling experts from the University of Denver, led by a lead author for the Intergovernmental Panel on Climate Change, analyzed our carbon goals and concluded they are consistent with electric sector emissions in scenarios likely to achieve the temperature targets of the Paris climate agreement.

- Our carbon emissions continue to decline. Since 2005, we have decreased carbon emissions 38% from electricity that serves our customers — an additional 3% reduction compared to 2017 levels. Our reduction levels surpass the U.S. commitment under the Paris climate agreement, which called for a 26% to 28% reduction in carbon emissions by 2025, and the EPA Clean Power Plan, which would have reduced carbon emissions 32% by 2030.
- For 13 consecutive years, our carbon reporting has been third-party verified in accordance with The Climate Registry — we are the only electric utility with this length of consecutive verified data.
- Since Xcel Energy became a member of EPA's Natural Gas STAR program in 2008, we have reduced methane emissions by more than 350 million cubic feet while expanding our miles of pipe 6%.

## Our Pathway to a Carbon-free Future

As we produce energy to serve our customers, we emit greenhouse gases. Our primary source of these emissions is from the combustion of fossil fuels to generate electricity, which makes up 99% of our total greenhouse gas emissions. Nearly all of our generation-related emissions are carbon dioxide. Because of this, it makes sense that our clean energy strategy focus primarily on reducing carbon emissions from electricity.

To achieve our carbon vision, we will continue working with our states and stakeholders. Our interim goal to reduce carbon emissions 80% by 2030 is based on absolute, company-wide emissions from the electricity that serves our retail and wholesale customers, measured from a 2005 baseline. Likewise, our aspiration to serve customers with carbon-free electricity by 2050 is company-wide.

Currently, we are implementing plans to achieve our previous goal to reduce carbon emissions 60% by 2030, from 2005 levels. Our state regulatory commissions have already approved the following efforts underway:

- The Colorado Energy Plan, which calls for the early retirement of 660 megawatts of coal-fueled generation by 2026 and the addition of 1,100 megawatts wind, 700 megawatts solar, 380 megawatts existing natural gas and 275 megawatts large-scale battery storage.
- Our current 2016 to 2030 Minnesota Resource Plan, which increases renewables in the Upper Midwest and retires nearly 1,400 megawatts of coal-fueled generation by 2026. A new resource plan for the region will be proposed in summer 2019.
- Our multi-state wind expansion announced in 2017 that will add nearly 3,700 megawatts of wind energy from 12 new projects across seven states.

We also are working on plans that take us all the way to reduce carbon emissions 80%. This is not a single plan, but will happen through a series of resource plans to be approved through our state regulatory processes.

In setting our goals, we did sensitivity analysis to identify key elements and variables that could affect our plans for reaching the interim goal. There are a variety of cost-effective pathways to reduce carbon emissions 80% by 2030, and we know the following common elements will be part of the plans:

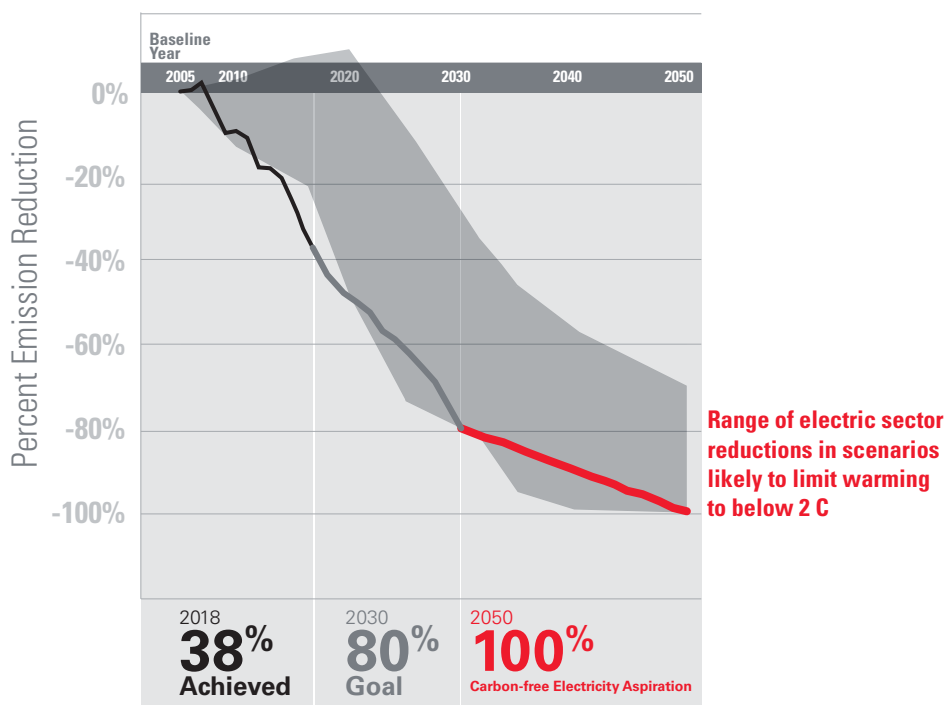
- Adding thousands of megawatts of wind and solar power to our system
- Incorporating both natural gas and storage resources to help balance high levels of renewable energy
- Deploying strategic electrification of certain end uses to help create flexible demand
- Continuing to implement industry-leading energy efficiency programs
- Seeking to operate our nuclear plants through at least the remainder of their licenses
- Retiring additional coal units or changing their operations to minimize emissions affordably and reliably
- Investing in supportive infrastructure to modernize the power grid

Looking beyond 2030 to our 2050 carbon-free aspiration, we will need new, 24/7 carbon-free technologies that are not yet commercially available at the cost and scale needed. These are technologies that can integrate high levels of renewables, balancing the peaks when customer use exceeds renewable generation and valleys when renewable generation exceeds customer use. To ensure these technologies are ready when we need them at an affordable price, there must be more research, innovation and development. Technology advancement is key to the long-term success of our strategy, and it has a long lead time for development.

## Scientific Analysis

The most recent climate science informed our carbon vision, which is designed to minimize the long-term risks associated with climate change. After reviewing international and national climate reports released in 2018, we hired an IPCC lead author and other climate modeling experts with the University of Denver to understand how our vision relates to global temperature goals. They consulted the newest International Panel on Climate Change emission scenarios database and analyzed carbon emissions for the electric sector in industrialized countries, within the scenarios that have a high (66% or greater) probability of achieving the 2 C goal and those more likely than not (50% or greater) to achieve the 1.5 C goal.

**Xcel Energy's carbon goals align with scenarios likely to limit warming to 2 C.**



The dark gray shaded area in the chart above represents the range from the highest to the lowest of these emission scenarios. The climate modeling experts then compared Xcel Energy's carbon emission reduction trajectory, including carbon reductions to date and the 2030 and 2050 goals. Based on their analysis, our reduction targets are clearly consistent with — even on the low end of — the electric sector reductions in scenarios that achieve the international 2 C goal. Even more encouraging, this analysis shows that our emission trajectory is also consistent with the more aggressive 1.5 C goal.

## Driving Change

We believe reducing carbon emissions reliably and affordably must be the top priority of our clean energy transition. To achieve this, we need to be disciplined and focus on efforts that will produce the greatest carbon reductions at the lowest cost to customers.

We have identified the following drivers that will make the change possible:

- **Protect energy reliability and affordability.** Our goals rely on maintaining these service fundamentals and cannot be achieved without them.
- **Support from our states and stakeholders.** We will need the support of stakeholders and state regulators to implement the resource plans that will achieve our goals.
- **A constructive policy environment and framework.** Reducing carbon emissions at the lowest cost should be the policy objective. To that end, we are advocating for policies that encourage economical large-scale clean energy development and utility ownership of resources.
- **Availability of cost-effective, carbon-free, 24/7 technologies.** There must be research and development to advance clean energy technologies, beyond renewables. We will need these technologies to eliminate the last 20% of carbon from the electricity serving our customers.

While our vision is ambitious, we believe these drivers implemented together will make it possible to transform our operations and the industry overall. Our plan is to continue working proactively and collaboratively in all these areas and to advance the solutions that emerge.

## Energy and Carbon Emissions Reporting

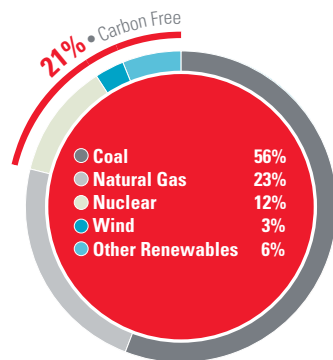
Xcel Energy supports timely, transparent public reporting of carbon dioxide and other greenhouse gas emissions. Our comprehensive greenhouse gas reporting, from all parts of our business, is based on The Climate Registry and its Electric Power Sector Protocol, which aligns with the World Resources Institute and ISO 14000 series standards.

We joined The Climate Registry as a founding member in 2007 to help establish a consistent and transparent standard for calculating, verifying and reporting greenhouse gases. Through The Climate Registry, we annually third-party verify, register and publicly disclose our greenhouse gas emissions.

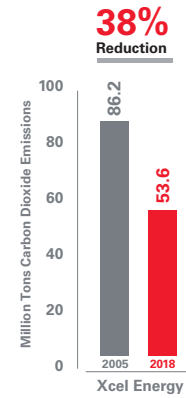
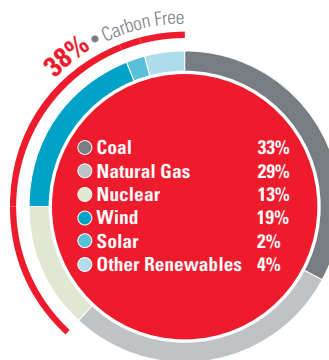
We report carbon emissions from electric generating plants that we own and from electricity that we purchase from others. We sell a small portion of the electricity we generate into the market to retailers outside our service territory. The carbon emissions from these off-system sales are excluded from our goal and associated carbon reporting because the energy does not serve our customers. Also, it is likely that companies purchasing the energy account for the emissions in their reporting, so excluding the carbon emissions associated with off-system sales from our reporting avoids double counting.

## Our progress toward a carbon-free future.

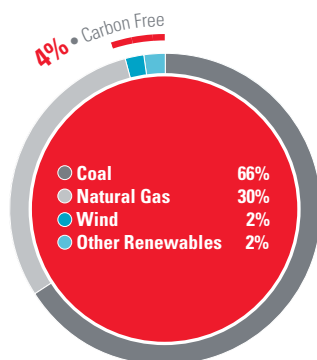
Xcel Energy//2005



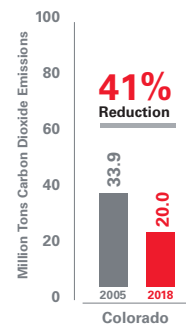
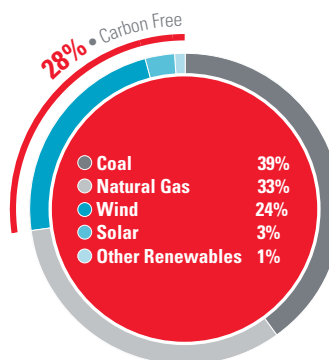
Xcel Energy//2018



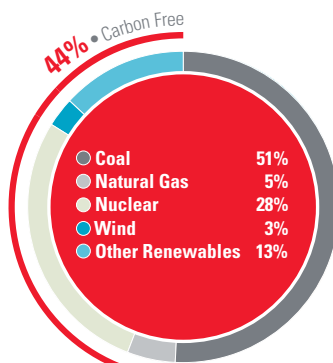
Colorado//2005



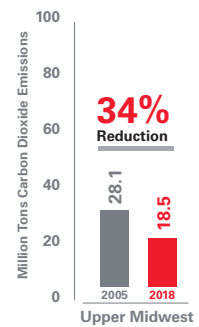
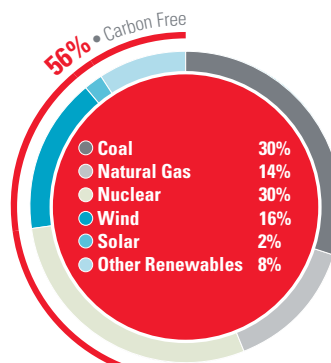
Colorado//2018



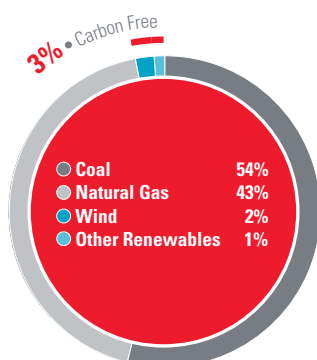
Upper Midwest//2005



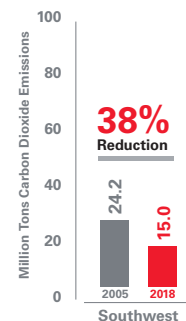
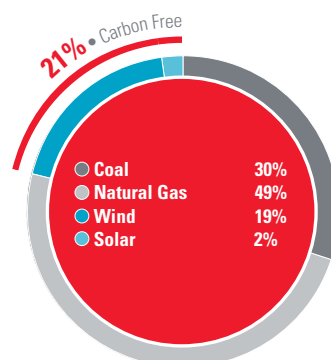
Upper Midwest//2018



Southwest//2005



Southwest//2018





## Methane Emissions

Our efforts to reduce greenhouse gas emissions also include methane emissions — a primary concern for the natural gas value chain. We are actively involved in programs that work to address the supply, midstream, distribution and consumer use of natural gas that are important to maintaining the industry's ability to operate. Xcel Energy serves about 2 million customers with natural gas for heating and other energy uses critical to the colder parts of our territory, Colorado and Minnesota, and does so with minimal methane emissions.

Methane emissions make up a small part of our total greenhouse emissions — less than 1% of our total greenhouse gas emissions (190,249 metric tons CO<sub>2</sub>e) in 2018. Nevertheless, we strive to operate the cleanest distribution system possible and minimize our methane emissions through cost-effective improvements to our natural gas system.

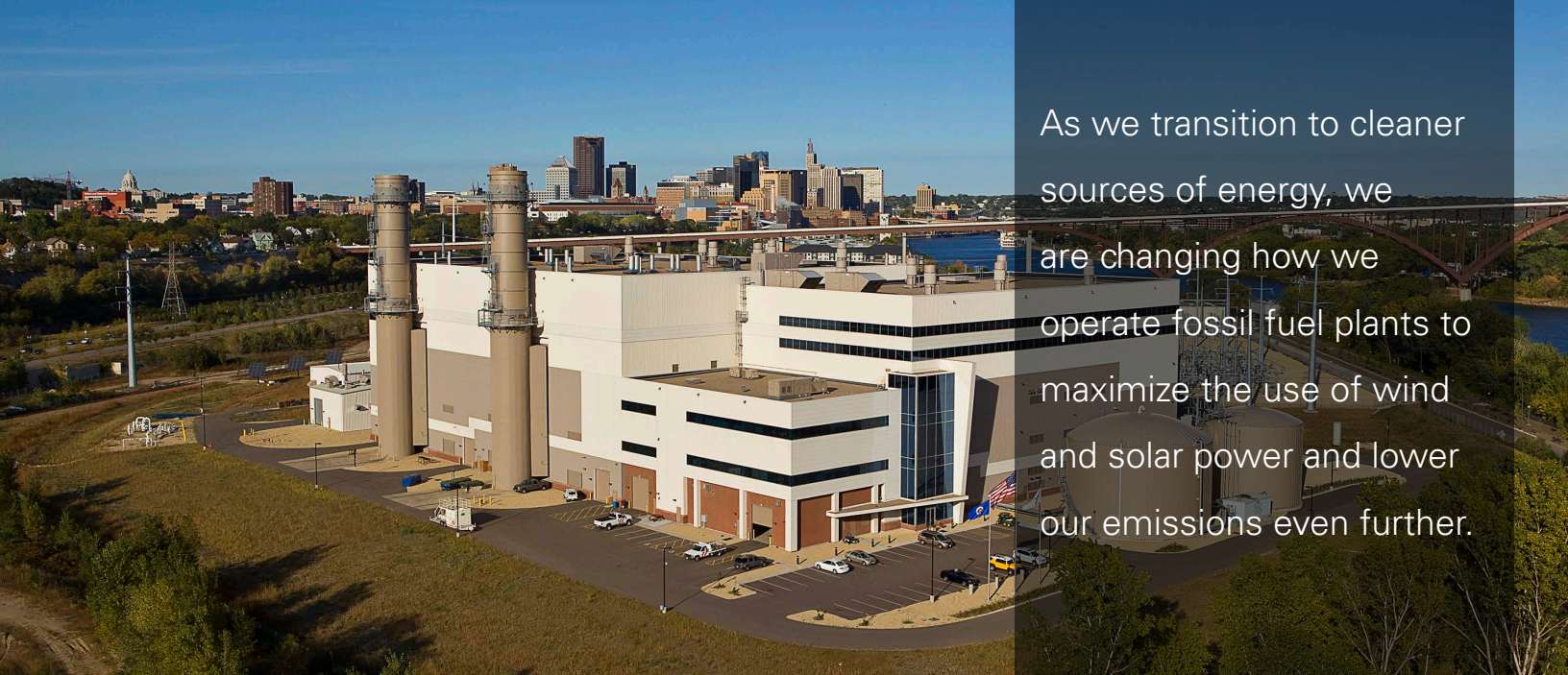
We have achieved these reductions through voluntary efforts. Since 2008, we have participated in EPA's Natural Gas STAR program, and we are a founding member of the program's Methane Challenge launched in 2016. Through the Methane Challenge, we plan to reduce methane releases more than 50% from the venting of pipelines during scheduled construction. We are also investing in operational improvements that not only reduce methane emissions but improve the overall safety and efficiency of the natural gas system for customers. These improvements include:

- **Replacing the cast iron pipe and unprotected steel pipe on our system, originally installed 50 to 100 years ago.** We replaced all 880 miles of cast iron pipe and have regulatory approval to continue removing bare-steel pipe from our system over the next five years.
- **Using pressure reductions and other methods to reduce methane emissions during pipeline maintenance and repairs.** We reduced our emissions from blowdowns on systems operating at excess of 60 psig by 89%, therefore, avoiding the release of 24 million cubic feet of gas into the atmosphere.
- **Replacing high-bleed controllers on our distribution and high-pressure pipelines.** We are currently working to replace the high-bleed controllers in our processing plants and are considering new programs to modernize the high-bleed controllers at our storage fields and compressor stations to reduce emissions at these facilities.

In addition to these programs, we are collaborating within the natural gas industry on initiatives that support our own proactive approach to operating and maintaining a natural gas system. For example, we are members of the Natural Gas Downstream Initiative, a collaborative effort with other major gas utilities, facilitated by MJ Bradley & Associates, focused on addressing the regulatory and technical issues related to the role of natural gas in a low-carbon future.

Beyond our direct distribution operations, we also recognize that the majority of greenhouse gas emissions associated with natural gas is in other parts of the value chain. This includes methane emissions from upstream sources through the production, compression and long-distance transmission of natural gas, and carbon emissions from downstream, end-use consumers. We participate in the Natural Gas Supply Collaborative, a group of natural gas producers calling for transparency and sustainability from upstream suppliers. Our industry associations, the American Gas Association and the Edison Electric Institute, are also partnering to understand methane emissions and enhance disclosures across the value chain.

For our customers who use natural gas, we are exploring opportunities to offer low-carbon solutions. We already provide a comprehensive portfolio of natural gas efficiency programs, but are exploring new technologies and methods to help our customers further reduce their carbon footprints. We see great potential for renewable natural gas to provide a lower carbon alternative and the potential for targeted, strategic electrification, such as water heaters, that could be powered with clean, renewable energy. As always, we are monitoring long-term technologies, such as hydrogen or power-to-gas, which could fundamentally shift natural gas supply and related carbon emissions.



As we transition to cleaner sources of energy, we are changing how we operate fossil fuel plants to maximize the use of wind and solar power and lower our emissions even further.

## Air quality

# Reducing air and other emissions

With support from stakeholders and regulators, we are voluntarily retiring half of our coal-fueled capacity by 2026 — a step that will significantly reduce emissions.

Our largest source of air and other emissions is the combustion of fossil fuels to generate electricity, primarily from coal. For well over half a century, coal has been a steady source of low-cost, dependable electricity for our customers that we have carefully controlled and operated in an environmentally responsible manner.

Since the 1990s, we have worked with our states and other local stakeholders on proactive environmental projects that serve as a national model for addressing state air quality needs while providing operational flexibility and ensuring reliable, affordable energy for customers. We know that clean air and cleaner energy are priorities for the customers and communities we serve, and as a leader in this field, they continue to be our priorities too.

As the cost to generate electricity with natural gas and renewable sources declines and these technologies improve, the way we generate electricity is becoming progressively cleaner. We are moving away from coal to lead the transition to clean energy, especially now as we work to achieve our vision to serve customers with 100% carbon-free electricity by 2050. To fulfill this commitment, we plan to rely on the relationships we have built and our successful model for engaging stakeholders to find new solutions — solutions that will not only cut carbon, but have the added benefit of reducing other emissions and improving the environment overall.

### 2018 Results

- Since 2005, we have reduced carbon emissions 38% from the electricity that serves customers.
- We continued to decrease emissions of sulfur dioxide, nitrogen oxides, mercury and particulate matter to levels that were 77%, 78%, 91% and 73% lower, compared to 2005.
- Under the EPA's Toxic Release Inventory program, we have reduced releases by nearly 30%, compared to 2005 levels.

- The Colorado Department of Public Health and Environment through its Environmental Leadership Program recognized Xcel Energy as a Gold Leader for the company's comprehensive Environmental Management System as well as its clean energy leadership and environmental stewardship.
- Within our vehicle fleet, we essentially replace all sedans scheduled for retirement with electric vehicles. We estimate that our 43 plug-in hybrid electric vehicles (PHEVs) helped to avoid emission of nearly 92 metric tons of carbon emissions for the year.

## Maximizing System Operations to Reduce Emissions

There is a significant shift in how we operate our power grid now compared to several decades ago. Not only are we changing the way we produce electricity, but the dispatch and operation of our generating resources is different too.

Through major clean energy initiatives in Colorado and Minnesota, we have retired coal units and replaced the power with cleaner, more flexible natural gas and wind and solar generation, and we have plans to do more. Last year, regulators approved our new Colorado Energy Plan that will retire two coal units and add thousands of megawatts of new wind, solar and battery storage, as well as existing natural gas. We also have approval to retire two coal units in Minnesota by 2026, and are moving forward with our multi-state wind initiative with 12 new wind farms to be completed in 2021.

As renewable energy gradually becomes the majority energy source on our system, we are focusing our operations to follow the wind and sun to maximize clean electricity production and do so reliably and cost effectively.

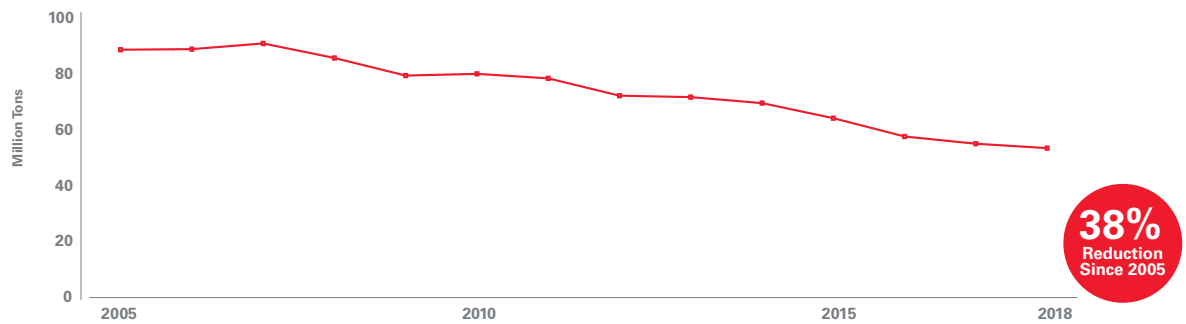
Advanced forecasting tools have dramatically improved the predictability of wind energy, making a variable energy source much more dependable. With reliable wind forecasts now available seven days in advance, we are able to make more accurate commitment and dispatch decisions associated with wind energy. Cleaner natural gas generation is an excellent companion to renewable generation. It has long managed the variability of wind-power production, with natural gas units cycling up and down as needed to help meet electric loads as wind speeds rise and fall.

Several years ago, an Xcel Energy operations team began exploring how coal units could do the same, although ramping up and down coal units is much more challenging. Traditionally, coal units have provided baseload power for our system, with the capability to run dependably 24/7. The company's coal plants began testing and learning their limitations, working around problems at lower load points and figuring out how to overcome them.

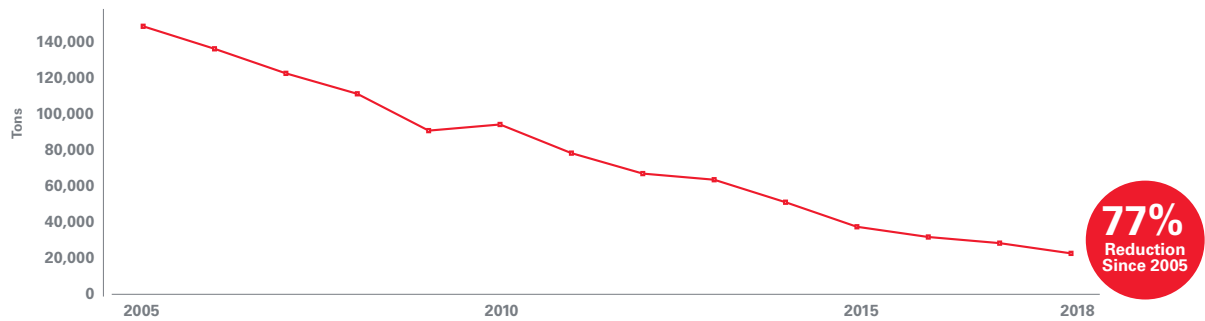
Today, this reduction in coal operations is creating additional system flexibility and helping to advance our transition to clean energy while reducing emissions and saving customers money. In 2018, our efforts to turn down and cycle off these units reduced coal generation by more than 788,000 megawatt hours, saving an estimated \$1.6 million and avoiding approximately 886,000 tons of carbon dioxide, as well as other emissions.

## Air Emissions Reporting

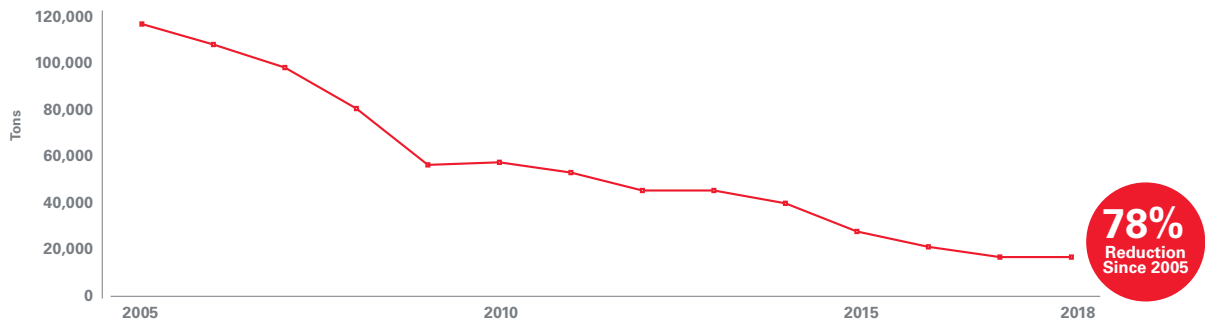
### Carbon Dioxide



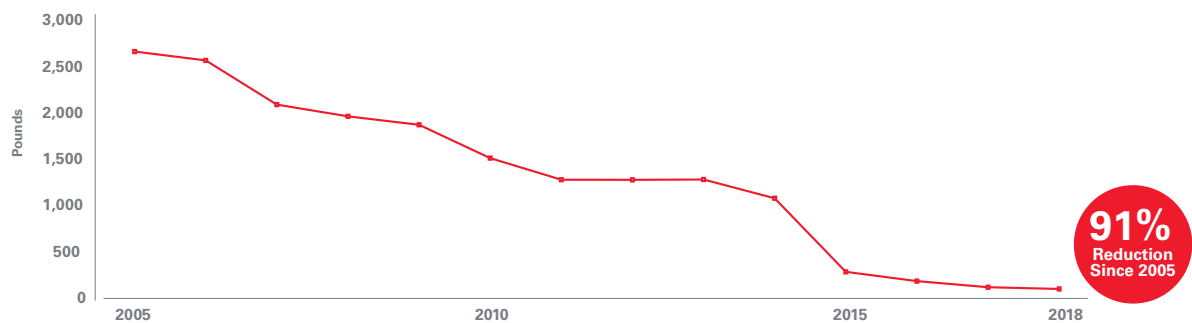
### Sulfur Dioxide



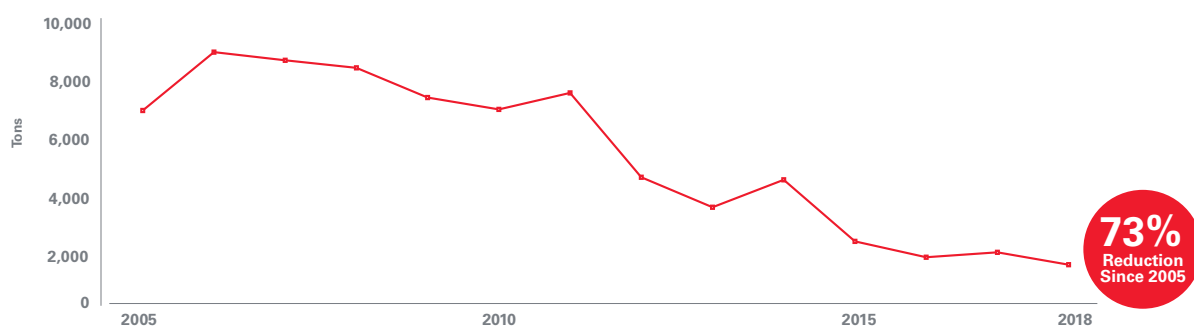
### Nitrogen Oxides



### Mercury



## Particulate Matter



## Reducing Fleet Vehicle Emissions

Our fleet of about 7,000 vehicles includes everything from small cars to light trucks, bucket trucks, excavators and trailers. In 2014, our vehicles were equipped with telematics to reduce fuel costs and improve driver safety. Using the technology has reduced idling and fuel consumption, wear and tear on vehicles, and emissions. In 2018, we estimate that the use of telematics saved approximately 150,000 gallons of fuel at a value of more than \$350,000.

## Community Right to Know and the Toxic Release Inventory Program

The EPA has administered the Emergency Planning and Community-Right-to-Know Act or EPCRA since 1986. The program is intended to help communities protect residents from potential chemical hazards. Under EPCRA, residents have the “right-to-know” about chemicals in their communities. Each year facilities in specific industries that manufacture, process or use the nearly 650 substances identified under the program must report their releases to air, land and water. The EPA manages the information in a publicly available database under the Toxic Release Inventory (TRI) program.

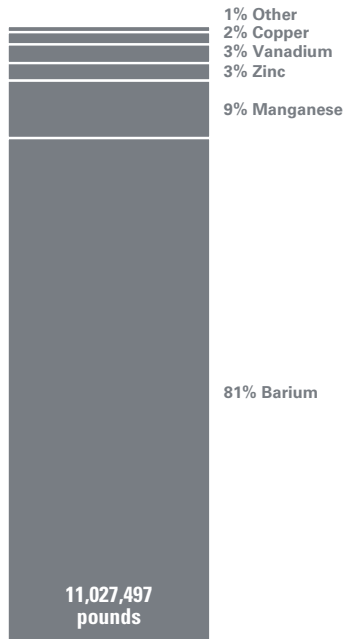
Xcel Energy supports this type of reporting and has participated since 1999 when the program was expanded to include electric utilities. We annually report to EPA our releases, which are the result of using coal, oil and refuse-derived fuel (processed municipal solid waste) to produce electricity. When these fuels are combusted, they release trace amounts of TRI reportable substances, including barium, chromium, copper, lead, manganese, mercury, nickel and zinc.

TRI reportable substances are reported by facility and release type — land, air and water. A facility’s releases may change slightly from year to year based on the amount of electricity produced and the associated fuel that is consumed, as well as the fuel composition and mineralogy.

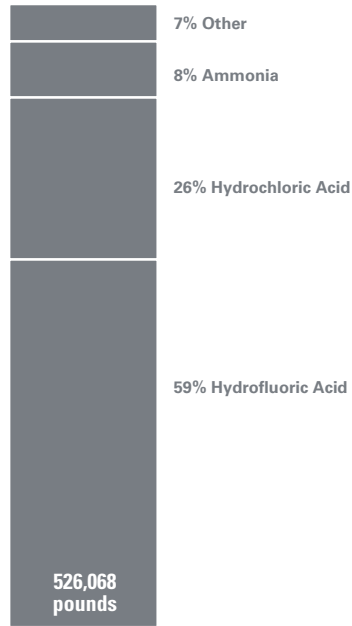
The vast majority of our TRI reportable substances are controlled at our facilities as part of the coal ash where they are contained, preventing them from entering the air. We capture about 95% of these substances and safely dispose of them in managed landfills.



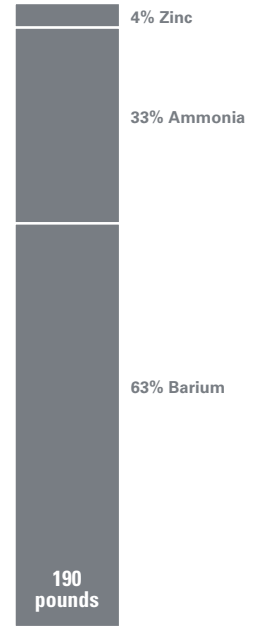
## 2017 TRI Releases



TRI Land Disposal  
(95 percent of total)

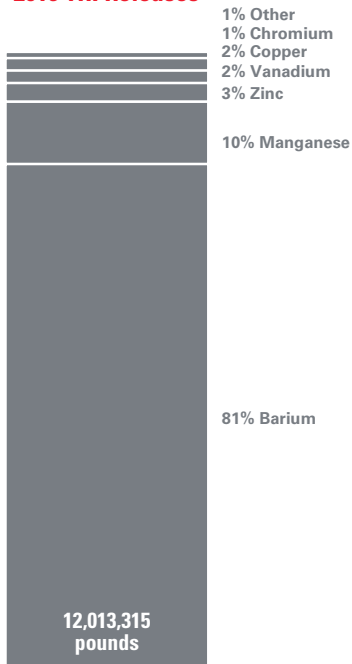


TRI Releases to Air  
(5 percent of total)

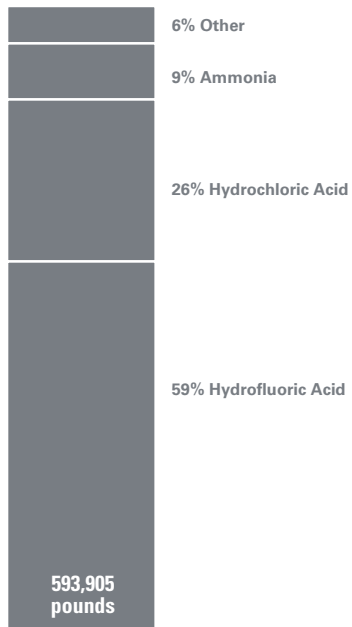


TRI Releases to Water  
(<0.01 percent of total)

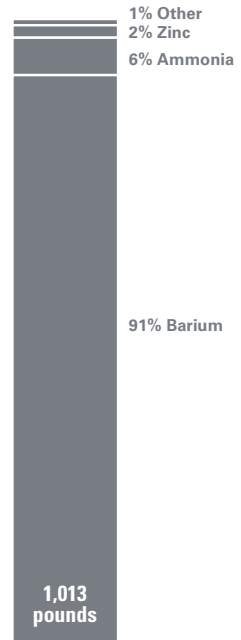
## 2016 TRI Releases



TRI Land Disposal  
(95 percent of total)

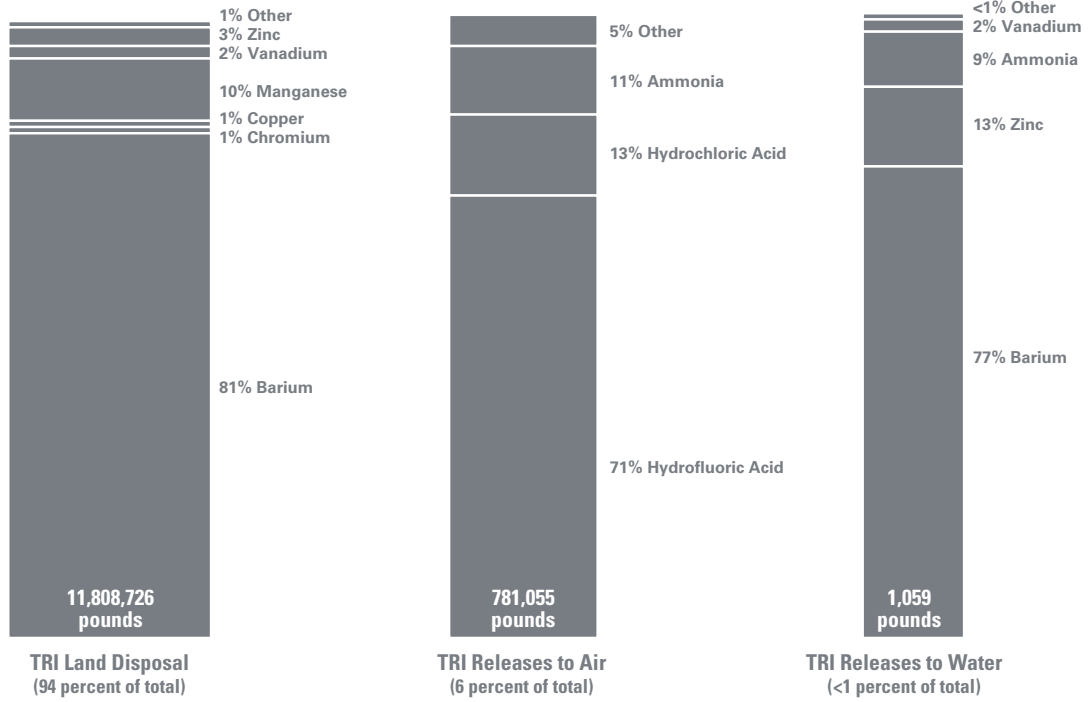


TRI Releases to Air  
(5 percent of total)

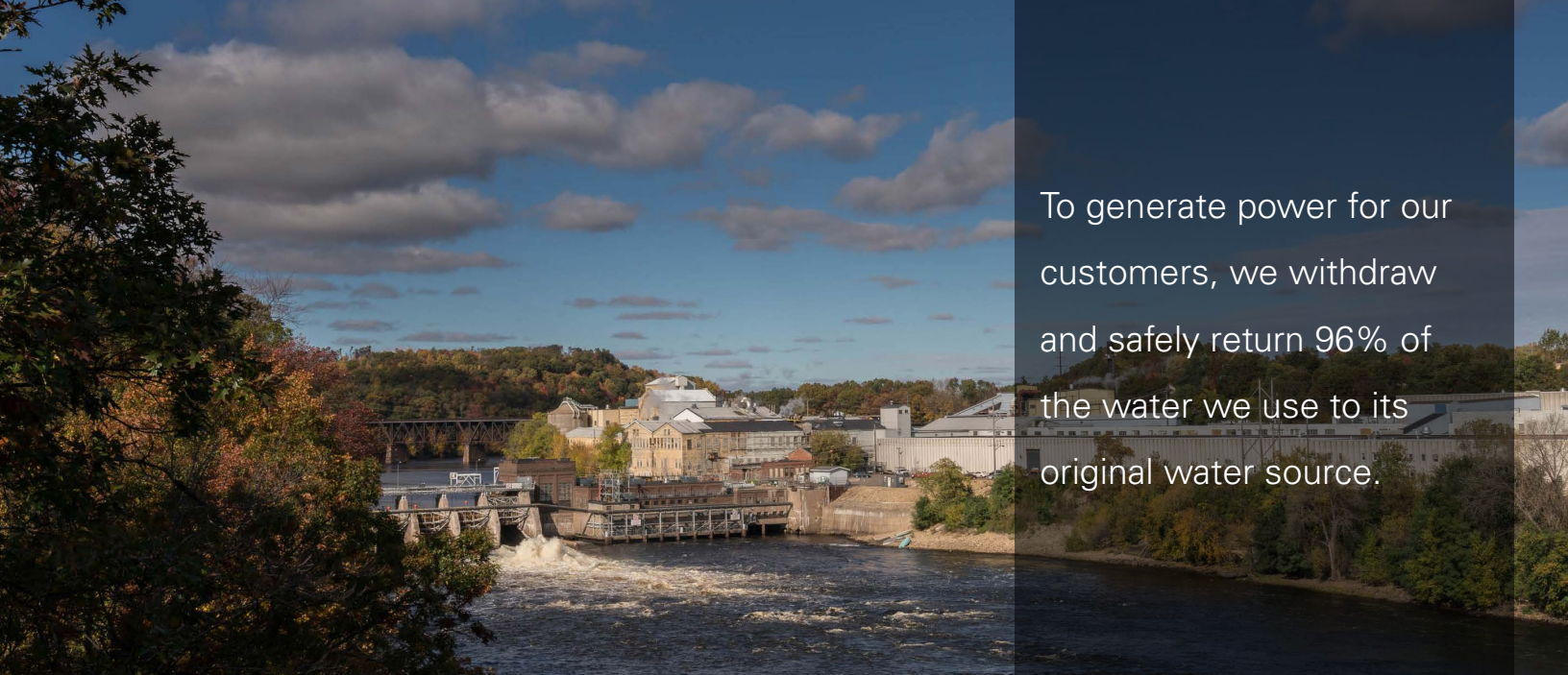


TRI Releases to Water  
(<1 percent of total)

## 2015 TRI Releases



Releases provided here are from 11 generating plants in locations throughout our service territory. For individual plant information visit the EPA's TRI Explorer website or contact [corporateresponsibility@xcelenergy.com](mailto:corporateresponsibility@xcelenergy.com).



To generate power for our customers, we withdraw and safely return 96% of the water we use to its original water source.

## Water quality, availability and management

### Managing water use

We regularly collaborate with local stakeholders and water managers on innovative partnerships and agreements to ensure reliable, cost-effective water supplies for our operations while also addressing different community needs.

Water conservation and protecting water quality are priorities for us. In the more arid Western and Southwestern regions where we operate, conserving and managing our water supply is especially important given challenges we face in dry years and concerns over drought. In all regions, we continually evaluate and monitor our systems and processes to ensure the water we return to local waterways is safe and meets the discharge limits contained in our Clean Water Act permits.

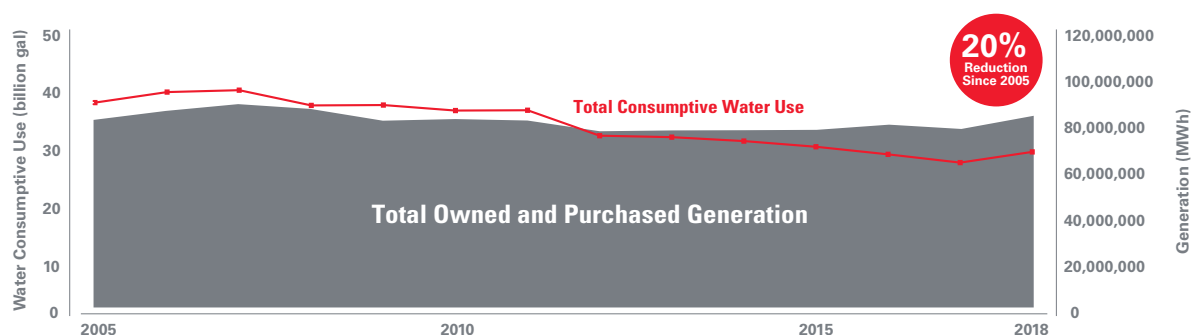
We understand that water is a fundamental, shared resource and is vital to the growth and development of our communities and to other industries, agriculture and ecosystems. As competition for water increases and weather patterns change, our water resources will become more stressed. That is why we continue to work cooperatively with our communities and states to secure responsible supply options and to save fresh water where we can.

#### 2018 Results

- Water powers steam turbines and cools equipment at thermal electric generating plants. Our thermal plants in Colorado, Texas and New Mexico use closed-loop cooling which requires less water to operate efficiently and minimizes fresh water withdrawals by recirculating water multiple times within the system — up to 25 times at some plants.
- From 2005 to 2018, we reduced water consumption approximately 20% from the electricity we generate and purchase, while total electricity production remained generally the same over that period. We expect water consumption to continue to decrease as we retire additional coal units and rely more on wind and solar resources that require no water to produce electricity.

- We withdrew approximately 638 billion gallons of water during the year, including municipal wastewater or effluent, to generate electricity at our thermal electric and hydroelectric generating plants. From these withdrawals, our facilities consumed approximately 24 billion gallons of water and returned approximately 614 billion gallons (96%) to the original water source.
- Our Upper Midwest thermal plants use open-loop cooling where water is continuously withdrawn and directly returned. Although water withdrawals are higher with this type of cooling system, consumption is lower. Our plants with open-loop cooling systems return about 99% of the water they withdraw to its original source.
- Over the past 38 years, we have saved about 200 billion gallons of freshwater by pioneering the use of treated municipal effluent to cool the Nichols-Harrington and Jones generating plants in Texas — enough water to fill nearby Lake Meredith and then some.
- The Xcel Energy Foundation contributed more than \$135,000 through its environmental stewardship focus area to nonprofit programs that support water quality, education and riparian restoration efforts. For several years, the foundation has supported the restoration work of RiversEdge West and its DesertRivers Collaborative. The program supports local land managers and efforts to restore riparian areas along the Colorado River in the Grand Valley region of Colorado and the lower Gunnison River. In Minnesota, we are a longstanding supporter of Friends of the Mississippi and currently fund its Community Stewards program. Working with agency staff, volunteers and local partners, the organization held 35 stewardship events for the year at different sites along the river.

#### **Xcel Energy water consumption compared to electricity supply from owned and purchased generation.**



## **Managing Water Supply**

### **Thermal Operations in the West and Southwest**

In the semi-arid and arid states where we operate — Colorado, New Mexico and Texas — we have strategic water resource plans that are updated annually to reflect our current operational requirements, local climate conditions and water use. Throughout the year we conduct a variety of activities to accurately predict and plan for future water supplies, which include:

- Forecasting plant water requirements based on anticipated electric generation
- Accounting for the water we need and use
- Monitoring snowpack reports
- Studying stream flow forecasts, seasonal climate projections and changes to the Ogallala aquifer — the primary aquifer that underlies much of the region in Texas and New Mexico that we serve

We acquire water for our thermal and hydroelectric plants through water rights and other agreements. Our integrated portfolio of water supply resources includes owned or self-supplied water rights, reservoir storage, groundwater rights and a number of other supplies, such as municipal and recycled water supplies. We own water supplies dedicated for our own use, and in Colorado, these water rights are available depending on regional water supply conditions in accordance with the state's prior appropriation system. Our portfolio also includes water from geographically diverse areas, including trans-basin water imported from other basins. This diversity is critical for maintaining a resilient, reliable water supply in the arid, climatically variable western United States.

We have expended significant resources to improve our water supply and the resiliency of our systems. Other suppliers that we do business with have responded similarly, taking steps to improve their water supplies and adopt drought response plans for ensuring they meet their municipal and industrial water supply obligations. Further, they pursued the acquisition of geographically diverse water supplies originating in other river basins, enhancing the resiliency of their systems.

Finally, we use recycled water or treated municipal effluent where available and feasible, which minimizes the competition between water needs for power generation and needs for environmental, recreational, municipal or other industrial uses. Recycled water use has the added benefit of increasing the reliability of our water supply because it is virtually drought proof and preserves billions of gallons of fresh water.

### Thermal Operations in the Upper Midwest

In Minnesota and Wisconsin where we operate thermal plants, water is more abundant and these facilities are permitted to withdraw and return water to nearby rivers and other waterways. While this helps to minimize water consumption, we still take a strategic approach to water use in these areas by monitoring weather patterns and using meteorological forecasting models to predict and ensure an adequate water supply during times when unusually dry conditions are likely to persist.

During these rare dry periods or drought years, we evaluate the use of alternative cooling options for each facility and implement prudent, temporary measures to provide supplemental thermal cooling. In times of energy emergencies, our permits have provisions that allow some plant operating flexibility, along with additional environmental monitoring requirements to ensure the protection of fish and other aquatic life.

### 2018 Water Use by Source (Billions of Gallons)

Source	Withdrawn	Consumed	Returned
South Platte River Basin	*5.18	4.48	0.70
Arkansas River Basin	*4.56	3.72	0.84
Yampa River Basin	1.32	1.32	0.00
<b>Colorado Total</b>	<b>11.06</b>	<b>9.52</b>	<b>1.54</b>
Ogallala Aquifer	3.63	3.33	0.30
Treated Municipal Effluent (Lubbock, Amarillo)	5.19	3.99	1.20
<b>Southwest Total</b>	<b>8.82</b>	<b>7.32</b>	<b>1.50</b>
St. Croix River	112.31	0.0	112.31
Lake Superior	9.83	0.0	9.83
Mississippi River	459.87	7.18	452.69
Minnesota River	36.47	0.0	36.47
<b>Upper Midwest Total</b>	<b>**618.48</b>	<b>7.18</b>	<b>611.30</b>
<b>XCEL ENERGY TOTAL</b>	<b>638.36</b>	<b>24.02</b>	<b>614.34</b>

\*Includes transbasin diversions

\*\*Does not include groundwater from these locations



## Hydroelectric Operations

Xcel Energy operates 26 hydroelectric plants, including six in Colorado, one in Minnesota and 19 in Wisconsin, with enough capacity to power more than 280,000 homes. Although these plants use water to produce electricity, the only water loss is through natural evaporation from reservoirs. We work with environmental and wildlife agencies to ensure plans are in place for monitoring watering quality, protecting aquatic life, ensuring minimum stream flow, preventing erosion, and controlling noxious weeds and other invasive plants. Many of our hydroelectric plants offer public recreational opportunities and some are stocked with fish.

Xcel Energy's hydroelectric plants operate on the following waterways; many of these are open to public recreation:

### 2018 Water Use by Source (billions of gallons)

Colorado	Minnesota	Wisconsin
Lower Clear Creek	Mississippi River	Chippewa River
South Fork Arkansas River		Apple River
South Clear Creek		Red Cedar River
Colorado River		Namekagon River
Animas River and tributaries		Montreal River
San Miguel River and tributaries		White River
		Flambeau River
		St. Croix River

## Meeting Mutual Water Needs

Planning for and managing future water supply is essential for the states and communities we serve. We actively participate in these efforts to provide our expertise and solutions, as well as to plan for our own water needs. The following are examples of our engagement and some of the innovative partnerships and agreements we have in place.


- Our Water Resources staff is actively engaged in the ongoing Colorado Water Plan process. They participate on volunteer boards and technical working groups, serve on the board of water user groups working to meet Colorado's obligations under Endangered Species Recovery programs, and participate in other water user groups working to craft policy and legislation to better adapt Colorado's water supplies to changing conditions. For decades, they have served on boards and as officers overseeing nine ditch companies in Colorado where the company owns significant water rights. Through these organizations, conflicts involving water are often identified and amicably resolved.
- We own very senior water rights on the Colorado River that are used to operate the Shoshone Hydroelectric Generating Plant. To help meet water needs within the city of Denver, along the Front Range and for some users on the Western slope, we established an agreement in 2006 to "relax" a portion of our water requirements for Shoshone during dry years. Colorado experienced below-average moisture in 2013, which is the most recent year that we executed on the agreement. We reduced Shoshone's water use by more than half and allowed water to be stored for critical uses, benefitting users throughout the state.

- We have agreements with the cities of Longmont and Westminster in Colorado to exchange high quality water under our water rights with their lowest quality water or effluent, which we use at our area power plants. It's similar to a practice we pioneered in Texas where we use recycled municipal effluent for cooling at our power plants.
- In dry years, Colorado farmers typically lack the full water supply needed to produce marketable crops. Through a mutually beneficial agreement, we buy limited quantities of water that farmers have available and use it in our power plants. Under this arrangement, farmers are compensated, helping them financially during dry years.
- In the Southwest, our Water Resources staff serves on regional groundwater planning committees to better manage critical resources like the Ogallala Aquifer which is the region's primary water supply and underlies much of our service area.
- Xcel Energy is a member of the Minnesota Sustainable Growth Coalition, a business-led partnership of 33 businesses and organizations working to promote a circular economy in the state. The coalition focuses on energy, water and waste issues to optimize use of resources, minimize waste and conserve resources. In the water area, the coalition is working on "greening gray infrastructure" or promoting infrastructure and practices designed to mimic the natural water cycle.

## Maintaining Water Quality

All of our large plants in Texas and New Mexico, as well as several plants in Colorado, are zero-discharge facilities — no process water is discharged from the plant site. Instead, it can be reused for growing crops or disposed through evaporation ponds.

Other plants, especially those in Minnesota and Wisconsin, use once-through cooling where water is taken from a river or other waterway and returned to the environment. At all our plants where we return or discharge water, we systematically treat, monitor and analyze the water to ensure we are meeting discharge requirements and to protect fish and other aquatic life.



Xcel Energy's program for approving waste vendors is designed to minimize risk and ensure the safe disposal of materials through the exclusive use of vendors that meet our exacting standards.

## Waste management

# Preventing and managing waste

We follow the same high standards outlined in our corporate environmental policy to responsibly reduce, reuse or dispose of our waste.

Our primary waste streams result from producing and delivering energy. This includes the coal ash that is left from burning coal to generate electricity, and the materials and equipment that come from the maintenance and repair of our transmission and distribution systems, as well as our natural gas system.

The best way to manage waste is to prevent it, and we have programs in place to help with this. We also look for opportunities to recycle or reuse waste as appropriate. When we must dispose of waste, we take steps to ensure that it is safely and properly disposed, which requires that our employees have the right training and follow the proper guidelines and procedures and that we use licensed facilities where applicable.

### 2018 Results

- We continue to reduce coal ash production as we transition to cleaner energy sources. Our generating plants produced 28% less coal ash for the year, compared to 2005.
- Approximately 19% of the coal ash our plants produced was reused. At our Texas generating plants, 100% of the coal ash is beneficially used, replacing products that would normally be produced from natural resources.
- We recycled nearly 23,000 tons of material from our operations, including more than 18,000 tons of wire and scrap metal.
- Altogether, we disposed of almost 10,000 tons of regulated waste from our operations, including 47 tons of hazardous waste.

## Coal Ash Management

Coal-fueled generating plants produce coal combustion residuals or byproducts commonly referred to as coal ash. Xcel Energy's generating plants consumed about 23.2 million tons of coal in 2018, supplied from mines in Colorado and the Powder River Basin of Wyoming.

Our plants operate in states that have regulated coal ash for many years. We store and dispose of ash in impoundments or ponds and landfills in accordance with these regulations, which specify construction standards and operating requirements including routine inspections and groundwater monitoring.

The following are important facts about our coal ash management:

- More than half of our coal operations are in arid regions where groundwater is scarce or at a greater depth, a favorable geologic condition that mitigates the risks of impacts from ash storage or disposal.
- We reduced our number of coal ash repositories in 2018 by about 30%, from 13 to nine. We now manage three impoundments and six landfills. This is the result of shutting down coal units and actively removing ash impoundments that are no longer needed.
- Only 18% of the total ash our plants produced in 2018 was permanently disposed in impoundments.
- Our three active impoundments include a three-acre incised pond, a 17-acre bottom ash pond, and a 100-acre ash disposal impoundment. This larger impoundment is built to state-of-the-art standards and meets stringent safety requirements, according to an EPA inspection.

Throughout our system, we try to recycle coal ash whenever possible for beneficial use, such as in concrete products, roadbed material, soil stabilization, engineered-fill material and more. As we install and operate new emission controls at our plants, such as scrubbers and activated carbon for controlling mercury emissions, the ash composition changes, making it potentially less desirable for beneficial use.

### Coal Ash Summary (estimated in tons)

	2016		2017		2018	
	Produced	Reused	Produced	Reused	Produced	Reused
Colorado	934,063	127,657	731,740	91,996	987,652	37,510
Southwest	274,785	274,785	289,391	289,391	207,092	207,092
Upper Midwest	699,401	55,982	649,662	43,531	775,237	121,675
TOTAL	1,908,249	458,424	1,670,793	424,918	1,969,981	366,277

### EPA's Final Rule for Managing and Disposing Coal Ash

The final Coal Combustion Residuals Rule became effective in October 2015 and regulates coal ash as a non-hazardous waste under Subtitle D of the Resource Conservation and Recovery Act (RCRA-D). It establishes minimum national standards for the design, operation and closure of landfills and surface impoundments. Beneficial use of coal ash as defined under the regulation is exempted. Although it has undergone a number of changes since being enacted, Xcel Energy's facilities are well positioned to meet the rule's requirements without significant impact to operations and cost.

Our company completed our second annual groundwater monitoring reports required by the rule in January of 2019. We identified two sites in Colorado where there are impoundments or landfills present and where a statistically significant increase of certain constituents exists in the groundwater. However, at one of these locations, we have already removed the coal ash from the impoundment. Furthermore, the groundwater monitored at those two sites is directly adjacent to the impoundments or landfills and does not indicate any impact to local drinking water. We have

kept county officials informed of the situation, and are currently conducting additional groundwater sampling and initiating an assessment of corrective measures as prescribed by the rule to evaluate whether corrective action is required at these facilities. If applicable, we will be informing stakeholders on that process.

## **Waste Management**

Xcel Energy's central Environmental Services department facilitates the company's waste management program, which is supported by facilities that generate regulated wastes. Environmental Services staff routinely visits these facilities and provides training and job aides to ensure facility personnel understand their waste management responsibilities. Our largest facilities have specific personnel trained to properly manage waste.

We have a program for approving waste vendors that is designed to minimize risk and ensure the safe disposal of materials through the exclusive use of vendors that meet our exacting standards. A team comprised of Environmental Services, Supply Chain, Legal, Risk Management and Investment Recovery employees meets quarterly to discuss the program and any relevant vendor issues. Vendors contracted to manage the higher risk wastes, such as hazardous waste, are audited on a routine basis.

### **Material Recycling and Reuse**

We are committed to preventing pollution and reducing waste as part of our business planning and decision making processes. Some of our waste materials can be recycled, reused or may consist of parts and materials that can be reclaimed. Not only is the recovery of these materials good for the environment, but it also can help manage the cost of generating and delivering energy.

We began a major effort in 2016 to recycle "cobra head" style streetlights after launching a five-year project to replace these older lights with new energy-efficient LED fixtures throughout our territory. We are investing in the new technology to support the energy goals of the communities we serve and to reduce operating costs. The new LED fixtures use about 40% to 60% less electricity than high pressure sodium lights and have a longer operating life, which means fewer replacements and less maintenance.

We could have potentially sold the fixtures for reuse, but we agreed not to put these older, less efficient lights back on the street. Instead, we are recycling the lights after removing and properly disposing of environmentally sensitive components.

We will begin a multi-year project in 2019 to replace gas and electric meters as part of our Advanced Grid Intelligence and Security strategic initiative. Depending on regulatory and planning considerations, we could replace up to 5.5 million meters. We are developing a plan for managing and recycling the old meters as part of the sourcing effort for this project.

Global market conditions have negatively impacted the recyclables market, and in 2019, we saw a sharp decline in the market for recycled cardboard and plastic. We constantly look for viable and environmentally responsible recycling opportunities. The vendors that we choose to recycle these materials are selected by a competitive bid process. Waste recycling vendors that handle sensitive materials, such as oil and batteries, are reviewed using the same approved vendor process that is used for the disposal of wastes.



### Material Recycling Summary (in Tons)

	2016	2017	2018
<b>Cardboard</b>		72	21
<b>Batteries<sup>1</sup></b>		49	76
<b>Plastic</b>	53	72	2
<b>Scrap metal</b>	20,841	13,390	18,334
<b>Used oil</b>	3,609	3,635	4,320

<sup>1</sup> Large lead-acid batteries recycled for reclaiming lead.

### Waste Disposal

The waste we generate must be disposed at properly licensed facilities based on the waste type. All of the vendors that we contract to manage regulated wastes are part of our approved vendor program and are required to have a valid contract established in accordance with Xcel Energy's Supply Chain. The regulated wastes identified below are disposed at licensed facilities that have been vetted for financial viability, a positive compliance record and proper insurance.

The waste summary below generally represents normal operating conditions in 2018. In addition, we completed two significant environmental projects that resulted in the one-time generation of special wastes that are excluded from the totals below. We closed a water treatment pond at the Black Dog Generating Plant, which resulted in the disposal of 4,992 tons of coal and coal ash tainted sediments. We also completed remediation of a legacy manufactured gas plant site in Fargo, North Dakota that resulted in 46,000 tons of nonhazardous contaminated soils.

### Waste Disposition Summary (in Tons)

	2016	2017	2018
<b>Hazardous</b>	31	50	47
<b>Universal<sup>1</sup></b>	78	112	163
<b>PCB related<sup>2</sup></b>	517	415	670
<b>Asbestos</b>	546	448	326
<b>Special<sup>3</sup></b>	16,978	8,363	8,716

<sup>1</sup> Universal waste includes regulated waste such as fluorescent light bulbs, rechargeable batteries and mercury switches.

<sup>2</sup> PCBs (polychlorinated biphenyls) are chemicals controlled under the Toxic Substances Control Act. PCBs were historically used in transformer oil.

<sup>3</sup> Special waste includes oily materials recovered from our operations, such as rags, filters, soil and water.

### PCB Phase-out Effort

We have been phasing out PCB-containing equipment from our transmission and distribution system for many years. The Toxic Substances Control Act of 1979 defines PCB equipment as equipment containing oil having a PCB concentration of 500 parts per million (ppm) or more, while PCB-contaminated equipment has oil with a PCB concentration of 50 to 499 ppm.

Xcel Energy has made dedicated efforts to remove all known PCB equipment from its system, including transformers, capacitors and other regulated categories of equipment. This equipment was targeted, removed and replaced with non-PCB equipment.

Other phase-out efforts include the replacement of regulated equipment with non-PCB equipment as systems are upgraded. Any regulated equipment removed from the field is disposed of and replaced with non-PCB equipment unless there are extenuating circumstances associated with the design or procurement of the equipment. Xcel Energy personnel are trained on PCB regulations and the proper identification, handling, removal and disposal of this equipment to facilitate phase-out efforts. Aside from PCBs that are occasionally discovered during facility upgrade projects in small sealed or previously untested specialized equipment, most of the PCB and PCB-contaminated equipment left on our system is the result of cross-contamination occurring during manufacturing or maintenance activities prior to or shortly after the adoption of the Toxic Substances Control Act.

### PCB Contaminated Equipment and Oil Removed from the Xcel Energy System

	2016	2017	2018
<b>PCB and PCB-contaminated oil (gallons disposed)</b>	<b>21,378</b>	<b>36,632</b>	<b>33,311</b>
<b>PCB and PCB-contaminated equipment (units removed from service)</b>	<b>632</b>	<b>815</b>	<b>1,235</b>

## Legacy Manufactured Gas Plant Projects

In the late 1800s until the mid-1900s, gas was manufactured using coal, oil and petroleum. It was used as natural gas is today, primarily for heating, cooking and street lighting. EPA estimates that thousands of manufactured gas plants or MGP facilities operated in the United States between 1815 and 1960. They were owned by municipalities and corporations, including predecessor companies to today's electric utilities. MGPs produced a variety of wastes and byproducts, including coal tar. Some of the waste and byproducts were sold for reuse or disposed off-site, and some were left at plant sites.

Given the extensive history of our operating companies — going back more than 100 years — Xcel Energy has inherited legacy MGP sites. All the plant facilities were closed and dismantled many years ago, and some of the properties where MGPs once operated have been sold. Over the years, Xcel Energy has worked cooperatively with environmental agencies and communities to successfully investigate and remediate former MGP sites when necessary.

### Ashland

We successfully completed the remedial phase of an eight-year cleanup project along the lakefront of Lake Superior in Ashland, Wisconsin, which was one of the busiest industrial ports in the country during the late 1800s and early 1900s. A final site cap, as prescribed by the Record of Decision (ROD), will be installed at the site in 2019. It was the site not only of a legacy MGP, but other industrial operations. The MGP was operated at the site from 1885 to 1947 and provided gas for street lighting and businesses. Later, the site was used for a city-owned landfill and waste water treatment plant. We have owned a portion of the Ashland site since 1986.

The \$200 million project was done under the supervision of EPA and the Wisconsin Department of Natural Resources. It involved more than 460,000 hours of work and employed best-in-class techniques, innovative technologies and a first-of-its-kind strategy to safely remove impacted lake sediments from the lakefront.

The effort included a unique agreement for cost recovery that effectively managed customer impact. In addition, numerous issues were successfully negotiated and litigated, including the recovery of more than \$50 million in insurance and third-party settlements to reduce overall cost. Working closely with state and federal agencies, the project was environmentally sound and economically balanced. Throughout the effort, we maintained strong community relations with the city, customers, elected officials and local Native American tribes. With the project completed, the Ashland community can now move forward with waterfront-redevelopment plans.



Our environmental protection efforts include safeguarding birds, bats and other wildlife around our operations. We regularly work with environmental agencies and conservationists to preserve wildlife and its habitat.

## Wildlife protection and biodiversity

# Managing wildlife and habitat

We have a long history of working proactively with wildlife agencies and conservationists on special programs, research studies and regulatory efforts designed to protect wildlife and its habitat.

Our operations cover thousands of miles of transmission and power line right-of-ways, as well as the lakes, rivers and acres of land that surround our generating plants and wind farms. Given our footprint, we must take care and coexist responsibly with wildlife and the natural habitat that surrounds our facilities.

We consider our impact on wildlife as we upgrade, design and build facilities. For power line and plant construction projects, we evaluate our projects to determine possible impacts and take appropriate steps to help avoid and minimize potential risks. If we do have impacts, we have programs in place to document and report incidents to regulatory agencies, and then determine what actions we can take to prevent future issues.

### 2018 Results

- Under our Avian Protection Plans, 2,700 electric transmission and distribution power-line locations have been retrofitted with equipment to protect birds.
- We continued to support pollinator habitat on Xcel Energy property, especially in the Upper Midwest where we planted 47 acres of new habitat through three volunteer projects with agency and nonprofit partners. We even completed a demonstration garden at our downtown Amarillo headquarters by filling planters that surround the building with plants that are visually appealing and pollinator friendly.

- Our popular Bird Cam website had more than 1.3 million views with visitors tuning in to watch bald eagles, great horned owls and peregrine falcons. As early as 1989, we began working with the nonprofit Raptor Resource Project to install nest boxes at several of our Minnesota generating plants to help restore the peregrine falcon to the Mississippi River Valley. With the program's success, we began installing web-based cameras to share live video of the birds and their nesting habits. Our Bird Cam program grew from there.
- Through the Xcel Energy Foundation, we contributed nearly \$436,000 in environmental stewardship grants to support organizations and programs that work to protect and enhance our natural environment.
- Former Vice President Walter Mondale, representatives from the National Park Service, and elected officials and community leaders from Minnesota and Wisconsin honored Xcel Energy for the company's donation of more than 24,000 acres of land along the St. Croix and Namekagon Rivers, which led to the creation of the Wild and Scenic Rivers Act of 1968. Events were held throughout Minnesota and Wisconsin in 2018 to recognize the 50th anniversary of the Act.

## Avian Protection Plans

Xcel Energy was the first utility in the country to enter into a historic agreement with the U.S. Fish and Wildlife Service to proactively address potential issues involving birds and power-line structures, while helping the company comply with federal avian protection laws. Our utility operating companies entered into separate voluntary memorandums of understanding with USFWS in 2002 to collaborate on developing Avian Protection Plans.

Transmission and distribution lines and equipment can be attractive to birds for roosting and building nests and can pose a collision and electrocution hazard that may result in death or injury of the birds. In addition, threatened and endangered avian species and eagles are protected by the federal Endangered Species Act and the Bald and Golden Eagle Protection Act, respectively. Our Avian Protection Plans are a critical initiative for protecting birds and complying with these federal wildlife protection laws.

As part of its plan, each operating company developed a schedule for retrofitting facilities determined to pose a higher risk for bird injuries or deaths. Since then, we've had great success completing the retrofits in a timely manner, as called for under the plans. All of the initially identified retrofits have been completed in our Colorado, Texas and New Mexico service territories. In our Upper Midwest service territory, we have finished the highest priority lines and poles and are working through the next level of retrofit projects. Additionally, all of our facility design standards have been revised so that new or modified construction meets industry standards to prevent or mitigate avian incidents.

Xcel Energy employees are required under the plans to report injured or dead birds using the company's online reporting form. We then analyze whether reasonable retrofits or the installation of additional avian controls can minimize the risk of avian incidents at the location in the future. This reporting and evaluation process is another step in complying with federal avian protection laws and demonstrating our commitment to taking responsible actions for avian protection.

## Helping Pollinators

Xcel Energy has been supporting the development and maintenance of pollinator habitats for over 30 years. With our Upper Midwest service territory coinciding with the Monarch Migration Corridor from Minnesota to Texas, we see tremendous potential to be a leader in helping pollinators.

The company currently has over 2,100 acres of pollinator habitat in Minnesota, North Dakota and Wisconsin. We have 44 active sites ranging from 0.25 to 800 acres on various company property including under transmission lines, around substations, power plants, community solar gardens, a wind project and company office sites. We are supporting and initiating projects that make a difference in the lives of pollinators, restoring native prairie ecosystems and targeting pollinator species of concern including the monarch butterfly, rusty patched bumblebee, and karner blue butterfly.



We can't achieve success on our own. We have many partners including state and federal agencies, communities and non-profit organizations. In 2018, we planted 40 acres of pollinator habitat around our Magic City Substation in Minot, North Dakota in collaboration with the U.S. Fish & Wildlife Service Partners for Wildlife. We partnered with Great River Greening and Xcel Energy employee volunteers to seed four acres of milk weed outside our Blue Lake Power Plant in Shakopee, Minnesota. An additional 16 acres will be planted in 2019 with the goal of creating a seed bank. We also partnered with the city of Burnsville, Minnesota in 2018 to plant three acres of pollinator habitat under transmission lines in an area where a new natural gas pipeline was installed leading to the Black Dog Generating Plant.

In Colorado, employee volunteer groups are partnering with nonprofit organizations to educate our employees on the importance of pollinator species and supporting projects for the development and maintenance of pollinator habitats in our communities. Partner organizations include the Butterfly Pavilion, Volunteers for Outdoor Colorado and the Colorado Pollinator Network.

Xcel Energy and the contractors we employ do not use chemicals that are harmful to beneficial insects in our vegetation management practices to control brush, trees and weeds on our rights-of-way and properties. This includes not using neonicotinoids, which is of special concern to people working to improve bee populations.

As we move forward with the pollinator initiative, we are focusing on developing habitat that can be sustained, allowing time for the sites to develop. Our primary goal is to continue to educate the communities we serve on the importance of the pollinators in their daily lives while utilizing company property to make a difference.

## **Responsible Wind Development**

Wind energy is an important and growing part of our energy mix, especially as we look to build and operate more company-owned wind farms. Through wind, we are reducing carbon and other emissions and improving the environment in ways that ultimately support and protect wildlife. But, wind farms must be properly located, constructed, operated and monitored to minimize impacts to wildlife and protected species.

### **Project Siting and Development**

Before construction, we carefully select wind farm sites to ensure impacts to birds, bats and other wildlife are minimized to the fullest extent practicable. This includes following the USFWS's Land-based Wind Energy Guidelines, conducting wildlife and habitat surveys and following other best practices. As part of this, we work with wind project developers, the USFWS and appropriate state wildlife and natural resource agencies during siting and permitting to ensure turbine locations are not in critical habitat for threatened and endangered species. If issues are identified, we work with the appropriate agencies to avoid or minimize impacts.

Our Sagamore Wind project in New Mexico is an example of our commitment to responsible wind development. The project developer sited turbines in locations that avoid and minimize impacts, and we are voluntarily entering into a conservation agreement. We have signed a letter of intent with the Lost Draw Conservation Bank to purchase preservation and restoration credits for the Lesser Prairie-Chicken (LPC) pending project approval and transfer of ownership.

Our participation in the Lost Draw Conservation Bank will help support LPC conservation by expanding, improving, and protecting high-quality LPC habitat. The bank is expected to restore thousands of acres of habitat by reconvertng agricultural fields and removing tall woody species such as mesquite. It will eliminate existing fragmentation, such as pivot irrigation, wind mills, and other tall structures, and provide permanent protection of this high-quality habitat using easements held by a New Mexico land trust.

### **Construction**

Pre-construction surveys are conducted prior to excavation for road or foundation construction, cable installation or crane relocation. This helps ensure that potential wildlife impacts can be minimized during wind farm construction. During construction of the Rush Creek wind project in Colorado, pre-construction surveys located burrowing owl nests in prairie dog colonies. Buffer zones were identified and marked to allow construction to continue while protecting the owls.

These surveys provide opportunities to identify other potential wildlife impacts due to indirect construction activity. At Rush Creek, for example, construction activity along a section of access road was restricted to protect an active swift fox den. We will also try to maintain existing trees and abandoned buildings on these sites when possible to avoid disturbing bat roosting habitat.

### **Wind Farm Operations**

Once a wind farm is built, we continue to perform studies and monitor wind turbine operations. Our wind farms have detailed Bird and Bat Conservation Plans, which provide a framework for how we study, monitor and minimize impacts over the life of a project — from wind farm planning to construction to the operation and maintenance and decommissioning.

Despite all these efforts, wildlife can be unpredictable, and there are no guarantees. We report injuries or fatalities to USFWS and appropriate state agencies. If protected avian species build nests in close proximity to existing wind turbines, we will evaluate what actions are needed to avoid and minimize impacts and engage our state and federal wildlife experts to ensure we take the right steps.

In addition to the wind farms we own, we also purchase a significant amount of wind capacity. We expect our third-party wind suppliers to perform similar permitting, reporting, reviews and studies of their wind farm operations.

### **Preserving Native American Cultural Resources**

Protecting significant tribal cultural resources during the siting, construction and operation of our wind facilities is a priority. We voluntarily work with interested tribes to identify tribal cultural resources in areas where there are potentially important resources and may modify the final wind facility design to avoid impacts as much as possible. During construction, tribal cultural resource monitors may be used to help with the unexpected discovery of artifacts, ensuring they are evaluated and managed in a culturally appropriate manner.

During development and construction of the Foxtail wind project, we worked closely with the Standing Rock Sioux Tribe and others because the facility is sited near the Whitestone Hill State Historic Site in North Dakota, which was identified early in the development process as a historical site with major significance to a number of Tribes.

## **Enticing Ospreys to Alternative Nest Sites**

Ospreys are federally protected raptors that have been successfully reintroduced in the Midwest, following decades of restoration and conservation efforts. Ospreys like distribution poles and transmission structures for nesting, but nests built on utility poles can pose a threat to the birds and may cause outages and damage to electrical equipment. Xcel Energy frequently erects alternative nest platforms that are taller than nearby lines in known osprey nesting areas to provide more attractive and safer nesting sites, while protecting system reliability. We also work closely with communities and civic groups to help them evaluate utility poles near high-quality osprey habitat, to identify alternative sites and assist with building and installing safe osprey nest platforms.

## **Lesser Prairie-Chicken Conservation Agreement**

We voluntarily entered into a conservation agreement with the Western Association of Fish and Wildlife Agencies (WAFWA) pursuant to the Lesser Prairie-Chicken Range-Wide Conservation Plan to help protect this species of prairie grouse.

Rangelands in our Colorado, New Mexico and Texas service areas provide important habitat for the LPC. To participate in the conservation agreement, we pay enrollment and mitigation fees based on our anticipated development activity. We also take conservation measures, following avoidance, minimization and mitigation practices during operation, maintenance and new construction activities. As an example, we may bury distribution lines within the buffers of active breeding areas and use special types of pole construction in certain LPC habitat areas.

The goal of the WAFWA conservation plan is to increase the population of the species from about 17,000 birds in 2013 to 67,000 birds across Colorado, Kansas, New Mexico, Oklahoma and Texas. These efforts appear to be working — in 2018, WAFWA reported that there has been a steadily increasing LPC population trend over the last years.



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