

2016 Corporate Responsibility Report

ALWAYS DELIVERING.



Who We Are

Every day Xcel Energy powers millions of homes and businesses across eight Western and Midwestern States. Our commitment starts with the basics—customers can count on us 24/7 to be there with safe, reliable and affordable energy. But, what we provide goes much deeper than that.

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 our customers with industry-leading options and energy alternatives to support their goals and objectives.

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 ensure we are *Always Delivering*.

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. We commit to:

- Ensure safety for ourselves, our coworkers and the public
- Work productively and create a challenging and rewarding workplace
- Treat all people with respect
- Conduct all our business in an honest and ethical manner
- Work together to serve our customers
- Be accountable to each other for doing our best
- Promote a culture of diversity and inclusion
- Protect the environment
- Achieve operational excellence

Operating Companies

Headquartered in Minneapolis, Minn., Xcel Energy Inc.'s operations include the activity of four wholly owned utility subsidiaries that serve electric and natural gas customers in our eight states. These utility subsidiaries, referred to as operating companies, are Northern States Power Company-Minnesota, Northern States Power Company-Wisconsin, Public Service Company of Colorado and Southwestern Public Service Company.

Northern States Power Company-Minnesota

Minnesota, North Dakota, South Dakota

Electricity and natural gas service (electricity only in South Dakota)

Christopher B. Clark, president

- Customers:
 - o Electricity: 1,460,650
 - o Natural gas: 509,323

Northern States Power Company-Wisconsin

Wisconsin, Michigan

Electricity and natural gas service

Mark E. Stoering, president

- Customers:
 - o Electricity: 257,214
 - o Natural gas: 113,469

Public Service Company of Colorado

Colorado

Electricity and natural gas service

David L. Eves, president

- Customers:
 - o Electricity: 1,449,096
 - o Natural gas: 1,377,317

Southwestern Public Service Company

Texas, New Mexico

Electricity service only

David T. Hudson, president

- Electricity customers: 388,999

These four operating companies, along with WYCO Development LLC, a joint venture formed with Colorado Interstate Gas Company (CIG) to develop and lease natural gas pipeline, storage and compression facilities, and WestGas Interstate, Inc. (WGI), an interstate natural gas pipeline company, make up Xcel Energy's continuing regulated utility operations.

Xcel Energy Services is the service company for the Xcel Energy holding company system. It provides a variety of administrative, management, engineering, construction, environmental and support services, including the company's philanthropic division.

Xcel Energy Transmission Development Company, LLC (XETD) and Xcel Energy Southwest Transmission Company, LLC (XEST) are transmission-only subsidiaries that will participate in Midcontinent Independent System Operator (MISO) and Southwest Power Pool (SPP) competitive bidding processes for transmission projects. Xcel Energy West Transmission Company, LLC (XEWI) is a transmission-only subsidiary that will competitively bid on transmission projects in the western United States.

Additionally, we have one non-regulated subsidiary in continuing operations, Eloigne Company, which invests in rental housing projects that qualify for low-income housing tax credits.

To Our Stakeholders:

Every day, we are reminded of how privileged we are to be in the energy business. It starts with the essential basics, with our electric and natural gas service providing 24/7/365 convenience for millions of customers. Doing that well will always be a key priority for us.

But our commitment does not stop there—our connections run much deeper than that.

We know that our success is tied to our communities' success. Growing and vibrant communities support our business growth, while clean and affordable energy powers our communities. For that reason, it is not only our pipes and wires that are embedded in the communities we serve.

At Xcel Energy, we dedicate our time, energy and talents to helping our communities thrive, making them great places to live and work. We strive to go above and beyond to provide the highest level of service because that effort will make our customers successful and help local economies grow.

Our aggressive plans include growing renewable energy to more than 40 percent of our total energy mix by 2021, shrinking our carbon footprint while saving customers money. Longer term, we will transition our energy supplies away from coal to even more renewable energy, where we expect to reduce carbon emissions by 60 percent by 2030 compared to 2005 levels. And as always, we will complement our service with industry-leading efficiency programs to help customers manage energy use and keep bills low.

In short, our customers want clean and affordable energy as well as a community partner, and we're ready to provide it and be it.

We have a tremendous responsibility to deliver on other shared goals too, including enhancing public safety, supporting community organizations, providing meaningful jobs and being a good employer. As a responsible community partner, we have a vested interest in not only meeting these responsibilities, but also continually raising the bar on our performance.

"Always Delivering" isn't just a tag line for us. It is who we are, and what we strive to do.

Delivering for the environment

Xcel Energy has served the public for more than a century. We have always aimed to deliver safe, reliable energy at a low price. That is fundamental to our mission and will not change.

What has changed is the increased understanding of the environmental impact of energy use and production. I am proud of our track record of translating that awareness into action and how we've greatly improved environmental performance while keeping energy reliable and affordable.

We have achieved these outcomes by retiring aging coal plants and replacing them with a combination of renewable energy, energy efficiency and more carbon-friendly natural gas for backup. In doing so, we are making a difference today and for the future. And our system and communities are better for it.

Since 2005, we've cut air emissions, such as nitrogen oxides, by approximately 70 percent and reduced water consumption by 35 percent. In fact, Xcel Energy's energy supply mix is cleaner than ever before. Last year, we reached a significant milestone, reducing carbon emissions 30 percent since 2005. It was an extraordinary year, one where we hit a new hourly production peak in Colorado and supplied 67 percent of energy from wind for the first time ever.

While we are proud of this progress, we are not satisfied. We have aggressive plans to continue down this path, and will do so with affordability in mind. If our current renewable proposals are approved, we expect to achieve a 45 percent reduction in carbon emissions by 2021 while saving customers money for

the long term. Beyond that, we have set an ambitious target to reduce carbon emissions 60 percent by 2030, which we believe we can achieve, depending on favorable economics and a supportive regulatory environment.

We have challenged ourselves to make wind work on our system, and we've delivered. Our ranking as the nation's No. 1 utility wind energy provider for more than a decade demonstrates that commitment. We are approaching solar and other innovative energy sources with the same philosophy, and see a bright future ahead.

Delivering economic development

Our wind plans not only help the environment, but are great examples of the economic engine energy can be for the local economy. Our plans to build 11 new wind farms in seven states benefit customers because construction costs will be offset by billions of dollars in fuel savings over the lives of the projects. Those same projects also offer tremendous economic benefits to communities, many in rural areas that can use an economic boost.

For example, last year we completed the Courtenay Wind Farm in North Dakota that created 200 construction jobs for a minority-owned business and will produce \$850,000 in annual tax revenue that will benefit local schools and other services. Participating landowners will receive \$26.5 million in lease payments over the next 20 years. Our planned wind farms will bring about similar benefits to the local host communities.

Altogether, Xcel Energy plans to invest more than \$18 billion in new, local infrastructure over the next five years, investments that will not only supply more clean energy, but also improve security and reliability of our operations and support a greater variety of services for customers. Those investments likewise create jobs and expand tax base—all of which deliver for local economies.

But our economic contribution goes beyond infrastructure. Last year, we launched an effort to strengthen our partnerships with local economic development authorities to attract new businesses to the communities we serve. When choosing a location, energy is an important consideration for many businesses; for some, it can be their largest expense. While a competitive price and excellent reliability are table stakes to attracting businesses, many companies are also looking to improve efficiency or use renewable energy to fulfill sustainability goals.

That's where we are uniquely qualified to help. We offer a significant portfolio of more than 150 energy-saving programs for all types of customers. We also continue to expand our renewable energy offerings to supply our customers the more tailored services they want and value. In 2016, we received regulatory approvals in Colorado and Minnesota for Renewable*Connect®, a program that gives business and residential customers a new option for choosing up to 100 percent verified renewable energy.

For the future, we will continue to explore innovative products and services that set us apart and give our communities one more advantage in this highly competitive world.

Delivering stronger communities

A strong community is a safe community, and ensuring safety around our energy facilities is a top priority for us. To enhance public safety, last year we completed significant natural gas infrastructure projects in Minnesota and Colorado. By implementing the latest technologies, these new transmission and distribution lines support the safe delivery of natural gas now and into the future. We also promote several public service campaigns, ranging from distracted driving to encouraging residents and contractors to call 811 before they dig. Since 2008, we've reduced our damage incident-rate for underground pipes and

wires for every 1,000 locate calls by 28 percent. Protecting our communities is the most important thing we do.

Through our foundation, we have several matching donation and volunteer programs that encourage our employees to support the communities where they work and live. I continue to be amazed and deeply proud of their generosity. Xcel Energy employees contributed at least 50,000 volunteer hours last year and pledged more than \$3 million in a record-setting United Way campaign, which the Xcel Energy Foundation matches.

Our foundation also awarded \$3.9 million in grants to organizations within four focus areas that reflect our priorities for strengthening communities: STEM education, economic sustainability, environmental stewardship and access to arts and culture. Every year we also provide millions of dollars for emergency heating assistance and related programs. Our team of personal account representatives is available to help customers in need arrange payment plans and navigate the resources available to them.

Strengthening our workforce

While our future is bright, we need to have a skilled workforce ready and able to keep us on the path to achieving it, solving the challenges of both today and tomorrow in an ever-evolving industry. We work hard to keep our employees safe and have made notable progress in recent years, with last year being our second-best employee safety year on record. We want all our employees to go home to their loved ones every night.

We also invest in our workforce with new technologies to help them do their jobs better, development opportunities to further them on their career paths, and volunteer opportunities so they can give back. Our workforce should reflect our communities, and our intentional hiring processes helps us diversity and strengthen our workforce as it transitions from one generation to the next. We also continue to focus on hiring military veterans because they bring the right stuff to our organization—leadership, teamwork and dedication. We have essentially doubled our military veteran hiring in the last two years and will continue to look forward to bringing on many more.

Always Delivering

Keeping the lights on is a key part of our mission and something we hope our customers can take for granted. But that is not enough: protecting the environment, driving economic development, giving back to our communities, and being a great place to work—these are just a few of the ways that Xcel Energy is “Always Delivering” for our customers and communities.

As you read our Corporate Responsibility Report, you will learn much more about our organization, our community impact and our efforts to develop a sustainable energy future for all of us. We appreciate your partnership as we work together to solve tomorrow’s energy challenges and make sure our communities are safe, strong, thriving and clean for generations to come.

Sincerely,

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

Ben Fowke

Chairman, President and CEO

Managing Corporate Responsibility

At Xcel Energy, corporate responsibility is fundamental to who we are and how we do business. We know that our success is tied to our communities' success, so the values of holding ourselves and our operations to high standards and giving back to the communities we serve are deeply rooted in our culture.

In fact, this commitment is founded in our mission, executed in our long-term business objectives, and measured and incented through our business planning and compensation. We continually challenge ourselves to meet the evolving needs and expectations of our customers, investors, employees, policy makers and other stakeholders interested in our business and its impacts. It permeates throughout our organization and is reflected in the theme of this year's report, *Always Delivering*.

To us, corporate responsibility means that we deliver safe, affordable, reliable energy that is increasingly clean and from renewable resources. That we challenge ourselves to approach our work in a "why we can" as opposed to a "why we can't" manner. That we keep the needs of our customers and communities front of mind as we go about our work, always seeking to support their success. And, that we deliver value to our investors both today and over the long term.

As such, our corporate responsibility focuses on those issues that matter most to our stakeholders. In this report, we demonstrate our commitment to disclosure and performance across 24 economic, environmental and social issues. All of these issues are key to our success as a business and our contributions as a corporate citizen, as we strive to deliver on the needs and interests of our stakeholders.

Based on survey results, a cross-sectional group of stakeholders identified 10 top-priority issues. While we have programs and initiatives around each of these issues, this input motivates us to sharpen our focus and deliver even stronger results in these areas. In this way, we can feel confident that our actions are creating the most value for our stakeholders, day in and day out.

Corporate Responsibility Governance

Corporate responsibility is embedded throughout our organization and integrated into our governance processes. Our Board of Directors and executive management team oversee and lead these efforts, with leaders and organizations across the company responsible for the elements that produce strong performance.

At the executive level, responsibility is shared among our senior executives reporting to the chairman, president and CEO. The executive team meets regularly throughout the year to chart and monitor progress on key strategic initiatives, as well as to track industry and technology trends affecting our business. Key components of corporate responsibility, such as affordability, reliability, employee and public safety and other table stakes of our business, are regular features of the team's oversight.

Broader and more extensive corporate strategy sessions are conducted annually, first with the executive management team and then with the team and the Board of Directors. These sessions focus on long-term opportunities and issues facing the company and its stakeholders, including development of growth plans, evolving customer needs and preferences, developments in the external landscape and policy considerations. Hearing from outside experts to understand the changing landscape is an important component of these sessions. The output of these sessions guides the work and focus for the coming year.

As an energy provider, we are keenly mindful of the importance of our business in driving the economy as well as the environmental impacts of energy use and production. As such, strategies and key initiatives

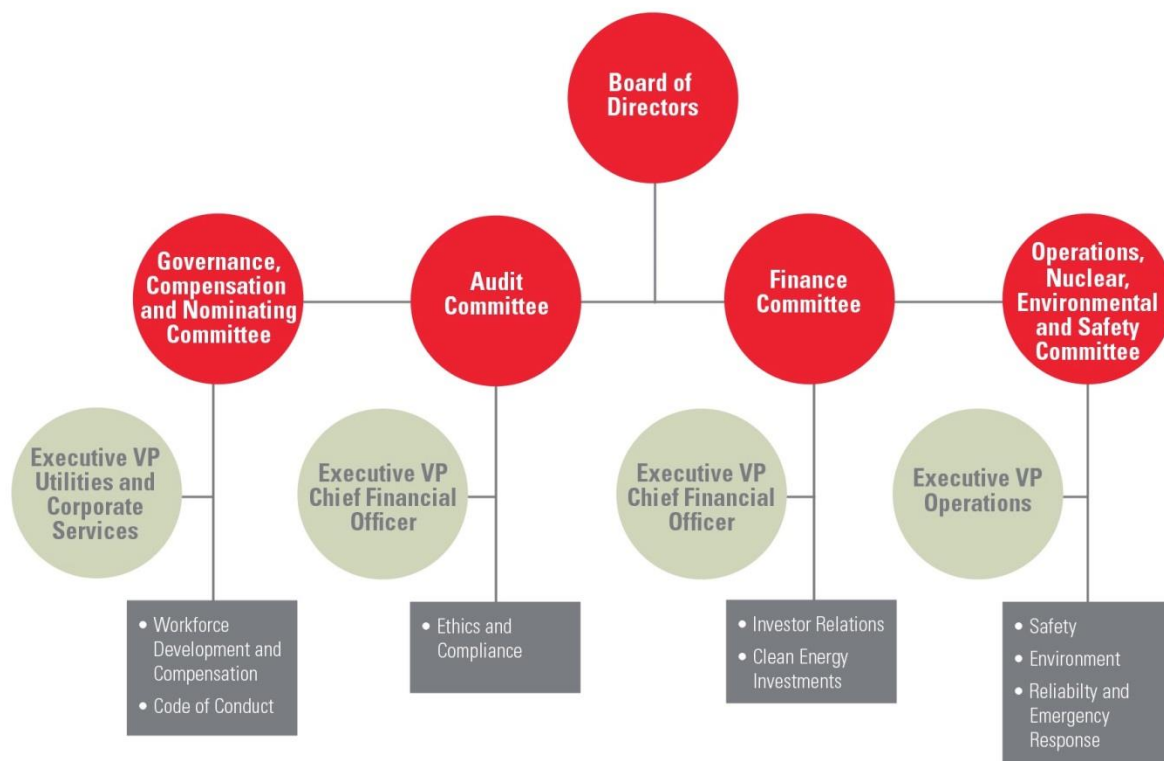
are crafted and executed to strike a sound and sustainable balance between reliability, affordability and environmental impact. We use innovative performance management techniques and compensation design to align employees around successful execution of these efforts. For example, our executive compensation is tied directly to our performance, specifically reliability, cost management, customer loyalty, public and employee safety, achievement of carbon emission reduction goals and financial performance.

The Board of Directors provides oversight of these issues, with the appropriate board committee delegated accountability for particular aspects of our corporate responsibility. For example, the Governance, Compensation and Nominating and Audit committees oversee respectively the Code of Conduct and corporate compliance. The Operations, Nuclear, Environmental and Safety committee oversees many corporate responsibility-related issues, such as environmental strategy and compliance, safety and operational performance, customer service levels—all aspects of excellence in delivering electricity and natural gas service to customers.

While the entire organization works on corporate responsibility, specific areas are directly tied to these issues. The organizational charts below call out the departments with work tied to corporate responsibility and their related activities.

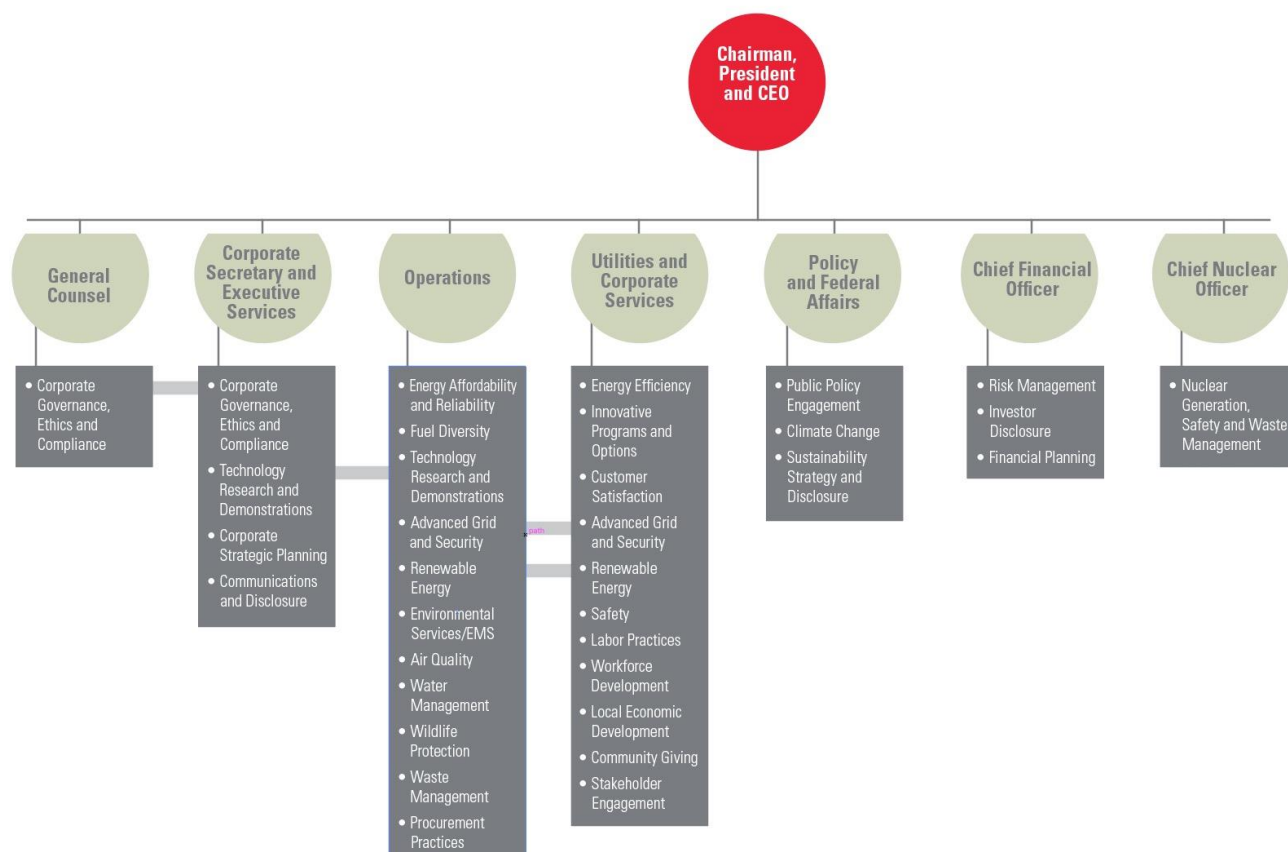
Our Board of Directors, led by the chairman, president and CEO, oversees corporate responsibility-related issues and initiatives. Many of these issues are assigned to the board committees with particular expertise on the topics, who then report back to the full board. Each committee has assigned a senior executive in the role of coordinating officer, who supports the planning of agendas and material supplied to the committee as it performs its duties.

Corporate Responsibility Board Oversight



Together, our executive team plans and executes on strategies designed to achieve Xcel Energy's business objectives, including corporate responsibility-related issues and initiatives. Senior executives are accountable to the chairman, president and CEO, as well as to each other.

Corporate Responsibility Executive Oversight and Management



Key Corporate Responsibility Issues and Focus Areas

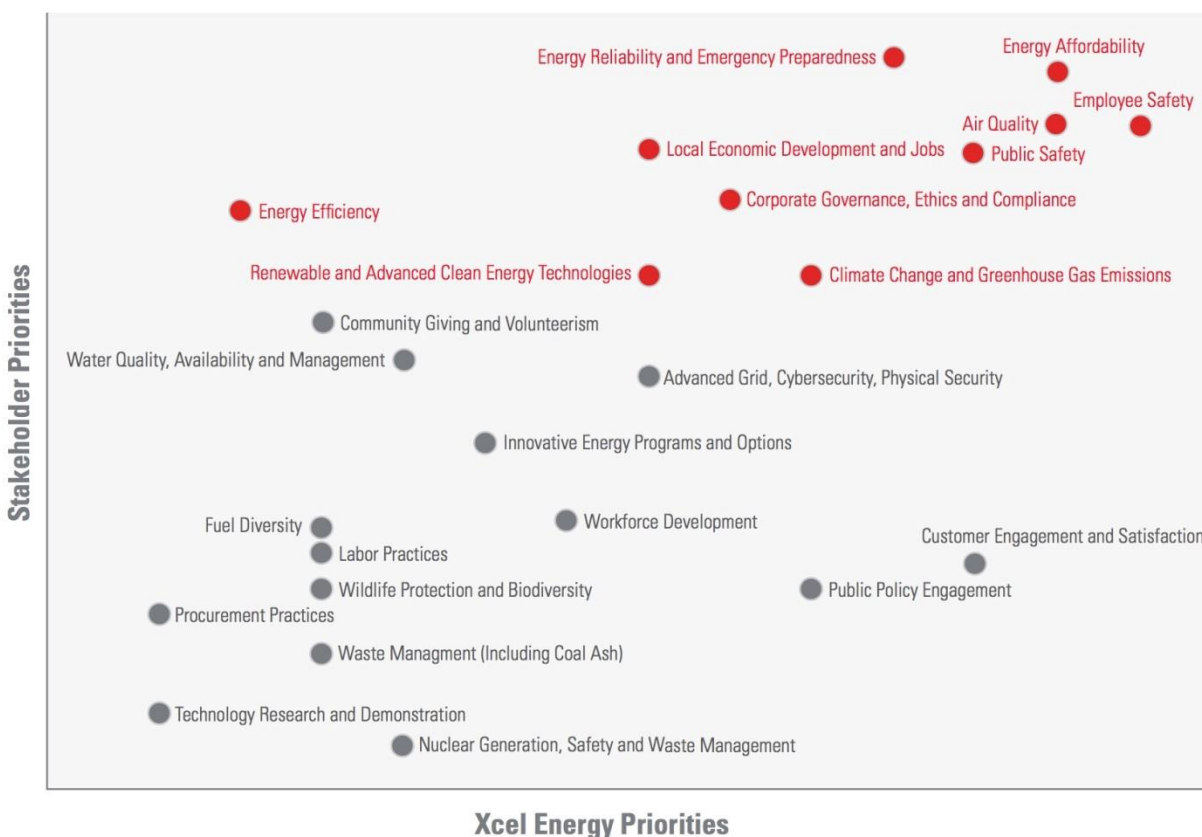
Based on our stakeholder engagement, research and participation in a number of industry and sustainability forums, we identified 24 major corporate responsibility issues for Xcel Energy (see methodology for definitions). Many of the issues closely align with the sustainability issues facing the entire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

While all 24 corporate responsibility issues are crucial to our company's success, we followed Global Reporting Initiative guidelines to identify areas of focus for our corporate responsibility efforts. We conducted an online corporate responsibility survey with more than 1,000 stakeholders to understand the issues most important to both our external stakeholders and internal leadership (see methodology for details).

Based on the results, we identified the issues of mutual interest to both internal and external stakeholders. While all of these issues are important, we consider the issues highlighted in red in the chart below to be focus areas because they reflect the items of priority importance to both our

stakeholders and us. Thus, to the extent we are successful in addressing and managing these issues, we will be delivering real value.

Corporate Responsibility Focus Areas



Aligning Corporate Responsibility Focus Areas with Business Objectives

Beyond the survey, we also see strong alignment between our corporate responsibility focus areas and our core business objectives. Our core business objectives are derived from the strategic planning process and represent the keys to our continued success as a business in achieving our vision to be the preferred and trusted provider of the energy our customers need.

The core business objectives include:

- Invest in our future
- Enhance the customer experience
- Keep customer bills low

As demonstrated in the table below, success in our corporate responsibility focus areas supports our core business objectives.

Core Business Objective	Corporate Responsibility Focus Area
Invest in Our Future <ul style="list-style-type: none"> • Increase ownership of wind and solar generation • Invest in the grid, including advanced technologies and transmission that enables more renewable energy • Provide the tools, technology, training and incentives to develop and support our workforce 	Employee Safety. Strive to achieve the ambitious goal of zero workplace injuries through our Journey to Zero employee safety campaign
	Renewable and Advanced Clean Technologies. Increase the use of economic renewables and position the power grid as a platform for new energy services
	Greenhouse Gas Emissions and Air Quality. Continue to pursue a cost-effective clean energy strategy to reduce carbon and other air emissions
Enhance the Customer Experience <ul style="list-style-type: none"> • Make it easy for customers to do business with us • Offer opportunities for economic development and new customer services • View our work through our customers' eyes 	Public Safety. Ensure those living and working near our facilities are aware of potential hazards and respond safely to them
	Reliable Energy. Deliver strong system reliability and outage response capabilities
	Local Economic Development. Support local economies through infrastructure investment, quality of service and economic development support
Keep Customer Bills Low <ul style="list-style-type: none"> • Achieve sustainable cost reductions by transforming the business • Harness technology to create more efficient and effective processes • Be good stewards of our customers' dollars through strategic resource allocation and cost management 	Affordable Energy. Transform our cost structure to become more efficient and customer focused, while investing in projects that reduce fuel and other expenses for customers
	Energy Efficiency. Support customers and the communities we serve in attaining their energy conservation goals
The Foundation of All Our Efforts	
Corporate Governance. Ensure sound corporate governance and a culture of compliance by focusing on strong practices, independent oversight and shareholder rights	

On-going Stakeholder Engagement

In addition to the corporate responsibility survey, as a regulated, public utility we have opportunities to meaningfully interact with our stakeholders in a number of ways, including our processes with public utilities commissions.

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

We regularly interact with these stakeholders through the following means:

- Requests, reports and topics for consideration before our public utilities commissions
- Ongoing interactions with customers, both business and residential
- Regular meetings and contacts with investors, community leaders, elected officials and others

These consistent, regular interactions provide insight into the interests of our stakeholders and enable us to respond to those needs on a more consistent and detailed level.

The table below outlines this regular engagement and our response to stakeholder interests.

Stakeholder group	Engagement	Key interests	Our response
Customers	<ul style="list-style-type: none"> • Customer Contact Center • Business Solutions Center • Business account managers • Personal account representatives for customers in need • Customer advocate process • Surveys and focus groups • Website, newsletters and bill inserts • Direct mail and advertising • Energy expos • One-on-one meetings 	<ul style="list-style-type: none"> • Energy service start and stop • Service reliability and timely outage response • Electric and natural gas safety • Affordable service • Energy and money saving opportunities • Easy billing and online account management • Information privacy • Neighborhood construction or repair work • Renewable energy • Environmental improvement 	<ul style="list-style-type: none"> • Public safety materials, programs and advertising • Expanded energy-saving programs and program goals • Low-cost or no-cost energy saving tips • Community outreach and events to promote energy efficiency • Online account management programs • Online outage map and improved outage communications • Data privacy process • Renewable energy consumer programs • Clean energy strategy • Operational excellence initiative

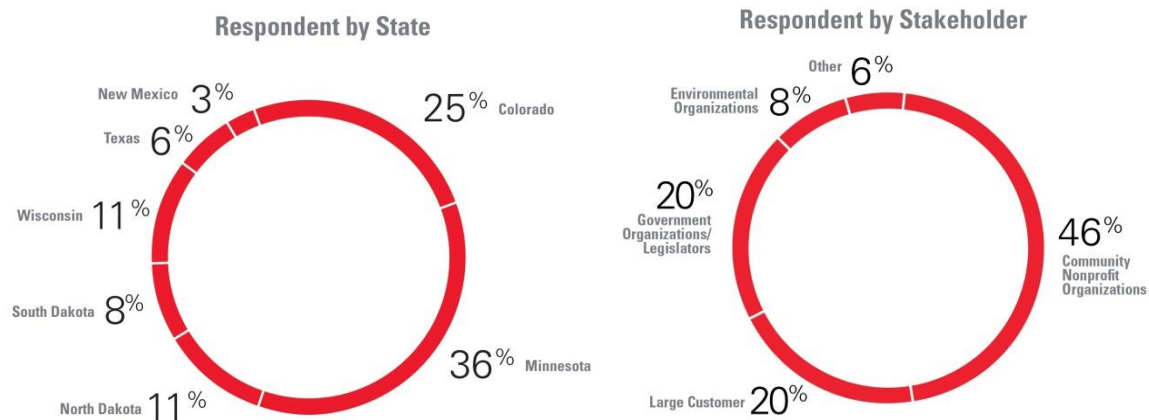
Employees	<ul style="list-style-type: none"> • Leadership meetings • Employee webcasts • Executive site visits and presentations • Bargaining unit negotiations and communications • Satisfaction, engagement and communication surveys • Training 	<ul style="list-style-type: none"> • Continued market-based compensation and benefits • Professional development opportunities • Communication • Recognition • Employee engagement • Community involvement • Increased involvement in national, state and local energy policy and legislation 	<ul style="list-style-type: none"> • Total Rewards statement • Management compensation training • My Financial Future planning tool • New Hire Connection employee orientation • Individual performance and development plans • Online professional development resources • Tuition reimbursement • XCelebrate recognition program • Print, electronic and video communications • Volunteer activities and paid-time-off program • United Way campaigns and matching gift program • Positive Effect engagement program • Business Resource Groups • Diversity and inclusion education • Wellness programs • Lunch-and-learn seminars • Grassroots political informational events
Communities	<ul style="list-style-type: none"> • Project-specific stakeholder meetings and open house events • Community relations and foundation staff • Partnerships and local memberships • Franchise agreements • Presentations and 	<ul style="list-style-type: none"> • Public safety • Project input and communication • Continued community support • Economic development and jobs • Continued community investment 	<ul style="list-style-type: none"> • Public safety programs • Project websites, newsletters, mailings and stakeholder meetings • United Way campaign • Foundation focus areas and grants • Employee volunteers and board members

	<ul style="list-style-type: none"> speaking engagements • Community workshops • Sponsorships and community events • Volunteer projects 	<ul style="list-style-type: none"> • Environmental leadership and support for local goals • Energy efficiency • Energy education 	<ul style="list-style-type: none"> • Programs for customers in need • Clean energy strategy • Power plant tours • Energy Classroom
Legislators and regulators*	<ul style="list-style-type: none"> • Policy leadership • Governmental and regulatory staff • Regulatory proceedings • Reports, filings and informational materials • Legislative initiatives • Political action committees and grassroots political informational events with employees • Speaking engagements 	<ul style="list-style-type: none"> • Reasonable energy costs • Reliable energy service • Environmental leadership • Emissions reductions • Responsible corporate governance 	<ul style="list-style-type: none"> • Productivity and cost reduction efforts • Clean energy strategy • Support for renewable energy standards • Regulated energy efficiency and conservation programs and goals • Voluntary emissions reduction initiatives • Highly rated corporate governance program
Investors	<ul style="list-style-type: none"> • Investor meetings and presentations • Website • Annual report, 10-K, 10-Q, proxy, financial press releases and other disclosures • Annual shareholder meeting • Teleconferences 	<ul style="list-style-type: none"> • Stock appreciation and company growth prospects • Meet earnings per share guidance • Meeting our long-term EPS and dividend growth objectives • Delivering a superior total shareholder return relative to our peer group • Solid credit ratings • Financing needs • Favorable regulatory environment • Transparency 	<ul style="list-style-type: none"> • Corporate strategy that includes a fair return on investment, utility business investment and stakeholder alignment • Senior management presentations and participation at investor conferences • Quarterly earnings release conference calls and webcasts • One-on-one meetings with current and prospective shareholders • Participation in utility and retail shareholder organizations • Investor Relations Mobile App

*Often overlaps with community stakeholders

Methodology for Corporate Responsibility Survey

The corporate responsibility survey was conducted internally following Global Reporting Initiative guidelines. The survey was 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 percent of potential respondents participated. The respondents represented a good mix of our local stakeholder categories and our service territory.



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 that are highlighted in red below.

Advanced Grid, Cybersecurity, Physical Security	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
Air Quality	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
Climate Change and Greenhouse Gas Emissions	Managing and reducing the greenhouse gas emissions from our operations, including carbon dioxide, methane and sulfur hexafluoride (SF6) through fleet transformation

Community Giving and Volunteerism	Giving both time and money to local nonprofit organizations; supporting energy assistance programs for customers in need
Corporate Governance, Ethics and Compliance	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
Customer Engagement and Satisfaction	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
Employee Safety	Adopting, enacting, and promoting effective programs that protect the health and safety of employees and contractors
Energy Affordability	Ensuring electricity and natural gas bills are affordable for consumers
Energy Efficiency	Providing programs to help customers take control of their energy usage and save money, including traditional rebate programs and advanced home solutions
Energy Reliability and Emergency Preparedness	Providing electricity and natural gas with few to no interruptions; being prepared to quickly repair outages caused by storms or other incidents
Fuel Diversity	Minimizing dependence on any one energy source by using a diverse mix of sources to generate electricity
Innovative Energy Programs and Options	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
Labor Practices	Adopting responsible practices related to employee pay, benefits and equal opportunity
Local Economic Development and Jobs	Working with the community to attract and support new business development and economic growth
Nuclear Generation, Safety and Waste Management	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
Procurement Practices	Doing business with responsible, local and/or diverse suppliers for the equipment, materials and services we purchase
Public Policy Engagement	Engaging and collaborating with policymakers and providing input on proposed legislation and regulations
Public Safety	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
Renewable and Advanced Clean Technologies	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

Technology Research and Demonstration	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
Waste Management	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
Water Quality, Availability and Management	Ensuring the availability of water for electricity generation and all other users; protecting water quality
Wildlife Protection and Biodiversity	Avoiding or minimizing impacts to protect species and their habitats; supporting raptor habitat and providing education and conservation opportunities on raptors
Workforce Development	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 17, 2017

Reporting Period: Jan. 1, 2016 – Dec. 31, 2016

Date of Previous Report: May 2016 (for 2015)

Reporting Cycle: Annual

Report Boundary: Xcel Energy and its four utility subsidiaries

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Xcel Energy's Corporate Responsibility Report covers the company's economic, environmental and social performance. We report on key initiatives, performance indicators and disclosures important to stakeholders and Xcel Energy, as we continue to provide high quality energy service and meet the challenges of a changing energy marketplace. Our corporate responsibility is all about driving and creating a more sustainable energy future for the customers and communities we serve.

This year marks the 13th year we have published this 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, and we have published a similar report in each following year. In 2012, we began publishing the full report online. We believe the online format provides easier access to information for our stakeholders. To raise awareness for our reporting and encourage stakeholders to access the report online, we print a highlights brochure that is distributed at our annual shareholders' meeting and at other events throughout the year. We also provide links to the report throughout our corporate website, 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 G4 guidelines in accordance with the Core option and the Electric Utilities Sector Specific Supplement. We have tried to meet the intent and follow the G4 guidelines 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.

Corporate Compliance and Ethical Business Conduct



Our Approach

At Xcel Energy, our vision is to be the preferred and trusted provider of the energy our customers need. Our company's Corporate Compliance and Business Conduct program continues to be a cornerstone of how we do business and the foundation for building trust.

For more than 100 years, we have integrated compliance and ethical business conduct into our culture and company's practices, helping ensure the trust of our customers, shareholders, regulators and employees. But that trust, which takes years to build, can take just seconds to break and forever to repair. A single wrong decision can damage or even destroy a company's reputation—no matter its history.

Our employees, contract workers and members of the board of directors deliver every day on the company's core value to conduct all our business in an honest and ethical manner.

Ethical Foundation: Code of Conduct

Employees and their principled actions are at the heart of Xcel Energy. Our business and management practices are built on the [Code of Conduct](#). Employees at all levels, contract workers and members of the board of directors are expected to apply the Code of Conduct to their work. The board of directors approves any changes we may make to the Code of Conduct to ensure top-level ownership of this foundational part of our culture.

The Code of Conduct alerts employees of their ethical responsibilities and holds them responsible for their actions. As part of yearly training, employees are asked to attest to their understanding of and adherence to the Code of Conduct.

We use Ethics Checkpoint within the company as a tool to guide ethical decision making.

Ethics Checkpoint

A series of questions to help employees make good business decisions.



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 Committee and Governance, Compensation and Nominating Committee. The 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 demonstrates commitment to compliance by assigning program responsibility to the chief ethics and compliance officer, who also oversees company strategy, communications and corporate governance activities. The chief ethics and compliance officer also drives our company culture, including our values. The integration of these activities and responsibilities ensures that compliance is part of how we make decisions across the company and how employees learn, read and hear about compliance.

Policies and Training Guide Decisions

Company policies and training help employees understand how we do things at Xcel Energy to make good decisions every day. Training courses are packed with information that is presented in an engaging manner and demonstrates how our values guide the way we do business.

100 percent of employees completed
Code of Conduct training in 2016



Our employees use the training information to ensure their actions protect the company's brand and reputation by working safely, effectively and complying with the many policies, laws, regulations and expectations governing our work.

Xcel Energy's
Policy of the Month

Monthly employee news stories focus on
the real-world application of policies to
help ensure understanding.

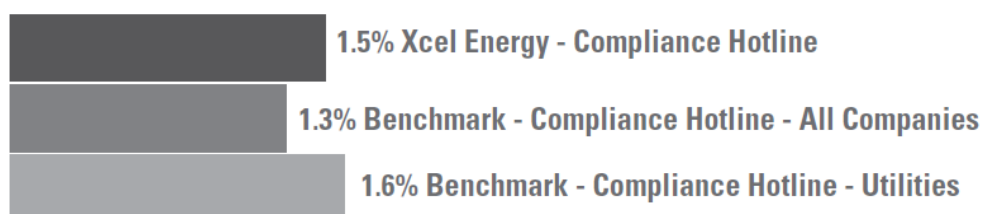
Issues, Investigations and Actions

When things don't seem right, employees are encouraged to discuss issues with their leaders. We know reporting issues takes courage, so we offer many reporting options, conduct effective investigations in a timely manner, take appropriate action and provide protection 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 administrative officer.

Our Compliance Hotline offers employees a way to ask questions about a decision they're unsure about and report issues. In 2016, the majority of inquiries and issues pertained to questions about benefits, compensation, overtime, bonuses, relocation, health savings account contributions and discipline.

About 30 percent of the issues reported in 2016 were reported through the Compliance Hotline, which provides the opportunity to report anonymously, and about 70 percent through non-Hotline channels. Our review does not indicate any trend or focus area that is concerning. Compliance Hotline results align closely with benchmarks.

Report Volume per 100 employees 12-months ending December 31, 2016



Employee Perceptions

In 2016, we changed how we evaluate the Corporate Compliance and Business Conduct program's effectiveness from the employee perspective, shifting from internally developed questions at the end of Code of Conduct training to an externally developed and administered survey. This change will enable the program to benchmark employee perceptions against those at other companies. With an overall assessment score for non-bargaining employees of 84 percent, employees responded favorably compared to the benchmark.

Overall Assessment Score



To enhance the transparency of our investigations process and foster employee understanding of how reports are handled, we provided employees with summary information that included the number of

substantiated allegations of wrongdoing, the types of discipline that were administered and other outcomes in the *2016 Corporate Compliance and Business Conduct Program Annual Report*.

Looking Ahead

We know our work is never done. That's why we are embarking on our second independent assessment of our Corporate Compliance and Business Conduct program in 2017 to gain greater insights into where our culture of compliance is strong and where opportunities exist to improve.

Our People and Culture

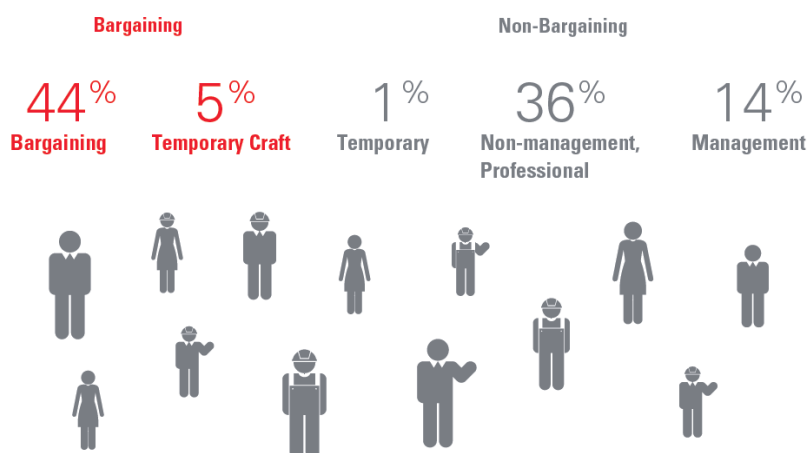


Our Approach

At Xcel Energy, our people are our greatest strength and the most significant contributors to achieving our goals. Although retirements continue to change the composition of our workforce, we view this change as an opportunity to build a diverse, customer-focused culture that is ready to meet the challenges of an increasingly competitive energy industry. With training, development and employee engagement, we are better responding to customer needs and driving our business forward through innovation and a competitive mindset that will successfully position Xcel Energy for years to come.

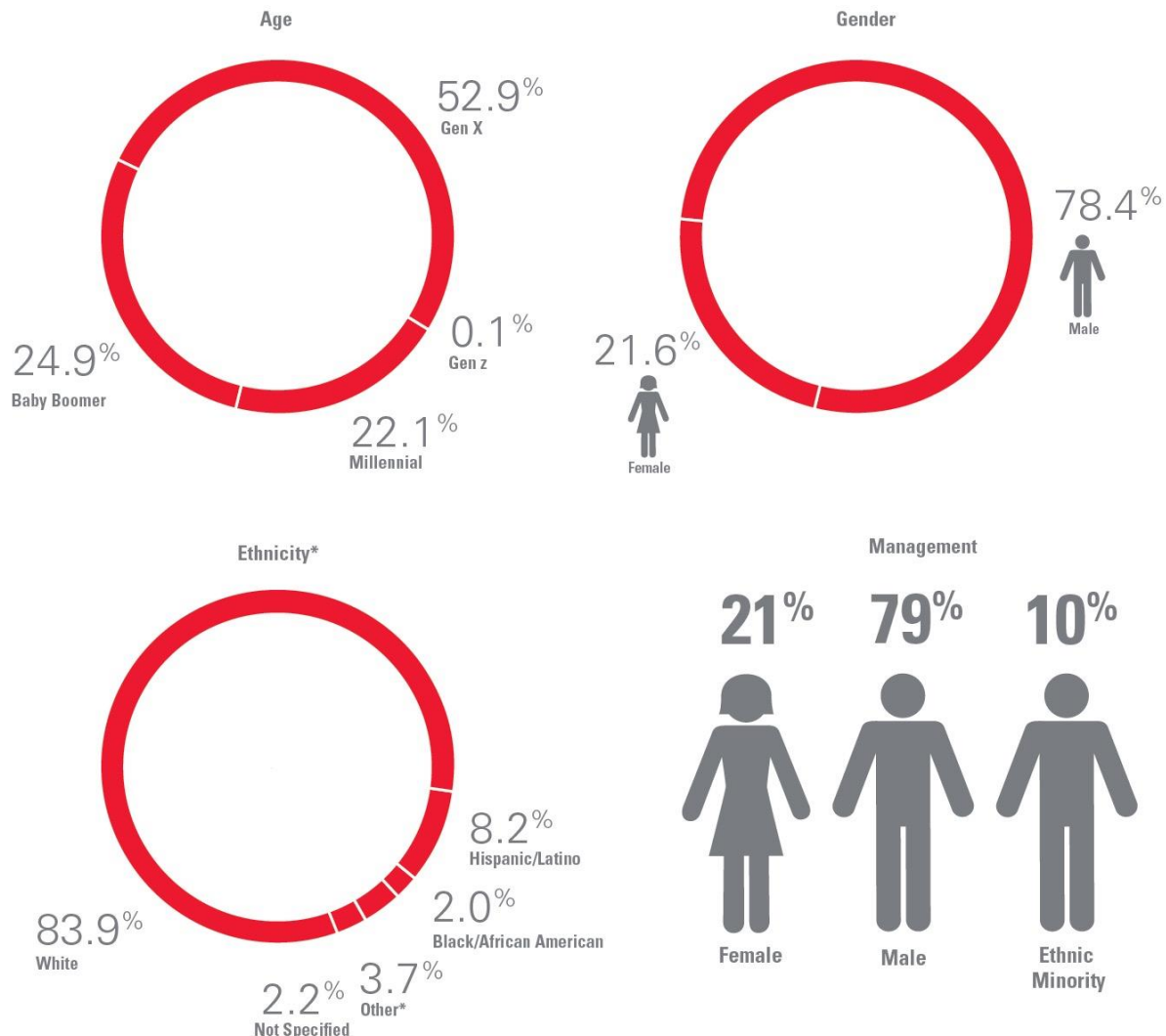
One of our primary missions is to proactively attract, retain and develop high-quality and diverse talent that brings a competitive mindset and is the right fit for Xcel Energy's culture. We are developing inspirational and courageous leaders and holding employees accountable for achieving results.

Our Workforce



2016 Workforce Demographics

As of year-end 2016, Xcel Energy had 12,009 full-time, part-time and temporary employees.



*Includes American Indian, Asian, Multi and Native Hawaiian

The average employee turnover in 2016 was 8.9 percent. About 37 percent of turnover was the result of retirements, about 49 percent were resignations and the remaining 14 percent includes turnover for other reasons, such as unsatisfactory performance, misconduct, severance or death.

Our projections show that 31 percent of our workforce will be eligible for retirement over the next five years and 44 percent over the next 10 years. However, we do not expect all employees to retire once they become eligible.

Workforce Planning and Analytics

We continued to develop and implement a stronger strategic workforce planning process and model to support leaders in using the opportunities that arise as a result of turnover. By leveraging data and analytics, we have been able to more accurately determine what the organization will need in terms of

size, type and necessary skill sets to achieve its objectives. The strategic workforce plan allows for a more intentional approach to deploying solutions that will address our changing workforce. In conjunction with this effort, we provide leaders with a Human Capital Report, a dashboard-style tool that includes standardized measures of cost, engagement, employee movement and performance management. This helps to inform leaders on workforce costs and provide monthly information on the state of their organizations to help in decision making.

Intentional Hiring

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. We are committed to ensuring that we have a diverse workforce that is reflective of the communities we serve so we can best support the needs of our customers.

Xcel Energy posted 2,015 requisitions in 2016, with internal candidates successfully filling 1,077 (44 percent) of these openings. Of these new hires, 96 percent were sourced from the states we serve.

Some of our targeted recruitment activities include:

Educational Relationships

We work with a number of targeted colleges, universities and technical schools, which provide an avenue for us to educate students on the opportunities for stable, well-paid jobs in the utility industry. We also ensure that these educational institutions offer training and curriculum that prepare students to be part of our future workforce. Through internships and pre-employment testing, we ensure a pool of qualified candidates to fill positions when job openings become available. Additionally, we provide high school students with education, encouraging them to pursue jobs in skilled trades. 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, Legacy program, and Right Track to hire high school summer interns.

Targeted Job Fairs

We support employment events that are most successful in identifying and hiring qualified employees. We maintain relationships with several schools and local organizations within our service territory that hold job fairs. Partnerships like this allow us to reach schools and organizations with a diverse population and continuously improve our candidate pool.

Search Engines

Xcel Energy markets our jobs on several key sites, including Indeed, LinkedIn, Energy Central and Rigzone. We leverage the Professional Diversity Network and other industry and skill-specific boards to target diverse, local talent and individuals with specialized skill sets. We also work with local, community-based organizations to reach candidates in our service areas, reducing the need for candidate relocation while supporting economic development in the communities we serve.

Veteran Outreach

In 2016, we focused on strengthening our strategic partnerships with veteran organizations and engaging in activities to increase our visibility as a preferred employer for military veterans. We created and implemented military-specific marketing and communications efforts and attended more than 30 job fairs that specifically targeted military veterans throughout our service area. We increased our veteran hires for

the year to 14.2 percent. Additionally, it was our inaugural year as part of the Hiring our Heroes program, which helps prepare active military personnel for their civilian careers. We also signed a national Statement of Support with the Employer Support of the Guard and Reserve, a Department of Defense office. We are proud to have been named a Best for Vets employer by Military Times for the third year in a row, and a Military Friendly Employer by GI Jobs for the eighth year in a row.

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 (NSBE), Society of Women Engineers (SWE), Society of Hispanic Professional Engineers (SHPE) and Society of Asian Scientists and Engineers (SASE) to attract diverse entry-level employees.

Diversity and Inclusion

We believe that a diverse and inclusive workforce makes us stronger as a company. 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. This commitment to supporting our employees in bringing their authentic selves to work was recognized in 2016 by the Human Rights Foundation—Xcel Energy achieved a score of 100 on the organization's Corporate Equality Index, earning us a spot as one of the Best Places to Work for LGBT Equality.

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

Diversity and Inclusion Training

Xcel Energy's commitment to Diversity and Inclusion is instilled in our 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 2016, more than 200 Xcel Energy employees and leaders throughout our service territory participated in half-day diversity and inclusion training sessions. The classes are designed to provide knowledge, insight and skills to manage diverse teams and create an inclusive culture.

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. Nearly 1,000 group members participate in cultural exchange, community outreach and business solutions. Additionally, through the Council for Diversity and Inclusion, leaders of our Business Resource Groups collaborate with company leaders to help the company achieve goals by addressing key business challenges around Xcel Energy.

- **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 focusing on the development, implementation and communication of programs and policies centered on 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 promotes professional development and shares 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.

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 operating companies and subsidiary companies throughout the company. 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.

Performance Management

We implemented a new performance management approach in 2016 for our non-bargaining employees, *Connect 4 Performance*. This approach focuses less on documentation, numerical ratings and formalized meetings, and more on frequent, simple and meaningful conversations between leaders and their employees. The performance review process begins with setting clear and measurable individual objectives that align with and support the goals of Xcel Energy. Employee feedback has been positive as indicated through employee engagement and several other feedback mechanisms.

Employee Engagement

Employee engagement at Xcel Energy is measured through an annual employee engagement survey, administered by an independent third-party vendor. In 2016, we reached a 79 percent overall favorable response with 68 percent of employees participating, consistent with 2015 results. We saw improved or consistently steady results across most categories in the survey. Areas that saw the greatest increase in positive responses company-wide included supervisor communication, diversity and inclusion, leadership, safety, innovation and agility, and performance and rewards. Safety continues to be one of our highest-scoring categories, with continued improvement in 2016.

In addition to comparing to our previous year performance, we leverage a U.S. energy and utility companies benchmark and a U.S. high-performing companies benchmark to compare our results. Xcel Energy's results are continuing to close the gap on U.S. high performing companies.

Employees are encouraged to offer feedback to Xcel Energy leadership through a variety of methods. They can submit anonymous comments as part of employee engagement and change tracking surveys, ask questions during regular leadership webcasts and face-to-face meetings, and respond to blog postings that our leaders make 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 of 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 at least monthly 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 17 years to improve union relations and promote collaboration on business challenges that impact our operations and workforce. For instance, we frequently work on issues such as staffing plans for operational changes associated with large projects like Clean Air Clean Jobs in Colorado. We also hold regular meetings between management and labor unions to address grievances and avoid arbitration when possible.

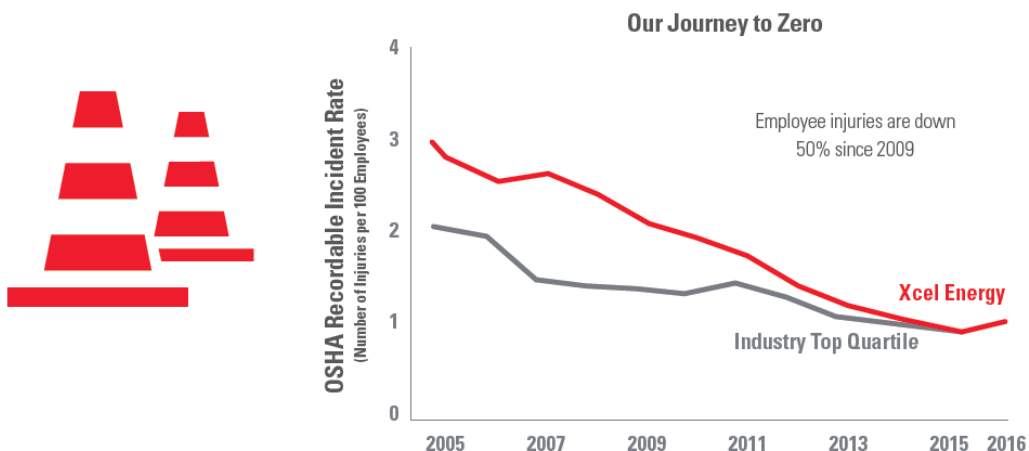
In 2016, Xcel Energy reached a tentative agreement with the union representing our employees in Texas and New Mexico. We also reached agreement with labor unions representing employees in Minnesota and Wisconsin in fall of 2016. Negotiations begin with the union representing Colorado employees in spring of 2017.

Employee Safety



Our Approach

Our Journey to Zero injuries is not just a slogan or a program, but an Xcel Energy core value. It is a commitment that all employees will return home from work without injury every day. Given the nature of our business, our employees face numerous hazards while performing their jobs. We've come a long way on our journey so far, reducing our injury rate from 2009 to 2016, when 79 percent of work groups went injury free—our second lowest year ever. These numbers signal a 50 percent improvement in the company's safety performance over that period of time. While we didn't make our 2016 safety target, we still made sure the second fewest employees went home injured in company history. We are continually working to provide the policies, training and awareness campaigns to help employees and the public stay safe.



Annual Employee Safety Results

Xcel Energy recorded 121 OSHA recordable injuries in 2016, 10 more injuries than in 2015. Strains and sprains continue to be the leading injury type, resulting in approximately 41 percent of all injuries and illnesses on an annual basis. Lacerations, fractures and eye foreign bodies are the next most frequent injury types. We track safety performance of 344 workgroups, and of those groups, 78 percent have gone one year or more without an OSHA recordable injury.

In 2016, we also recorded 68 injuries classified as Days Away, Restricted and Transferred or DART—nine more of the injuries than occurred in 2015. These are incidents in which there are one or more lost days, or one or more restricted days, or one that resulted in an employee transferring to a different job within the company. Fortunately, there were no fatalities among Xcel Energy employees and contractors in 2016.

All contract employees receive safety training from their employers as a requirement of working with Xcel Energy. Job briefings and job-site safety reviews occur daily. In 2016, our contractors recorded 62 injuries while working more than a million hours.

Policies and Training

We have 21 corporate safety policies in place to address occupational safety and health issues. These policies apply to all Xcel Energy bargaining and non-bargaining unit employees, as well as contractors, as applicable. 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.

The Corporate Safety, Field and Energy Supply Safety and Training, and Contractor Safety departments—all under the leadership of the vice president of Safety and Workforce Relations—are responsible for overseeing implementation of regulatory compliance, providing technical consultation to business areas, tracking and communicating the company's safety performance, and fostering our safety philosophy and core value.

There are three key components to our safety and health culture: communication, safety committees and training.

- **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 Campaigns

In 2016, we entered the seventh year of our ambitious Journey to Zero workplace safety campaign. Journey to Zero is about creating a safer work environment by putting safety at the forefront of everything we do. Our objectives include:

- Demonstrating support for safety improvements, starting with top leadership
- Implementing a strategic approach, aligning our efforts to advance our safety culture
- Ensuring all safety efforts focus on common goals, making sense of all activities we do
- Ensuring that employees take personal responsibility for their safety and the safety of others
- Actively driving culture change through behavioral safety program and initiatives
- Implementing specific business-area safety plans focusing on four aspects:
 - **Leadership effectiveness:** Line of sight to executive levels, expectation setting and participation in safety leadership at all levels (including foremen and crew leaders)
 - **Employee engagement:** Taking responsibility for personal safety and the safety of crews, maximizing impact of safety teams and ensuring employees are engaged, effective and working together
 - **Incident prevention:** Providing the right personal protective equipment, increasing awareness, communication and safety meetings, taking a proactive approach, outlining medical management and leveraging information, learning and insights
 - **Bargaining unit engagement:** Engaging union leadership to be active in safety programs and improvements

We continued a number of important safety campaigns in 2016, while also launching new initiatives to help keep employees safe.

24/7 Safety Campaign: Bringing Safety Home

Xcel Energy's 24/7 Safety campaigns are focused on maintaining a safety mindset around the clock. We want our employees to be safe both on and off the job. Xcel Energy helps employees to stay safe 24/7 by providing home safety information through several avenues, such as the weekly published Safety News and the employee news magazine. The 2016 campaigns focused on wellness and personal/cyber security.

Employee Safety Suggestion Contest

The Journey to Zero Employee Safety Suggestion Contest was created in 2016 to encourage all employees to share their ideas for improving workplace safety through innovative process, tool or safety system improvements. Suggestions that identified specific problems and proposed viable solutions that

would enhance Xcel Energy's safe working conditions, efficiency and effectiveness were received in 2016 and later judged in 2017 by a panel of safety experts, with 12 employees, or groups of employees, receiving a total of \$17,500 in prizes for their selected winning submissions.

Ergonomics Campaign

Musculoskeletal Disorders (MSDs, or strains and sprains and cumulative trauma disorders) are the leading type of injury at Xcel Energy. Sprains and strains represent more than 40 percent of our injuries within Xcel Energy. The following Ergonomics Training modules were initiated in 2016:

- **Workplace Athlete Strengthening Program:** An ergonomist and the Safety team worked to bring out the workplace athlete in all Xcel Energy employees. New video training modules on purposeful stretching (to reduce sprains and strains), strengthening activities (for commonly injured joints) and balance exercises (to decrease slip, trips and falls) were released to support our workplace athletes.
- **Move It:** All of our bodily systems are activated by movement against gravity. When our bodies are not in motion, we lose muscle mass and bone density. The Move It training video, tips card and poster were released in 2016 and designed to help employees move often (every 30 minutes) to gain the high frequency and low-intensity movement our bodies need.

Job Briefings

One of the most important things we do is to complete thorough job briefings with employees working on projects. We have improved the quality of our job briefings with some additional tools to assist foremen and managers.

Safety Intervention and Stop Work Responsibility

The Safety Intervention and Stop Work Responsibility is fundamental to ensuring everyone goes home safe each and every day. It's something we all need to re-commit to each year, which is why we require a refresher training program. In 2016, the Safety department updated the Safety Intervention and Stop Work Responsibility refresher training created to ensure that all employees watch out for each other and understand they have the authority and obligation to stop anyone's work that if they see something that's unsafe.

Safety News

The Safety News continues to be an effective tool for educating and informing employees about current safety topics. The publication provides all employees with weekly safety information and near miss reviews, as well as findings and lessons learned from accident investigations.

Supervisors' Safety Development Program (SSDP)

The Safety department completed pilot testing in all jurisdictions in 2016 for a new National Safety Council-accredited training program called the Supervisors' Safety Development Program. The program is designed to improve safety leadership by helping supervisors and managers recognize safety as part of their responsibilities, while equipping them with the knowledge, leadership skills and methods necessary to become effective safety leaders and advocates. Beginning in 2017, the Safety department will deliver one class quarterly in three operating companies, consisting of two full days of training for Operations leaders. The program will train supervisors and managers to incorporate best safety practices into their daily management activities by requiring them to demonstrate their knowledge and skills during the training.

Life Sustaining Awards

The Xcel Energy Life Sustaining Awards are given to employees who go beyond the call of duty and save or attempt to save the life of another.

2016 Recipients of Life Sustaining Awards

Recipient	Position	Location
Dennis Buchanan	Plant Director	Amarillo, TX
Kim Beth Buchanan (spouse)	Spouse of Dennis	Amarillo, TX
Robert Racine	Mechanic Splicer	Minneapolis, MN
Jenny Borgerson	Gas Compliance QA/QC Spec.	St. Paul, MN
Jeffery Matti	Troubleman	Boulder, CO
Mike Miller	Foreman	Boulder, CO
Doug Scott	Lineman	Boulder, CO
Kevin Victor	Journeyman Service Lineman	Roswell, NM
Gary Schmidt	Line Crew Foreman	Sioux Falls, SD
Lydia Jenkins	Credit & Collection Clerk	Amarillo, TX
Eric Dorschner	CCC Team Lead	Newport, MN
Nicholas Hince	Line Crew Forman	Newport, MN
Dena Stai	Apprentice Lineman Step 8	Eau Claire, MN
Breanna Martinez	Senior Associate	Ft. Collins, CO
Janeese Worley	Associate 2 nd 6 month	Ft. Collins, CO

Total Rewards for Employees



Our Approach

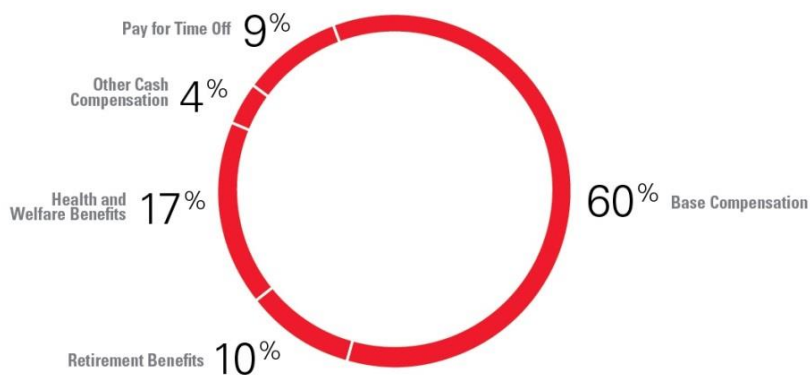
As our industry changes, it is essential that we are able to offer current and prospective employees an attractive package of pay, benefits and professional development. With that in mind, Xcel Energy is committed to providing employees with market-competitive compensation and benefits. Through benchmarking and employing best practices, we strive to offer programs aligned with the market and attractive to our workforce, while finding ways to manage costs to keep our compensation and benefits programs financially viable.

Employee Total Rewards

Xcel Energy's total rewards package includes base and variable compensation, along with benefits like health and wellness, retirement and pension, paid time off, recognition and talent development.

Our Total Rewards Statement tool is offered to show our employees the full value of the benefits package we provide. 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.

Xcel Energy Sample Total Rewards Statement



Benefits

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

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

Xcel Energy continues to offer a basic 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 as a sign of our commitment to provide savings vehicles that enable employees to fully engage while working, yet able to exit the workforce at an appropriate age. We also balance financial and workforce objectives with providing a fair and market-based benefits package, which results in our ability to recruit and retain top talent to serve our customers.

Xcel Energy Benefits Package for eligible Non-bargaining Unit Employees*

Health Benefit Plans	<ul style="list-style-type: none">• High Deductible Healthcare Plan (HDHP)<ul style="list-style-type: none">○ Reasonable and affordable premiums○ Includes a Health Savings Account (HSA) employees can contribute pre-tax dollars○ In aggregate, Xcel Energy pays almost 75% of medical costs• Dental plan<ul style="list-style-type: none">○ Xcel Energy offers a basic and enhanced dental plan• Vision plan<ul style="list-style-type: none">○ Xcel Energy offers access to a vision plan• Wellness Program<ul style="list-style-type: none">○ 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	<ul style="list-style-type: none">• Pension plan<ul style="list-style-type: none">○ 5 percent cash balance plan for new employees and legacy formulas for other employees○ 100 percent paid by Xcel Energy• 401(k) savings plan<ul style="list-style-type: none">○ 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	<ul style="list-style-type: none"> • Life Insurance <ul style="list-style-type: none"> ○ Xcel Energy covers the full cost of basic life insurance ○ Offers voluntary supplemental and dependent life insurance coverage • Paid Time Off <ul style="list-style-type: none"> ○ Xcel Energy covers the full cost of short-term and long-term disability for eligible employees
Work/life balance programs	<ul style="list-style-type: none"> • Employee Assistance Program (EAP) • Paid Time Off <ul style="list-style-type: none"> ○ Vacation/PTO ○ Sick leave • Transit pass subsidies • Adoption Assistance • Flexible Spending Accounts <ul style="list-style-type: none"> ○ Dependent Care ○ Medical ○ Transportation
Professional development programs	<ul style="list-style-type: none"> • Tuition reimbursement • Variety of internal and external development opportunities

*Bargaining unit benefits are based on the contract negotiated with a specific local union.

Professional Development

Total Rewards is more than pay and benefits. It also includes providing opportunities for the professional development of our employees. 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, suggestions and support.

With this in mind, we offer employees resources and tools to support their personal and professional development, including a Learning Management System, 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.

In 2016, employees completed a total of 332,275 internal learning opportunities. Additionally, our tuition reimbursement program provided \$953,871 to 288 employees in 2016.

2016 Professional Development Opportunities

Learning Programs	Completions in 2016	Opportunities
Online Courses	231,851 completions of 2,278 course titles	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.

Classroom Courses	100,424 completions of 2,131 course titles	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.
Career Development Assignment Program	40 completions	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.

2016 Leadership Development Opportunities

Program	Participants in 2016	Opportunities
Talent Review	300+	Our talent review process identifies individuals who might be successors for critical positions at Xcel Energy. In all, about 240 key positions have been identified and more than 1,500 leaders and individual contributors have been assessed. 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.
Coaching in the Moment	314	Coaching in the Moment is a full-day learning opportunity that teaches leaders how to coach employees by using insightful observations, shifting their worldviews and empowering them to take meaningful action. This training is transforming how our leaders interact with their team members by helping them learn to resolve their own dilemmas.
The Leadership Challenge	915	The Leadership Challenge is a leadership development program designed for leaders to equip and empower them to lead effectively through change and transition. The program targets Xcel Energy leaders (supervisor to director) who have direct reports, or who regularly manage people as part of their job, with an emphasis on those who will be impacted most by change.

Public Policy Engagement



Our Approach

Over the next decade our industry will undergo significant changes, driven by market forces and encouraged or supported by government policies. We have more than a century of on-the-ground energy experience—whether we are meeting everyday customer needs, managing complex systems or responding to an emergency. It's critical that we share our expertise with policy makers and elected officials as they make decisions that may impact our business and the service we provide to customers and communities.

Xcel Energy participates in industry, trade, business and other associations to provide our perspectives and to learn from the perspectives and experiences of others. We also meet and communicate with policy makers and legislators through special events, associations and one-on-one meetings, and we provide input and formal comments on proposed legislation and regulation.

Public Policy Matters

We continue to help shape the dynamic, significant change happening in our industry, with a focus on four key areas.

Customer Choice: Changing Customer Expectations

Customers are increasingly demanding more energy service and product choices, and will push policies to create those choices if they are not available. Third parties are able to innovate and keep pace with technology advancements to offer customers new solutions, while the pace of the regulatory process in some cases hinders our ability to provide customers more choices in a timely fashion. In order to maintain our position as our customers' trusted energy advisor, we will pursue regulatory reforms that allow us to respond more quickly to customer interests.

We also find that with the lack of near-term federal action on carbon policy, state and local governments are pursuing their own goals. Communities and regulators are increasingly interested in electrification of heating, transportation and industrial sectors as a strategy to decarbonize. We are working with local governments to provide options for meeting their energy goals.

In addition, corporate customers are increasingly adopting goals for carbon emissions reductions and renewable energy that drive demand for additional clean energy options and policy changes. Current and potential customers are seeking to customize their energy usage so that it is cleaner while being just as

reliable. We continue to work on policies that enable us to advance and expand customer offerings to meet this demand through programs such as Renewable*Connect[®].

Grid Modernization: Changes at the Grid Edge

Aging grid infrastructure, along with the need to integrate increasing distributed energy resources and changes in customer expectations, require the distribution grid to evolve to meet increasing demands, while maintaining reliability, safety and resilience.

With advanced metering and grid investments, greater adoption of distributed energy resources (DERs), and new rate design, we will be collecting increasing amounts of data on our customers on how and when they use energy. Data analytics capabilities will be critical to the success of grid modernization and present Xcel Energy with new opportunities to craft individualized customer solutions. As we expand these capabilities, we also must maintain and protect customers' data privacy and establish cybersecurity standards.

Regulators will continue to initiate proceedings to proactively plan for a more modern distribution grid and incorporating more DERs—proceedings that are likely to result in changes requiring integrated distribution planning, streamlining interconnection standards and accommodating new technologies. It is important that we are proactively engaged in these processes and continue to promote the value the grid provides to all customers.

Generation Transformation: Changing Where Our Energy Comes From

Xcel Energy is moving rapidly to decarbonize our generation fleet. By 2021 a majority of our generation will come from carbon-free resources and mostly from wind energy. If successfully implemented, our “steel for fuel” strategy will lower customer costs, reduce risk to the company and result in increased earnings.

States are taking the lead in encouraging renewable energy generation by, among other things, increasing their renewable portfolio standards. While some states are merely increasing requirements, others are taking a more proactive approach by adding a timing component—requiring more clean energy at peak times—creating an incentive for storage as well as renewables.

There is increasing scrutiny of the cost effectiveness of baseload generation, particularly in deregulated states where utilities have divested generation. Several states have turned to subsidies to maintain nuclear generating capacity that was threatened with early retirement in unregulated markets. While our regulated assets do not face the same market uncertainty, continuing price declines for renewable and natural gas-fueled generation may raise questions about the costs of maintaining our baseload fleet in the future. As our generation mix changes and increases variability, new transmission is needed both to interconnect new resources and ensure that the energy can flow with minimal congestion constraints. We seek balanced transmission expansion that meets these needs with the lowest possible cost to our customers.

With more distributed generation coming online, utilities will increasingly be required to incorporate integrated distribution system planning in their resource plans. Increased transparency of the distribution system will ease the integration of DERs, provide data for valuation of those resources, and potentially establish a distribution grid as a platform for a distributed-energy resource market that we will own, operate and compete in. We are working to increase our capability for this planning and are gathering increasing information about our system through our advanced grid initiatives.

Storage is the most rapidly advancing distributed energy resource in the near term. Xcel Energy embraces energy storage as an opportunity to provide value and flexibility to the grid, to be proactive in implementing emerging technologies, and to be responsive to customer interests. Besides operating a pumped hydro storage facility for almost 50 years, Xcel Energy has a number of battery storage facilities deployed or in development. We are deploying emerging storage technologies through pilot projects to determine their value to our system, and will deploy the technology more broadly both in front of and behind the meter as they become cost effective. We are also working with the operators of our bulk energy markets to update market dispatch software and other aspects of resource integration to accommodate this promising technology to the extent that it provides system value.

Safety: Grid Resilience and Security

Historically, risks to grid reliability revolved largely around natural phenomena such as floods and major storms. Our dedicated field personnel are adept at responding to these types of events so that customer service can be restored as quickly as possible.

However, 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. While it is impossible to protect our grid against every malicious attack, we are taking reasonable and prudent steps to prevent, detect and mitigate the impacts of any malicious 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.

We are also engaging with other members of our industry, other segments of the economy and the government to increase threat information sharing and test our combined capabilities to respond to an attack. Individually and in collaboration with other utilities we are working to prepare our personnel 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 efforts, 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.

Regulatory Reform: Changing How the Utility is Regulated

As our industry transforms, so too should our regulatory structure. Across the country, states and stakeholder groups are examining how we should adapt the regulatory framework for utilities. These efforts are designed to align energy policy and technology advancement with utility business models, both by changing how utilities earn a return for their investors and by reforming regulatory structures to incentivize grid modernization and innovation or increasing competition.

As state regulatory commissions and other stakeholders take on these initiatives, we are engaging in these proceedings to ensure our utility perspective is represented. We continue to emphasize the value of the vertically integrated utility and the grid to our customers in providing stable and predictable rates and continued reliability.

Regulators around the country are also using rate design reforms to achieve different goals—either to promote and subsidize the adoption of DERs or to ensure that customers are properly allocated the costs they are responsible for. Our global solar agreement and the rate programs it established in Colorado are

an example of how we will provide valuable data to inform the company's approach to more closely align rates and costs. We will continue to advocate for rate design changes that align with our core principles of cost causation.

Federal regulators also drive changes in technology adoption and cost allocation but on the bulk energy system. The Federal Energy Regulatory Commission has been active in addressing energy storage and DERs, and continues to advance national transmission expansion priorities.

Tax Reform and Policy: Supporting Reforms that Benefit our Stakeholders

Xcel Energy supports tax reform that will benefit our customers and shareholders and that will support our "steel for fuel" strategy, which is a win-win strategy for our customers and shareholders and will make renewables the dominant resource in our portfolio in coming years.

We support the general principles outlined by Congress and the Trump administration of lowering the corporate rate by broadening the tax base. However, the regulated utility sector is distinct from other industries, and we have been educating administration officials and members of Congress on those distinctions.

The utility sector is the most capital-intensive industry, with annual investments above \$100 billion nationwide. The longstanding tax deduction for interest expense is a key aspect of the code that helps facilitate these investments in a cost-effective way for our customers. Some tax reform proposals would shift away from interest deductibility and toward full expensing. We oppose this because it would trade away interest deductibility—a major benefit for our customers—in exchange for a timing benefit that regulated utilities cannot utilize due to normalization requirements. In order to keep energy bills affordable and predictable for customers, we strongly support retaining the deductibility of interest in lieu of adopting full expensing.

We also support the existing phase out of the wind production tax credit and the phase down of the solar investment tax credit. Xcel Energy along with other energy providers made investment decisions based on the existing tax code and IRS administrative guidance. Retroactive changes in the law or administrative guidance could negatively impact these investments to the detriment of utility customers across the country.

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 Day:** We offer employees a special day at the capital 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 activities 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.

2016 Xcel Energy Political Action Committee Activity

PAC	Employees Participating**	Total Employee Contributions to PAC	Total Contributions Made to Candidates
Minnesota	344	\$42,366	\$31,100*
North Dakota	371	\$7,747	\$2,200
South Dakota	344	\$5,975	\$9,600
Texas/New Mexico (SCOPE)	433	\$37,370	\$66,450
Colorado (Western PAC)	374	\$23,672	\$33,100
Wisconsin	355	\$32,455	\$44,392
Federal PAC (XPAC)	416	\$250,378	\$256,300

* Funds contributed by employees can accrue over multiple years and are not necessarily distributed in the same year they were contributed.

**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.

The Customer Experience



Our Approach

As we strive to achieve our vision to be the preferred and trusted provider of the energy our customers need, we recognize that customer expectations are growing. We are actively working to deliver new, innovative solutions and interactions designed to build a loyal and satisfied customer base, now and for the future.

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 continue to work to improve all levels and points of service—whether a customer has just moved to our service area, is struggling to pay a bill or is experiencing a service outage. We are continually improving the systems, processes and people we have in place to manage different customer needs and circumstances.

As customer needs evolve, one thing we know is that customers want convenience. They should be able to pick the time and place that works for them to do business with us. That's why we designed our website to work for all devices, including smart phones and tablets, and we continue to improve our Interactive Voice Response system to let customers conduct their business over the phone at any time of day. We also have customer agents available to translate more than 70 different languages.

We continue to focus on outage communications to make sure customers get the information they need, at times when they need it most, and in the communication channel they prefer. Our focus is on enrolling more customers in options to receive service notifications through text, email or a phone call and on improving the delivery of those options, while also improving our online outage map and other communication tools.

None of this work can be successful without the hard work of Xcel Energy employees. After all, they play a vital role in our customers' experience through their everyday interactions and work on behalf of customers. We have efforts underway to train and raise awareness among our employees to ensure their focus is on customers and that they understand how their work supports an ever-better customer experience.

Measuring Customer Satisfaction and Loyalty

We monitor customer perceptions of the company and our performance through several tools. Most notably, Xcel Energy is one of the first utilities in the country to track Net Promoter Score®, a leading indicator of loyalty for competitive industries. It asks customers one simple question, how likely they are to recommend Xcel Energy to others. We began using the measure in 2016 and are using the results to inform our customer strategy.

In addition, we continue to benchmark the relationships between Xcel Energy and our residential and small- to medium-sized business customers against industry peers in the J.D. Power & Associates Electric Utility Customer Satisfaction studies. For both the residential electric study and business study, we placed in the second quartile nationally in 2016, with customers providing positive feedback in the areas of reliable electricity service, efforts to develop energy supply plans for the future and actions to take care of the environment. In addition, residential customers gave Xcel Energy favorable ratings for involvement in local charities and civic organizations, while business customers rated us favorably for providing frequent updates and notices of new developments.

We also continue to demonstrate strong performance at our call centers. Through regular transactional surveys in 2016, more than 86 percent of customers reported that they were extremely satisfied with their call center transactions. More than 92 percent of customers reported their problem or issue was resolved on the first call to Xcel Energy.

Education and Outreach

Xcel Energy's Education and Outreach program is designed to promote and encourage participation in the company's energy efficiency and renewable programs. We do this by leveraging partnerships and sponsorships to meet customers in the communities where they live and provide information in a compelling way. By attending local community and sporting events, we facilitate one-on-one interactions that give customers a better understanding of who we are, what we do and how we can improve their lives. The program won several marketing awards in 2016 but most importantly yielded more than 5,700 direct sign-ups to our energy efficiency and renewable programs. We gained exposure to more than four million people and generated nearly 30,000 targeted customer leads.

We continued to promote our award-winning digital video series *This is How* in 2016, which showcases how customers can save money and be more energy efficient through a variety of low-cost or no-cost home improvements. The series is available in tablet-based kiosks in major libraries across seven states and has been rolled out through a number of channels, including xcelenergy.com, Facebook and sponsorship partner websites. The concept is to try to catch customers and influence them as part of their daily routines—returning a library book, at intermission during a kids' hockey game or picking up a light bulb at the hardware store. The videos are less than one-minute long, and can be sent via a text message to a customer's cell phone to view again at home or on the go.

We also partnered with the Greater Twin Cities United Way to spotlight United Way programs and Xcel Energy's support at 23 outreach events in 2016. In addition to raising awareness for United Way, we gained exposure to more than 500,000 customers at community events, increasing energy efficiency program signups about 11 percent when compared to the same events the previous year without the United Way partnership.

Also in 2016, we leveraged our partnership with the Minnesota Historical Society to offer a series of walking tours open to the public, including a guided tour of Xcel Energy's Hennepin Island Hydro Generating Station that first started producing power in 1882. Guests on the tour were escorted through

the power plant by Minnesota Historical Society tour guides, who shared their in-depth knowledge about the history and operation of the plant.

Helping Customers in Need



\$47.8 million in energy assistance helped more than 100,000 families in 2016

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 customer accounts where medical needs are present, provide services that promote the efficient use of energy, while making energy bills more affordable to income-qualified families through payment plans and energy assistance programs.

In 2016, we helped provide nearly \$47.8 million to customer energy assistance programs throughout our service territory. 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 disconnect service to customers only as a last resort when there are payment issues. We will usually shutoff service three to 10 days after the disconnection notice is sent if we are unable to resolve the issue or arrange a payment plan with the customer. In 2016, we disconnected service to a total of 79,671 customers. The majority of these customers are reconnected after they arrange payment plans or pay their bills in full. We typically send customers a reminder notice 33 days after their unpaid bill is due and a disconnection notice 64 days after the original due date. Heat-affected disconnects are not performed in our five Upper Midwest states during the heating season. In all states, our Customer Care leadership can decide to suspend disconnections during extreme weather or other emergency situations.

Scam Awareness

Xcel Energy has monitored scam activity reported by customers for several years. Scammers try various ways to trick customers into paying them money by threatening to turn off their service. All types of customers have been targeted, especially small business customers. After scam activity increased in 2014, we launched an awareness campaign and technology changes that have proven effective in protecting customers.

In 2016, we joined Utilities United Against Scams, a collaborative of more than 90 utilities across the United States. UUAS members share leading practices and updates about how scams are affecting their customers, as well as ideas and updates on what they're doing to spread awareness. In its first year, the

group introduced a bill in the U.S. Congress to create an annual scam awareness day, National Utilities United Against Scams Day, which takes place on the third Wednesday of November every year. Nov. 16, 2016 was the first UUAS Day and was covered by media outlets across the country, spreading awareness of scam techniques and how customers can protect themselves.

Our customers continue to lose fewer dollars to scammers than they did in 2014, when our formal scam awareness activities began. Last year, customer losses were down about 52 percent.

Public Safety



Our Approach

Ensuring the safety of our employees, our customers and the public is a responsibility that Xcel Energy takes very seriously. We want everyone who lives, works or gathers near our facilities to be aware of possible hazards and to respond safely to them.

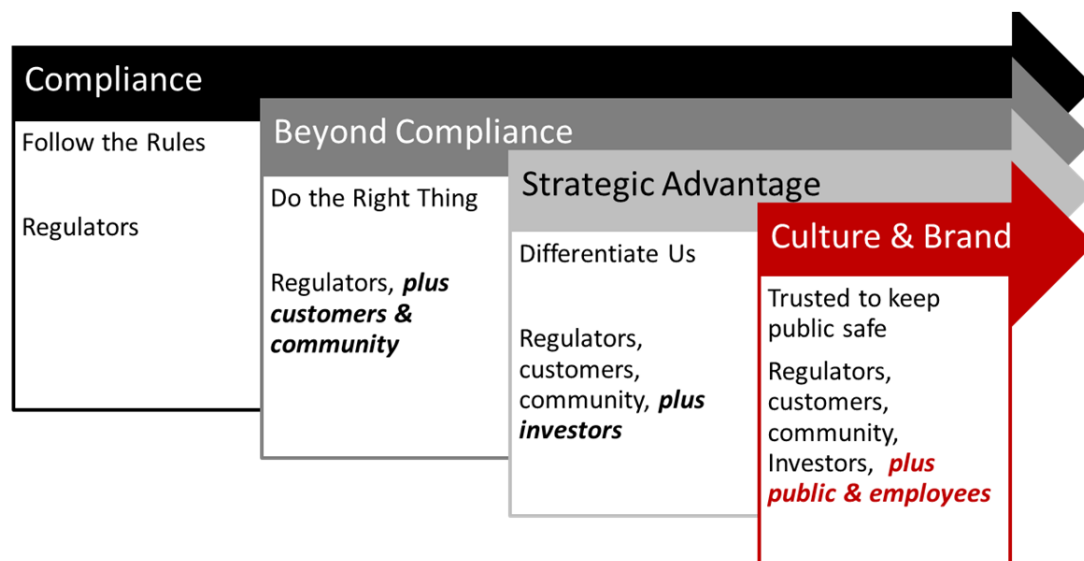
To do this, we provide comprehensive outreach programs that promote safe behavior among our customers, communities, emergency responders and third-party workers. Our goal is to prevent accidents that can result in serious injury or death, property damage, costly repairs or fines and decreased service reliability. Most serious accidents 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.

Our proactive public safety awareness efforts in 2016 enabled us to engage with people more than 200 million times through websites, social media, mailings, email campaigns, advertising and event participation

200 Million



Our public safety program's primary goal is to ensure Xcel Energy maintains compliance with American Petroleum Institute Public Awareness Programs for Pipeline Operators Recommended Practice 1162 (API RP1162). But, keeping the public safe is more than just a requirement at Xcel Energy, it's a value. We share safety messages with customers, communities, investors, employees, public officials, at-risk workers, educators and the utility industry with the goal of increasing safety awareness and ensuring these stakeholders trust Xcel Energy facilities and services are safe. By going beyond compliance, we can ensure that we are doing our part to help keep the public safe and that the Xcel Energy brand is synonymous with trust, safety and value.



Advertising Campaign

Xcel Energy introduced the new *Always Delivering* campaign in mid-2016, which is based on the idea that energy, along with Xcel Energy's products and services, is largely invisible. But if we could somehow make energy visible, we could drive customers to think about it—and us—differently. The campaign uses simple language; consistent, entertaining visuals; subtle humor and a friendly approach we think will resonate with our customers.

Our goal for the safety aspects of the 2016 advertising campaign was to focus on increasing awareness of four critical public safety messages: call before you dig, overhead lines, natural gas and ice on meters. We used a mix of media in order to reach as many customers as possible. Through strategic paid media placements, we achieved the following channel impressions:

- Television 10,500,000
- Radio 52,611,969
- Out of Home 40,064,173
- Print 974,089
- Digital & Social 100,699,435

Note: Numbers include data from both before and after the introduction of the Always Delivering campaign in July 2016.

Public Safety Initiatives

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 elementary educators, students and their parents, and third-party workers. Here's a list of the tactics Xcel Energy employs to raise public safety awareness:

- Event appearances
- Social Media
- Advertising
- Websites
- Trainings
- Mailings
- Meetings
- Email communications
- Broadcast media appearances
- Sponsorship

Here's how we reach out to the public to raise awareness about:

Call 811 Before You Dig

In 2016, we set a target of 1.30 or fewer accidental dig-ins to our underground gas or electric service per 1,000 underground locate requests. While that goal was not met (actual was 1.34), our overall progress toward limiting damages to our system remains intact. Since 2008, we have reduced the damage incident-rate per 1,000 facility locates by 28 percent.

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 well-known initiative is the establishment of a three-digit national phone number people can call before they dig to get underground utility lines marked.

Here are a few of the outreach efforts we employed in 2016 to increase awareness about calling 811 before you dig:

- Increased efforts around the 811 awareness campaign in Fargo, North Dakota and Eau Claire and Lacrosse, Wisconsin, after these markets experienced above average underground excavation damages when no locate was requested.
- Partnered with Colorado 811 to sponsor the Colorado Ride the Rockies bicycle racing team.
- Collaborated on the lighting of the Lowry Bridge in Minneapolis for National 811 Day.
- Helped to establish the first annual Colorado 811 5K run. Planned and promoted safety post-run event which included local emergency responders, Red Cross and Xcel Energy electric safety demonstrations.
- Display the 811 logo on all our vehicles and provide extensive information about the initiative on our Public Safety web page.
- Partnered with other utilities and contractors to sponsor national promotion of 811 awareness on National Safe Digging Day (August 11), which included national television ads that ran during the Olympics, radio ads, Angie's List and social media.
- Sponsored JJ Harrison, the 811 Rodeo Clown.
- Conducted a safety presentation for electric apprentices at a trade school with CO811.

Electric Safety

Contact with electricity can result in serious injury or even death. As such, Xcel Energy continually tries to engage the public in understanding that they should stay away from our equipment conducting electricity, such as overhead lines, underground lines, downed power lines and damaged electrical equipment. Here are a few of the outreach efforts we employed in 2016 to increase awareness about electric safety:

- Conducted dozens of electric safety demonstrations featuring the PowerTown arcing display.
- An estimated 30,000 people were exposed to our electricity safety demonstrations at the Minnesota State Fair, which posted its largest-ever attendance in 2016.
- Xcel Energy provided thousands of electricity and natural gas safety pamphlets at safety events throughout our service territory.
- Awarded more than 150 girl scouts with the Safety Ambassador patch during the Colorado Day of Service.

Natural Gas and Pipeline Safety

Through our membership with the national nonprofit Pipeline Association for Public Awareness (PAPA) and our participation in state-specific pipeline associations, as well as Minnesota's Community Awareness Emergency Response (CAER) association, we helped distribute the following materials in states where we have natural gas distribution and transmission pipelines:

- Excavators
 - PAPA Excavation Safety Guide, "Pipeline Edition" was mailed to more than 100,000 excavators.
 - MN CAER Gopher State Newsletter was mailed to 31,917 excavators.
- Public Officials
 - PAPA Public Officials Newsletter was mailed to 17,506 public officials.
 - MN CAER Public Officials Newsletter was mailed to 5,954 public officials.
- Emergency Officials
 - PAPA Pipeline Emergency Response Guide was mailed to 4,538 emergency response agencies.
 - MN CAER Emergency Responder books were provided to more than 2,329 emergency response agencies.
 - Attendance at and sponsorship of many pipeline emergency responder meetings in Colorado, Minnesota, North Dakota, South Dakota and Wyoming provided additional, in-person pipeline safety training to hundreds more emergency responders.

Outreach to Specialty Audiences

Emergency Responders and Public Officials

Our *Responding to Utility Emergencies* online training provides local emergency responders, such as firefighters and law enforcement, with important safety information about situations involving natural gas pipelines and electricity. We also share safety information in our communities through traditional advertising, our website, social media sites and our electronic newsletters and inserts in billing statements.

Here are the ways we reached out to emergency responders and public officials in 2016:

- Mailed information directly to emergency responder agencies and community officials across our service territory and provided information specific to their regions regarding response to life-threatening and non-life-threatening emergencies, including essential public service restoration.
- Sponsored Responding to Utility Emergencies and First Responder Beware websites, which received 1,753 visits in 2016.
- Conducted numerous emergency drills involving local emergency responders from the communities we serve.

Third-Party Contractors

Third-party excavation damage remains the biggest threat to our natural gas distribution systems. To spread awareness, we engage in fulfillment programs that provide safety information to third-party workers and contractors. We offer free videos and related safety materials that address the specific needs of these audiences. Our programs also direct workers to our e-SMART worker website, where safety information is continuously available.

Here are the ways we reached out to third-party contractors in 2016:

- Mailed safety posters to more than 65,000 businesses with at-risk third-party contractors and included an offer for free visor cards and DVDs about working safely near power lines and natural gas pipelines. In response to this offer, we provided 25,111 additional pieces of safety information to at-risk workers (excavators, plumbers, general contractors, etc.) to support 1,268 requests. We also emailed additional safety information using “tips of the trade” and had several thousand visits to our e-SMART worker website.
- The mailing to third-party contractors also included tree workers and gutter, siding and roofing installers to further emphasize the hazards of performing work in areas near energized electric lines. We offered a *Tree Worker Safety* video program and an industry-best DVD entitled *Worker Beware* to workers who install gutters, siding and roofing and use scaffolding in our service areas.
- Solar safety information has been added to third-party website to educate the public.
- The website for third-party contractors includes Spanish translation throughout the site. Additionally, Xcel Energy field workers have access to a bilingual business card to give to Spanish speaking contractors.
- Developed and mailed an agriculture postcard to more than 22,400 farming and agricultural businesses to point them to our online at-risk worker website and safety information.
- Partnered with the newly created Public Agriculture Safety Alliance (PASA) leveraging existing relationships within the agricultural community. Every state has its own Ag agents, and PASA partners with these agents to strategically communicate vital pipeline safety messaging to our Ag community. An annual publication, similar to The Farmer’s Almanac, is sent to each agent for their communities.

Educators

Our fulfillment programs provide safety information to children and educators, including principals and superintendents, with a focus on second- through sixth-grade students. We offer free videos and related safety materials that address the specific needs of these audiences. Our programs also direct elementary educators—including younger students and their parents—to our e-SMART kids website where safety information is continuously available.

Here are the ways we reached out to educators in 2016:

- Utility safety email sent to school principals and superintendents.
- Developed electric and natural gas safety activity sheets to use as handouts at public events and presentations.
- Mailed safety brochures to more nearly 26,000 elementary educators, which included suggested safety activities for the classroom. In response to our offer, we placed more than 68,500 pieces of safety material directly into classrooms. These safety materials help educators meet national science education curriculum standards, and the related e-SMART website continues to be a valuable educational resource, as demonstrated by more than 14,400 website visits in 2016.
- Added a section on renewable energy, as well as solar safety information, to the elementary website to educate the public.

Customer Energy Efficiency Solutions

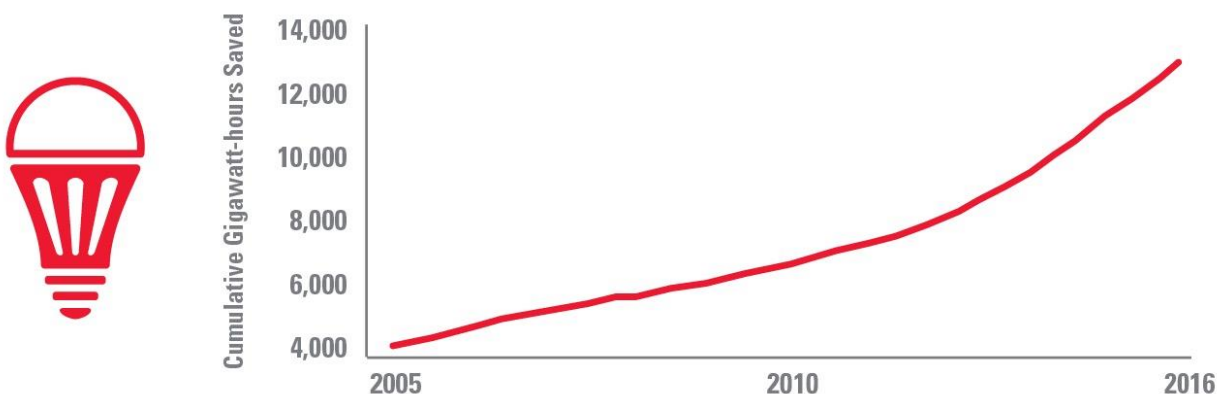


Our Approach

At Xcel Energy, we are empowering customers with energy solutions that give them more control over their energy use and their monthly energy bills. Our comprehensive portfolio of more than 150 programs is designed to meet individual needs and preferences—from rebate programs to energy audits to recycling services. We provide energy-saving programs designed to meet the individual interests of all types of customers, offering everyone the opportunity to participate.

As we continue to expand our comprehensive portfolio of efficiency programs, more customers participate and save energy

Xcel Energy customers annually save about a terawatt-hour of electricity with our comprehensive portfolio of energy efficiency programs.



We have been a leader in energy efficiency and conservation since the early 1990s. Today customers can learn more about their program options through our Xcel Energy website. Our goal is to make it as easy and convenient as possible for customers to access our programs and understand the benefits available to them.

We are always evaluating emerging technologies and program models to develop products that benefit different customer groups. An important part of the process is considering what our customers and communities want and value. Xcel Energy assesses its energy efficiency product offerings based on several criteria in addition to cost effectiveness. We seek to ensure:

- Value to all stakeholders
- Options for all customers groups
- Control over costs and customer rate impacts
- Balance between energy and demand savings
- Products that provide long-term energy and demand savings to meet future customer needs

2016 Conservation and Load Management Results

Xcel Energy provided nearly \$99 million in rebates to residential and business customers in 2016. In total, our programs had about 4.9 million electricity and 1.1 million natural gas participants—some of our customers participate in multiple programs.

In 2016, customers
saved enough:



Electricity to power
142,500 homes



Natural gas to power
20,000 homes

Since we began consistently tracking energy efficiency results in 1992, we estimate our customers have saved enough electricity to help us avoid building about 19 average-size power plants. In 2016, Xcel Energy customers saved 1,081 gigawatt-hours of electricity through our energy efficiency programs, enough to prevent more than 574,000 tons of carbon dioxide emissions for the year, as well as other environmental impacts. With results like this, energy efficiency is one of the most cost-effective ways for our company to reduce emissions and meet growing clean air requirements.

State	Spending	Electric Conservation & Load Management			Gas	Gas Conservation
		Participants	Generator kW	Generator kWh	Participants	Dth Saved
MN	\$ 114,975,732	3,597,153	135,564	552,782,775	632,454	908,472
CO	\$ 85,167,752	918,709	88,523	410,498,551	476,846	614,558
WI	\$ 11,856,617	5,100	12,647	58,196,595	2,175	165,833
TX	\$ 3,309,061	2,508	8,188	14,451,094	NA	NA
NM	\$ 8,635,918	310,068	5,520	38,169,375	NA	NA
SD	\$ 819,918	90,889	1,583	4,734,942	NA	NA
MI	\$ 309,009	4,056	0	2,145,710	290	13,680
ND	\$ 244,059	305	797	26,996	1,304	12,506
Total	\$225,318,066	4,928,788	252,822	1,081,006,038	1,113,069	1,715,049

**Achievements listed in this table are preliminary for 2016. Texas energy savings are reported at the meter, which is different from all others reported at the generator.*

Program Highlights and Recognition

According to the 2016 Ceres report *Benchmarking Utility Clean Energy*, Xcel Energy is among the top ten U.S. utilities for life-cycle energy efficiency savings, based on the estimated energy savings for all efficiency measures put in place for the year.

Partners in Energy Connects Directly with Communities

The Midwest Energy Efficiency Alliance has selected Xcel Energy's Partners in Energy program as one of its 2017 Inspiring Efficiency Award winners, which honors the best and the brightest in energy efficiency. We were given the honor for the collaborative approach that the program takes in working with communities. As an example, when the City of Eden Prairie, Minnesota was looking to take its city-wide sustainability initiatives to the next level, the city applied to Partners in Energy to help reach its goals.

The program is unique in that it offers the chance for Xcel Energy to connect directly with community officials and organizations to build sustainable relationships by promoting our existing renewable, energy efficiency and even payment programs. With a population of 62,000 Xcel Energy customers, Eden Prairie is just one of seven communities and almost 340,000 customers that were selected in the first round of our 2017 program. We will enroll six more communities in the second half of the year. These community partnerships are incredibly powerful ways of connecting with our customers by engaging with them directly at times when they are thinking about their energy use.

Leadership in Rooftop Unit Efficiency Produces Meaningful Results

The U.S. Department of Energy, on behalf of the Better Buildings Alliance, Advanced Rooftop Unit Campaign, recognized Xcel Energy as the utility with the greatest number of high-efficiency rooftop-unit installations through an efficiency program by a supporting partner.

Rooftop units are a common type of cooling equipment used for cooling commercial and industrial buildings. Roughly 60 percent of commercial floor space nationwide is cooled by rooftop units.

Our program installed 2,484 high-efficiency rooftop units in Colorado in 2016, resulting in an estimated savings of 2.3 million kilowatt-hours, worth \$230,000 annually.

Customer Recognition

We recognized 11 businesses in Colorado and six businesses in Minnesota for their individual efforts to save energy through our 2016 energy efficiency programs. These companies collectively saved nearly 40 million kilowatt-hours of electricity and more than 433,000 therms of natural gas. Awards were presented at our energy efficiency open houses in Denver and St. Paul in early 2017. More than 260 business customers attended the Denver event, and about 260 business customers and 185 trade partners attended the St. Paul Energy Efficiency Expo. These events featured teams of experts from Xcel Energy and outside organizations, providing participants with energy saving ideas and rebate opportunities, as well as information on energy efficiency study funding. Both events included a technology showcase to educate customers on available options, including the latest in lighting, motors, refrigeration, energy-management system and datacenter equipment.

State-by-state Overview and Performance

Minnesota	
Residential Programs	<p>Program offerings range from prescriptive rebates to in-home services providing energy efficient materials and installation labor. Consumer education is included with most of the residential programs to increase conservation awareness and encourage energy-wise choices and behavior in the home.</p> <p>In 2016, the Residential Segment exceeded its electric and gas participation, savings and spending goals. Top drivers of electric savings were Energy Feedback, Home Lighting, Residential Cooling, Home Energy Squad and Heating System Rebate programs.</p> <p>Within the natural gas program offerings, Heating System Rebate, Energy Feedback, ENERGY STAR Homes, Home Energy Squad and Energy Efficient Showerheads were the largest contributors.</p>
Business Programs	<p>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 and/or peak demand and minimize environmental impacts. These include:</p> <ul style="list-style-type: none"> • Equipment rebate and custom rebate programs that lower the upfront cost for customers to purchase and install energy efficient equipment or process improvements. • Studies and audits that help customers identify, plan, prioritize and implement energy efficiency projects. • Holistic programs that encourage long-term energy management planning to help customers analyze, track and implement efficiency plans rather than ad-hoc efficiency projects. • Demand response programs that help lower customers' electricity demand during peak periods in exchange for lower rates or energy bill discounts. • Business education, advertising and promotional efforts that work to increase customer and trade awareness of energy use and conservation options, which drives behavioral changes and leads to future participation in our programs. <p>The 2016 energy efficiency and conservation programs recorded strong performance from a number of programs including Turnkey Services, Process Efficiency, Commercial Efficiency, Business New Construction and Lighting Efficiency.</p> <p>Trade and community groups continue to engage in efficiency projects. We provide the tools and resources they need to advocate for energy efficiency. Through these partnerships, we are able to expand our reach, generate awareness and increase participation in our efficiency programs.</p>

<u>Low-income Programs</u>	<p>The Low-income Segment includes the Home Energy Savings program (HESP), Multi-Family Energy Savings program (MESP) and Low-income Home Energy Squad program. These services and products help income-qualified customers reduce their energy use and ultimately lower their bills. HESP offers customers a home energy use analysis to identify areas for energy savings and free energy efficiency upgrades. MESP provides electric energy efficiency measures and information to customers in multi-family buildings. The Low-income Home Energy Squad program performs a quick assessment of each participant's home and implements energy saving measures during one visit.</p> <p>In 2016, the Low-income Segment performed well with especially strong results from the Multi-family Energy Savings program. The program success hinges on its ability to reach a high number of participants in large complexes.</p> <p>In its fourth year, MESP continued to show strong performance in 2016 due to high participation numbers in large complexes combined with strong interest from property management organizations.</p>
South Dakota	
Residential and Business Programs	<p>Xcel Energy's energy efficiency portfolio for South Dakota customers is a mix of electric programs designed to encourage our residential and business customers to save energy and lower their energy bills in a variety of ways. For businesses, we offer Lighting Efficiency Rebates as well as load management programs to help reduce peak demand. For residential customers, we offer discounted LED bulbs through our Home Lighting program and educational outreach programs. 2016 was our fifth year with active programs in South Dakota, and we continue to work with customers and trade partners to promote energy efficiency.</p>
North Dakota	
Residential and Business Programs	<p>Xcel Energy provides savings opportunities for North Dakota customers through our load management programs, as well as residential natural gas rebate programs and home energy audits.</p>
Wisconsin	
Residential and Business Programs	<p>Xcel Energy participates in a statewide program called Focus on Energy that provides incentives to eligible Wisconsin residents and businesses for installing cost-effective energy efficiency and renewable energy projects.</p> <p>Xcel Energy retains a portion of the approved annual funding for our voluntary customer programs and to promote the Focus on Energy programs. The retained dollars also fund general conservation activities, advertising and energy efficiency education for residential customers, commercial customers and trade allies in our service territory.</p>

Michigan	
Residential and Business Programs	In Michigan, Xcel Energy participates in a statewide program called Efficiency United that educates residential and commercial customers about energy efficiency and offers cost-effective solutions and rebates for reducing energy use. Michigan does not allow Xcel Energy to retain any of the funding dollars for internal programs.
Colorado	
Residential Programs	<p>Xcel Energy's 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.</p> <p>In 2016, the products in our residential programs performed very well, with the following electric and gas products exceeding their targets: Energy Efficient Showerhead, ENERGY STAR New Homes, Home Lighting & Recycling, Insulation & Air Sealing, Refrigerator & Freezer Recycling, Residential Heating, School Education Kits and Water Heating. The Home Lighting & Recycling product led performance in the residential electric segment, with more than 354,000 participants.</p>
Business Programs	<p>Energy efficiency sales to business customers are achieved through Xcel Energy's account managers and Business Solutions Center, end-use equipment vendors and energy service companies. 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:</p> <ul style="list-style-type: none"> • Prescriptive products focus on the most common equipment • Custom products encourage savings from unique situations, often involving newer technologies or measures • Study and educational products help customers identify energy efficiency opportunities <p>In 2016, the electric business product achievement was driven by top performers all exceeding targets, such as Lighting Efficiency, New Construction, Process Efficiency, Compressed Air Efficiency, Cooling, Data Center Efficiency, New Construction, Lighting (Small Business) and Motor and Drive Efficiency.</p> <p>Our natural gas products in the business program included notable achievement from the Energy Management Systems product, which greatly exceeded its natural gas savings forecast.</p>
<u>Low-income Programs</u>	The Low-income Program consists of the Energy Savings Kit, Multifamily Weatherization, Non-Profit and Single-Family Weatherization products. These products analyze natural gas and electric consumption for low-income customers and provide them with products, services and

	<p>education designed to assist in lowering their energy bills.</p> <p>In 2016, the Multifamily Weatherization and Non-Profit products exceeded their electric energy savings goals due to higher than forecasted participation.</p>
New Mexico	
	<p>Xcel Energy offers a broad portfolio of programs to meet the needs of business, residential and low-income customers in our eastern New Mexico service territory.</p>
Texas	
	<p>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.</p>

Customer Renewable Energy Solutions



Our Approach

Just as our customers want more control over their energy use, they also want more choice in how their energy is produced. It is our goal to provide innovative solutions that help customers meet their priorities around clean energy and the environment, while balancing these choices with the cost all customer pay to support renewable choice programs. This includes offering a range of renewable energy programs for customers, making it possible for them to choose their own personal energy options that best fit their individual interests and needs.

The programs we offer, and the locations where we offer them, are driven by the interests of our customers, as well as by our states and their policy goals.

Renewable choices vary by state to meet regulatory and customer needs		MN	WI	ND	SD	CO	NM	TX	MI
Renewable*Connect®	Choose to power some or all of your energy with verifiable wind and solar energy, potential to save with optional long-term contracts	■				■			
Solar*Rewards®	Incentives for installing your own solar	■				■	■		
Solar*Rewards® Community®	Subscribe to a solar garden and get paid for your portion of the energy produced each month through an Xcel Energy bill credit	■	■			■			
Solar*Connect Community®									
Windsourse®	Pay a little extra each month to power some or all of your energy with local wind power	■	■			■	■		■
Made in Minnesota	Higher incentives for installing your own MN made solar equipment	■							
Net Metering	Get credited kWh for what your own solar produces, sell extra back to us*	■	■			■	■		■

*Net metering ability to carry forward or be paid for unused energy varies by state

■ Colorado Renewable*Connect solar farm development is underway for a planned 2018 launch; New Mexico Solar*Rewards availability varies from year to year and is not currently available

Historic Agreement Helps Shape Colorado's Energy Future

Xcel Energy reached a groundbreaking agreement in 2016 that resolved a number of proposals the company had before the Colorado Public Utilities Commission related to renewable energy. In all, a

historic number of parties, including 22 solar developers, environmental groups and consumer advocates, came together to help set the course for the state's energy future.

The agreement principally shapes the future of our renewable energy programs for our Colorado customers. Specifically, we will expand our Solar*Rewards and Solar*Rewards Community programs, with approved plans to add solar capacity each year between 2017 and 2019 for a total of 342 megawatts. We also can now begin offering customers Renewable*Connect, our newest renewable energy option.

In an effort to make solar energy more accessible for all customers, we are working with the Colorado Energy Office to implement a low-income rooftop solar program and with Energy Outreach Colorado to expand low-income access to community solar gardens. And, we are increasing solar garden access with company-owned and competitively-bid community solar gardens designed to serve 100 percent low-income customers and service providers.

The parties also agreed to begin a transition and test of new rate designs for residential customers. We are currently offering customers two new rate options—Time of Use, which encourages customers to shift usage to off-peak hours, and Peak Demand Pricing, which encourages customers to shift usage to off peak hours while also staggering energy usage during this time. These programs essentially offer lower energy rates when the cost of providing electricity service is lower, primarily due to a lower demand for electricity, and will lead to a more efficient use of energy.

Renewable*Connect

Our newest renewable energy option is flexible, low-cost and convenient. Through Renewable*Connect, customers can power their homes and businesses with up to 100 percent clean, local wind and solar energy. Participants not only choose how much they want, but also choose the subscription length that best fits their needs, with options for month-to-month, five-year or 10-year terms. The longer-term options provide price certainty with lock-in price schedules over the term of the contract. The associated Renewable Energy Credits (RECs) are Green-e Energy certified and retired on behalf of Renewable*Connect participants, allowing these customers to claim and promote their use of renewable energy and meet sustainability goals.

In 2016, the program was approved by regulatory commissions in Colorado and Minnesota. We began offering Renewable*Connect to our Minnesota customers in spring 2017, with locally generated solar and wind energy from the North Star Solar project in Chisago County and the Odell Wind Farm in southern Minnesota.

In addition, Xcel Energy partnered with the Minnesota Department of Administration and Gov. Dayton to establish a special Renewable*Connect Government program, a long-term contract that will deliver renewable energy to the state capitol complex following its multi-year renovation. There may be potential to expand this program in the future and use the contract as a template for other government agency customers.

In Colorado, we expect to begin offering Renewable*Connect in 2018, once the solar energy project is in place to supply clean energy to participants.

Solar*Rewards

Through Solar*Rewards, we offer customers in Colorado, Minnesota and New Mexico incentives to install solar panels on their homes and businesses. By the end of 2016, Xcel Energy had helped customers

install more than 34,700 photovoltaic (PV) systems, with a capacity of nearly 309 megawatts-DC, and we paid incentives totaling nearly \$31.2 million for the year.

As part of the global agreement in Colorado, we plan to add 225 megawatts of capacity under the Solar*Rewards program from 2017 to 2019. In Minnesota, 2016 marked the third year of the five-year plan to fund Solar*Rewards annually with \$5 million from the Renewable Development Fund. The funding level supports about 4.6 megawatts of solar energy capacity each year with the potential to install 23 megawatts over the five-year program.

In addition to Solar*Rewards in Minnesota, the state also supports a Made in Minnesota program with an annual budget of \$15 million that the Department of Commerce administers. The Made in Minnesota program will be funded for 10 years. Solar energy systems up to 40 kilowatts must incorporate components that meet Made in Minnesota requirements to be eligible for production-based incentives. Xcel Energy supports the Made in Minnesota program by interconnecting the systems and by providing production data for the Department of Commerce to pay annual incentives.

In December of 2015, the Solar*Rewards program in New Mexico closed under the state's Reasonable Cost Threshold, after the state determined that the program was not cost effective.

Solar*Rewards Results (as of yearend 2016)

State (year program launched)	Total	
	Systems	Capacity (Megawatts-DC*)
Colorado (2006)	32,675	278.0
Minnesota (2010)	1,912	22.8
New Mexico (2009)	149	8.0
Total	34,736	308.8

*We report megawatts-AC in other sections of the Corporate Responsibility Report, including megawatts reported for Solar*Rewards.

Solar*Rewards[®] Community

Xcel Energy's Solar*Rewards Community program gives customers in Colorado and Minnesota an option to invest in solar energy without having to install, own and maintain their own solar panels.

Under the program, Xcel Energy seeks solar garden operators to apply and install community solar gardens. The garden operators then sell or lease a portion of their gardens' solar output directly to our business and residential customers. Xcel Energy then credits a participating customers' bill for their portion of solar energy produced by the garden.

In Colorado, we plan to expand the Solar*Rewards Community program by up to 117 megawatts through 2019. Our program in Minnesota is rapidly growing, and as of early 2017, was declared to be the largest community garden program in the country by the Smart Electric Power Alliance. At the end of 2016, the program had 36 megawatts of solar gardens installed, which doubled to 74 megawatts installed during the first quarter of 2017.

Solar*Rewards Community Results (as of yearend 2016)

State (year program launched)	Proposed		Approved		Completed		Subscription Status	
	Gardens	Megawatts -AC	Gardens	Megawatts -AC	Gardens	Megawatts-AC	Customers	Megawatts-AC
Colorado	--	--	52	68.5	25	13.9	1,001	13.9
Minnesota	413	912.0	110	428.0	12	36.4	779	36.4
Total	413	912.0	162	496.5	37	50.3	1,780	50.3

Solar*Connect Community

We began offering customers in Wisconsin Solar*Connect Community in early 2016. Under the program, we will purchase solar energy from two local, one-megawatt community solar gardens and are offering subscriptions to customers. Customers have the flexibility to choose their own subscription levels, up to 100 percent of their electricity needs. Pristine Sun, a leading solar developer, is currently constructing the gardens in Eau Claire and LaCrosse, with the completion expected in 2017. Solar*Connect Community is about 87 percent subscribed, with more than 100 customers participating.

WindsorSource

Xcel Energy was an early leader of customer choice wind energy when we launched the WindsorSource program in Colorado in 1998. As one of the nation's first voluntary green energy programs, WindsorSource continues to be an option for customers interested in purchasing renewable energy above what is provided in our standard energy supply. For a small premium, customers can purchase as little as one 100-kilowatt-hour block or opt to have 100 percent of their electricity consumption covered by renewable energy. On behalf of participating customers, we retire the Green-e Energy certified Renewable Energy Credits associated with the wind energy provided under WindsorSource.

The WindsorSource program hit a milestone of 100,000 participating customers in 2016. It is the third largest voluntary green energy program in the country, according to the National Renewable Energy Laboratory based on 2015 customer participation.

2016 WindsorSource Results

	Customers			Megawatt Hours
	Residential	Commercial & Industrial	Total	
Minnesota	47,850	306	48,156	148,755
Wisconsin, Michigan	5,930	57	5,987	13,906
Colorado	44,597	746	45,343	186,546
New Mexico	817	86	903	3,715
TOTAL	99,194	1,195	100,389	352,922

Customer Transportation Solutions



Our Approach

As an energy provider, Xcel Energy has the unique opportunity to support customers and communities that want to participate in the electric and natural gas vehicle markets. We offer safe, reliable and increasingly clean energy to fuel electric and natural gas vehicles at an affordable price.



Even with low gasoline prices, our electricity rates are competitive, at about **\$1** per gasoline equivalent

Xcel Energy has developed three areas of focus for supporting alternatively fueled vehicles:

- Enable the market by offering customers more choices, including options to repower their transportation
- Get the rules right and seek policies that benefit all energy users
- Manage system impacts by providing reliable and safe energy to fuel vehicles at an affordable cost to customers

In Xcel Energy's service territory, the market for electric and natural gas vehicles remains in the initial growth stages. We estimate there are currently more than 12,500 electric vehicles (EVs) throughout our service territory. While most people prefer to charge their EVs conveniently at home using our service, we also provide electricity for more than 500 public charging stations throughout our service territory. Additionally, there are a few hundred medium- and heavy-duty natural gas vehicles (NGVs) that fuel at more than 35 public and 35 private natural gas fueling stations in Colorado, Minnesota, Texas and Wisconsin.



Adoption of electric vehicles has increased more than **80%** annually since 2011 in Xcel Energy service territory

The market is projected to grow, especially as new models of alternative fuel vehicles become more available and more affordable for both individual and fleet use. There were just two electric vehicle models on the market in 2010, while in 2016, that number jumped to 25 models. Electric vehicles with a range of more than 200 miles at a price point around the average cost of a new car are likely to hit the market in 2017. Plus, fueling is becoming increasingly easier and more accessible.

In 2016, Xcel Energy continued to participate in the U.S. Department of Energy's Workplace Charging Challenge and Edison Electric Institute Fleet Electrification Commitment. A rapidly growing number of Xcel Energy employees now drive electric vehicles to and from work. Under a pilot program, employees have the option to charge electric vehicles at our facilities for a reasonable monthly fee that covers electricity and administrative costs. Additionally, the number of alternative fuel vehicles in our company fleet is expanding, with increased options from electric sedans to natural gas bucket trucks.

Supporting Customers

- Along with specific Xcel Energy initiatives that support customer vehicle fueling and public education, we encourage customers to contact us to ensure that adequate system infrastructure is in place to support their fueling needs.
- Across our service territory, we work with auto manufacturers and station developers to build public fueling stations for both electric and natural gas vehicles. In the recent past, we enabled the installation of more than 50 new public fueling stations, including more than 20 electric fast chargers. Plus, we provided electricity and natural gas to thousands of drivers that fuel at home or in their fleet parking lots.
- Xcel Energy offers residential rate options for all customers and specifically for EV drivers that enable customers to save on EV charging during off-peak hours.
- We have piloted smart charging technologies to study customer charging behaviors, and as the technology evolves, we will continue to evaluate options to optimize charging through demand response and load shifting.
- Our Windsource® for EVs program is specifically marketed to electric vehicle owners who want a renewable fueling option. Currently, a majority of our customers who drive EVs participate in one of Xcel Energy's renewable energy programs, including Windsource.
- We hosted booths and participated in several public education and outreach events to provide customers with information, including Drive Electric Week events in Colorado and Minnesota and the Twin Cities and Denver Auto Shows.

Policy Development

Xcel Energy continues to work with stakeholders to help develop state policy and regulations that support the market and customers who purchase electric and natural gas vehicles. It is important that new rules are fair to all customers—both those who own vehicles and those who do not. To make it easier for third parties to install fueling stations in Colorado, we changed our policies to include a special tariff and construction allowance.

System Readiness

We have conducted several studies of our electric and natural gas systems to verify that we can manage the increased load as customers begin using our energy to fuel vehicles. To make it easier for third parties to install public electric and natural gas fueling stations, we work individually with developers to help find ideal locations based on preferred gas pressure, vehicle traffic and fleet needs. Additionally, customer research, as well as the use of electric vehicles in our fleet and by employees, continues to inform our strategy for the future.

Community Economic Impact and Development



Our Approach

As an energy provider, we can play a valuable role in helping local economies grow and prosper. Through our ongoing investment in our infrastructure—the plants, pipes, poles and wires that make up our business—we generate tax revenue, purchase goods and services and employ local workers. Also, by keeping our energy prices affordable, local residents and businesses have extra money to spend in their communities too. But, our connection and contribution to local economies goes much deeper than this.

Our utility system is often integral to the success of major local initiatives, such as downtown revitalization efforts, new industrial parks and public works projects. For example, we are actively participating in the planning of several forward-looking, sustainable developments within our service area that are models for cutting-edge, efficient energy design, including the Ford Site and Rice Creek Commons in the Twin Cities and Pena Station in Denver.

By working side-by-side with local chambers of commerce and economic development organizations, we can provide our expertise and valuable service to 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 key to achieving 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.

In recognition of our commitment to local economies, Finance & Commerce recognized Xcel Energy with a 2017 Progress Minnesota award for the company's commitment to the state's economy, including energy efficiency and renewable energy leadership.



Xcel Energy contributed nearly **\$1.7 million** in 2016 to local chambers of commerce and economic development organizations

Xcel Energy Direct Economic Impacts

2016 Economic Value Generated

Total revenues	\$11.1 billion
Electric utility revenues	\$9.5 billion
Natural gas revenues	\$1.53 billion
Other operating revenues	\$75.7 million

2016 Economic Value Distributed

Electric fuel and purchased power costs	\$3.72 billion
Cost of natural gas sold and transported	\$732.7 million
Employee compensation, including wages and benefits	\$1.9 billion
Tax payments	\$806.9 million
Franchise fees	\$171.5 million
Community giving	\$63.4 million
Interest charges and financing costs	\$619.9 million
Common stock dividends	\$680.5 million

Focus on New Economic Development Services

Xcel Energy launched a strategic economic development function in 2016 to help attract new businesses and assist existing businesses to grow within our eight state regions. We are leveraging our strong partnerships with local, state and regional economic development organizations to advance opportunities for customer growth. These efforts are concentrated in serving our regional business clusters that include: data centers, advanced manufacturing, bio sciences, aerospace and aviation, microelectronics, agriculture and food processing, as well as traditional heavy manufacturing and processing industries.

Primary to the success of supporting business growth is having data and information about the issues that affect the businesses we serve. We are expanding and fine-tuning our use of information to better understand business challenges our customers face. Market intelligence better prepares us to compete for new customers and retain existing customers, further increasing our competitive value to the marketplace.

To target and encourage industry clusters to build in our service territories, we are implementing a national engagement strategy that is centered on key industry leaders and associated business organizations, as well as using internationally recognized site consultants. With outstanding reliability and customer service, combined with competitive prices and our ability to provide renewable energy and efficiency options, we provide a competitive solution to meet customer needs.

We also are promoting real estate opportunities in our service territories through a new Certified Site initiative. The program enables site consultants and individual businesses to efficiently evaluate locations for new or expanding industrial clients. By partnering with our communities on this initiative, we foster collaboration and the ability to best facilitate load growth within our eight states.

Economic Benefits of Nuclear Energy in Minnesota

Xcel Energy operates two nuclear energy facilities in Minnesota—the Monticello Nuclear Generating Plant in Monticello and the Prairie Island Nuclear Generating Plant near Red Wing. As Minnesota's largest source of carbon-free energy, the plants generate about 1.4 billion kilowatt hours of electricity per year, enough to serve about 1.5 million homes, but their contribution goes much further than this.

In spring of 2017, the Nuclear Energy Institute published a report on the contribution of these facilities to Minnesota's economy.

Xcel Energy's nuclear operations are estimated to generate approximately \$1 billion of total economic output annually, which contributes \$600 million to Minnesota's gross state product each year. The study finds that for every dollar of output from Xcel Energy's nuclear operations, the state economy produces \$1.98. NEI also estimates the facilities generate about \$33 million in state and local taxes annually, in addition to federal annual taxes of more than \$113 million. In addition, they are a source of high-skilled jobs, employing approximately 1,700 people at the facilities, plus 140 support positions at the Minneapolis headquarters. This direct employment is estimated to create another 4,200 jobs in other industries, for a total of 6,100 jobs in Minnesota.

The plants generate about 21 percent of Minnesota's electricity and about 54 percent of the state's carbon-free electricity. Without this carbon-free electricity, an estimated 7 million metric tons of carbon dioxide would be released annually, the equivalent of putting more than 2.6 million additional cars on Minnesota's roadways each year, or double the number of passenger cars in all of Minnesota. By 2030, these nuclear plants will have provided almost \$9 billion in avoided emissions benefits.

During full-power operations, the three reactors provide around-the-clock electricity for Minnesota homes and businesses. Over the last 10 years, the facilities have operated at approximately 85 percent of capacity, which is significantly higher than all other forms of electric generation, providing reliable electricity to businesses and consumers and helping prevent power disruptions which could lead to lost economic output, higher business costs, potential loss of jobs and losses to consumers.

Minneapolis Clean Energy Partnership

In 2014, the city of Minneapolis, Xcel Energy and CenterPoint Energy teamed up to form a novel Clean

Energy Partnership in support of the city's Climate Action Plan and 2040 Energy Vision. Now in its third year, the partnership is building on a long history of collaboration to explore innovative approaches and enhanced outcomes in energy efficiency and the use of renewable energy in Minneapolis. 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.

In 2016, the Clean Energy Partnership board continued to focus on completion of its 2015-2016 work plan focused on:

- Helping utility customers in the city to become more energy efficient
- Expanding access and the use of clean, renewable energy among customers
- Increasing the collaboration between the city and the utilities to address energy and climate-related issues

Key actions under the plan include:

- Helping 75 percent of Minneapolis homeowners, renters and rental properties participate in efficiency retrofit programs by 2025, ensuring the distribution of participants reflects the distribution of income levels in the city
- Developing a tool to make energy data easily accessible for customers complying to the city's new Building Energy Disclosure policy for medium and large commercial buildings
- Promoting the adoption of renewable energy solutions for Minneapolis customers and the city, such as onsite solar, wind, community solar gardens and green tariffs
- Investigating the feasibility of large-scale renewable energy purchasing for municipal government and/or residents
- Continuing to shift to LED streetlights
- Developing a Community Engagement Pilot Program that was rolled out in 2017. The program is testing strategies to engage renters and low-income communities that have historically not participated in utility programs at the same levels as single-family market-rate homes.

The board also released its inaugural annual report focused on progress in 2015, which showed the city has reduced its carbon footprint by 7 percent since 2014. In early 2017, it also finalized its new 2017-2018 plan, with goals of establishing low-income community solar gardens within the city and developing a small business refrigeration energy efficiency program targeted at grocery stores and gas stations. This program will leverage Xcel Energy program resources, utility rebates and city grants and financing.

In early 2016, the U.S. Department of Energy recognized the partnership between Xcel Energy and the city of Minneapolis with a Better Buildings® award for designing a new Energy Benchmarking tool. The award specifically honors the collaboration between the two organizations in developing the system that makes it easier for building owners to better understand, track and report their energy usage. The new web-based tool allows owners and building managers to access whole-building data, instead of having to collect billing information from tenants separately.

The U.S. Environmental Protection Agency and others also recognized the Clean Energy Partnership with a 2016 Climate Leadership award. The effort received an Innovative Partnership Certificate for working collaboratively on leading edge climate initiatives and collectively establishing objectives to measurably address greenhouse gas emissions.

Community Giving



Our Approach

Xcel Energy serves hundreds of cities and towns throughout our service territory. With our active and ongoing investment in their infrastructures—through our poles, pipes and wires—we are literally connected and serve as an integral member of those communities.

We believe it is our responsibility to have a positive impact—as an energy provider, good neighbor, community advocate and environmental steward. After all, we know that our success is directly tied to the success of our communities. Our support is far-reaching—from charitable giving to employee volunteering to economic development and support for energy assistance programs.



Total Community Giving in 2016

Corporate Giving & Community Investment	\$9.4 million
Employee Contributions	\$3.7 million
Volunteer Time	\$766,400
Energy Assistance	\$47.8 million
Economic Development	\$1.7
Total	\$63.4 million

Through several matching donation and volunteer programs, we encourage our employees to be involved and to share their time, energy and talents. From supporting our annual volunteer Day of Service to our successful United Way Campaign, our employees have a tradition of giving generously and supporting our communities.

The Xcel Energy Foundation is our company's charitable arm and oversees our giving and volunteer programs. Our foundation support is focused generally 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.

2016 Focus-area Giving Highlights

We contributed more than \$3.9 million in foundation grants in 2016 to promote our primary focus areas of STEM education, economic sustainability, environmental stewardship and access to arts and culture. Across communities in the eight states we serve, approximately 350 nonprofit organizations received grants, averaging just about \$9,700 each.

STEM Education

The Xcel Energy Foundation gave nearly \$1.3 million in 2016 to programs that provided hands-on learning opportunities that demonstrate the linkage between math and science, real-world applications and future careers. Our goal is to increase the number of students entering and completing post-secondary education in STEM disciplines and pursuing STEM careers.

	2016 STEM Education Giving
Colorado	\$541,500
Minnesota	\$575,500
Wisconsin	\$75,000
North Dakota,	\$58,500
South Dakota	\$35,600
Total	\$1,286,100

Making the connection between science and the natural world:

Cal-Wood Education Center is situated on 1,200 acres of Colorado wilderness outside of Jamestown, Colorado. The organization provides life-changing outdoor experiences for more than 4,500 youth and family members who come to Cal-Wood each year. The Xcel Energy Foundation supports Cal-Wood's Science-based Environmental Education program, which is the organization's largest program that embodies the heart of its mission.

On Cal-Wood's pristine mountain property, the organization focuses on the study of local plants, animals, weather patterns, forestry, pioneer life, geology, pond ecology and more. With each class group, Cal-Wood education staff partner with visiting teachers to tailor a specific set of learning objectives that are relevant to the needs of the students and support STEM objectives. They place a priority on providing students with knowledge of current science, engineering and natural resource careers that they might choose to pursue in the future. This is especially important for minority students who are underrepresented in STEM careers. The Building Relationships with Inner-City and Diverse Groups and the Environment (BRIDGE) scholarships are awarded to low-income students so that they can attend the program, which is a three-day, two-night outdoor immersion program for elementary and middle school students. Cal-Wood takes special actions to customize its program for linguistically diverse students.

Rafael Salgado, executive director of the Cal-Wood Education Center, recently received the Enos Mills Lifetime Achievement Award from the Colorado Alliance of Environmental Education—another Xcel Energy Foundation grant partner—for his lifetime of contributions to environmental education.

"Cal-Wood has received funding from the Xcel Energy Foundation since 2012, totaling nearly \$35,000 in financial support. In addition, we have benefitted from over 250 hours of volunteer time through the company's Day of Service. We estimate that with Xcel Energy's support, 830 low-income children have been able to participate in our three-day, two-night environmental education program. These students represent 15 low-income schools from 12 cities from the Front Range. Donors like Xcel Energy are making a difference in our kids' lives by supporting organizations such as Cal-Wood. We are very grateful for their support."



—Rafael Salgado
Executive Director,
Cal-Wood

Economic Sustainability

The Xcel Energy Foundation donated more than \$1.1 million in 2016 to programs that promote workforce development, workforce readiness, specific job skills training, job placement and job creation. This includes programs that provide case management and supportive services to low-income populations to assist them in attaining and retaining employment that leads to economic self-sufficiency.

	2016 Economic Sustainability Giving
Colorado	\$317,500
Minnesota	\$674,500
Wisconsin	\$38,500
North Dakota,	\$54,500
South Dakota	\$41,200
Total	\$1,126,200

Providing job training for life

Summit Academy OIC offers certificate programs for the construction and healthcare industries. Their programs serve low-income, mostly minority residents of the Twin Cities by connecting them with hard and soft skills and wrap-around support services. Students receive one-on-one counseling and career advising and complete personal, financial and professional development courses.

The Xcel Energy Foundation supports Summit's adult education programs, providing individuals from economically disadvantaged neighborhoods with the skills they need to obtain living-wage and upwardly mobile careers in the high-demand industries of construction and healthcare.

"Xcel Energy has supported Summit Academy OIC's no-cost construction and healthcare training programs since 2001. In 2016, Summit Academy placed 258 students in employment earning an average annualized wage of \$33,000—an \$8.5 million dollar impact. Together, we are building stronger communities."



Katie McShea
Grant Writer,
Summit Academy OIC

Environmental Stewardship

The Xcel Energy Foundation donated more than \$530,000 in 2016 to projects that help foster an ethic of stewardship and conservation. This includes partnerships focused on conserving and improving wildlife habitat, open lands, wet lands, parks, trail systems or recreational areas, as well as efforts that promoted natural resource conservation and awareness.

	2016 Environmental Stewardship Giving
Colorado	\$214,500
Minnesota	\$252,500
Wisconsin	\$25,000
North Dakota,	\$28,300
South Dakota	\$10,000
Total	\$530,300

Engaging youth to take action

H2O for Life educates and engages youth to learn, take action and become global citizens. The organization provides students with unique and valuable learning experiences through service-learning opportunities focused on the global water crisis and local water issues in their home communities.

The Xcel Energy Foundation supports Race 2 Reduce, a service-learning opportunity focused on local water. The program provides classroom curriculum for teachers of all grade levels, kindergarten through high school, to raise awareness for clean water.

“Because of the generous donation and long-standing partnership with Xcel Energy, to date, Race 2 Reduce has reached over 8,800 students and over 1,150 teachers and adult community members, engaging more than 100 classrooms and seven clubs throughout the two local school districts. Our poster contest drew over 1,600 submissions from across the state of Minnesota with more than 70 different school districts participating.”

Kelly Wrobel

Director of Development,

H2O for Life



Access to Arts and Culture

The Xcel Energy Foundation contributed more than \$455,000 in 2016 to programs that provide free or reduced admission to artistic and cultural activities for people who otherwise would not have access. This includes projects that enhance visual, music or performing arts education in K–12 schools by offering curriculum, after-school programming, concerts, musician or performer visits or family workshops.

	2016 Access to the Arts and Culture Giving
Colorado	\$126,500
Minnesota	\$219,500
Wisconsin	\$63,500
North Dakota,	\$27,700
South Dakota	\$18,000
Total	\$455,200

Providing access to live performing arts

The Lone Tree Art Center opened in 2011 as the first performing arts and multi-use public venue in south metro Denver. Its presence in Douglas County, one of the fastest growing counties in the nation, enhances the vitality and supports the economic development and infrastructure of this bustling community. The venue's popularity and its flourishing programs demonstrate the demand for high-quality cultural experiences. Welcoming visitors from throughout the seven-county metro area, the center has broad reach and has served more than 300,000 patrons and visitors since opening.

The center offers student matinee performances that invite elementary, middle and high school students from throughout the metro Denver area to experience live performances and interactive presentations which enhance learning. Popular offerings include the National Geographic Live! Speakers Series, interactive science shows and productions based on children's and classical literature. Matinees offer low-cost student and extended outreach to Title 1 schools, with a goal of increasing program impact with students who have limited exposure to live performing arts.

"With help from Xcel Energy, the Lone Tree Arts Center has been able to create an innovative program designed to make the arts accessible to children from a wide variety of backgrounds and cultures. The funding allows us to identify Title I schools, invite them to attend a professional performance, and pay all costs associated with the field trip. For many of these children and schools, this is the only way they can attend. Thanks to Xcel Energy for helping us make a difference!"

Lisa Rigsby Peterson

Executive Director,

Lone Tree Arts Center



Employee Involvement

The cities and towns we serve represent more than just our service territory. They are where our employees live, work and raise their families. Our employees have a strong tradition of giving back to the community through charitable donations and volunteerism.

Xcel Energy offers a number of programs to encourage employee 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:** Xcel Energy sponsors an annual United Way campaign and matches the pledges of employees, retirees and contractors.
- **Day of Service:** Xcel Energy sponsors 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.

The company's 2016 United Way campaign was one of the most successful, as we topped a number of campaign measures, including:

- Highest combined total of employee and retiree pledges and event funds
- Highest total employee pledge amount, as well as highest average gift amount
- Most number of leadership-level pledges

More than 5,200 employees and retirees contributed \$3 million in pledges and event contributions. Combined with the company match, the campaign raised a total of more than \$5.7 million to support United Way programs and hundreds of nonprofit organizations throughout Xcel Energy's service territory.

Xcel Energy supports United Way at the highest levels, with a long history of company leaders serving on boards and committees. In 2016, Ben Fowke, Xcel Energy president, chairman and CEO, and his wife served as board chairs for the Greater Twin Cities United Way campaign. David Eves, Xcel Energy president of Public Service Company of Colorado, served as board chair for Mile High United Way in Denver. David Hudson, Xcel Energy president of Southwestern Public Service Company, served as board chair for the United Way of Amarillo and Canyon in Texas, while Mark Nisbet, Xcel Energy principal manager in North Dakota, served as the board chair for the United Way of Cass Clay in Fargo. In

addition, we have received multiple awards and recognition from United Way organizations throughout our service territory for our overall support.

Recognition for outstanding United Way leadership



Our employees in Texas and New Mexico truly deliver each year for their local United Way organizations, participating at the highest rate among all Xcel Energy locations. In 2016, more than half of our employees in these states made a pledge through the campaign, and company leadership played an active volunteer role.

At the annual United Way of Amarillo & Canyon Victory Gala, two Xcel Energy employees were honored for their work during the campaign. Mark Mechenbier, Energy Supply Operations manager, was awarded *Loaned Executive of the Year* for his commitment to the United Way mission and going “above and beyond” at meetings and events. Ronnie Walker, Texas North regional Community Relations manager, was honored with *Team Leader of the Year* for inspiring United Way team enthusiasm, reinforcing loaned executive skills and being an effective leader.

2016 Day of Service

Xcel Energy made a difference in numerous communities during our annual Day of Service held in September. More than 4,000 employees, family members, friends and even customers volunteered for nearly 100 nonprofit projects. Volunteers performed a number of tasks from packing food boxes to planting trees and park cleanup. In total, the effort contributed more than 13,000 volunteer hours in a single day to support our local communities, valued at more than \$400,000.

Other Community Giving



In addition to focus area giving, the Xcel Energy Foundation may provide strategic philanthropic grants to projects that are significant to our local communities. In 2016, the Xcel Energy Foundation made a gift of \$250,000 to the Eau Claire Community Foundation for the Confluence Project, a performing arts center that is central to the revitalization of downtown Eau Claire.

For several years, the city has partnered with the University of Wisconsin-Eau Claire, local businesses, private donors and government agencies to plan and raise money for the project. The company's donation helped to kick off the final leg of a 100-day fundraising campaign to encourage other businesses to make contributions.

About the Xcel Energy Foundation

The Xcel Energy Foundation was established in 2001 to fulfill the mission of using the collective knowledge, resources and skills of our staff and colleagues to make a positive impact in communities throughout our service territory.

The foundation board provides oversight and is comprised of five directors and three officers, including Ben Fowke, who serves as the foundation's chair and president. The board meets annually to review financial statements and approve the annual budget, which is determined by prioritizing what the board hopes to accomplish with the available resources. They also set policy on a number of items, including the levels at which we provide matching funds for employee efforts, our focus areas for giving and overseeing the foundation's investments. The majority of Xcel Energy Foundation funding comes from Xcel Energy shareholder dollars.

Affordable, Reliable Energy



Our Approach

We provide 24/7/365 convenience for millions of customers who depend on us for the fundamentals—reliable, safe, affordable energy that is increasingly clean.

Xcel Energy electric reliability is among the top-one third of U.S. electric utilities, with customers having electricity service on average 99.9 percent of the time in 2016. When a major storm hits, we are prepared to respond swiftly and effectively to restore energy service, as has been demonstrated time and again in our own jurisdictions, as well as in other parts of the country where we have responded through mutual-aid agreements.

As we invest in strengthening and upgrading our pipes, wires and plants, we naturally consider projects that provide the best overall value for customers and the communities we serve. This includes diversifying our energy supply to provide energy from a reliable mix of resources while managing cost, environmental impact and making sure we are not too heavily dependent on any one energy source.

Over the past four years, the average Xcel Energy customer bill has gone down. That's because we constantly seek ways to improve productivity, reduce costs and lower bills, while continuing to invest in our system and improve the service we provide.



Xcel Energy Residential Electric Bills*



Xcel Energy Residential Natural Gas Bills*



*Source: SNL data for retail electric and natural gas sales; figures included are annual average of monthly bills

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:

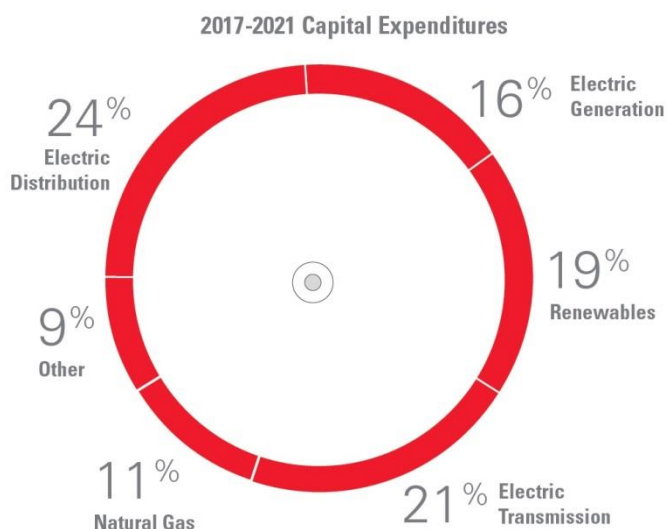
- **Duty to serve:** We cannot pick and choose our customers. We will provide service to any residence or business within our service territory that requests it under reasonable terms and conditions.
- **Cost of service pricing:** We cannot arbitrarily raise prices to levels beyond our costs. Pricing 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.

Investing for the Future

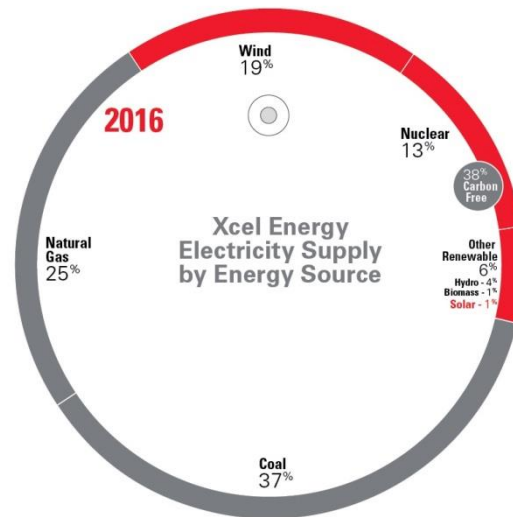
Over the next five years, we have plans to invest \$18.4 billion in projects that, in addition to ongoing maintenance and repair, will improve energy production, strengthen the energy grid, ensure security and offer customers more options.

Xcel Energy is investing in projects that offer the most value for customers.



Electricity Generation

Xcel Energy produces and purchases electricity from a diverse mix of energy sources, including coal, natural gas, nuclear and renewable power sources. In 2016, we delivered more than 111 million megawatt hours from our own generating plants and through power purchases.



Xcel Energy Generation

We currently own about 17,600 megawatts of generation, mostly comprised of coal and natural gas, but this is changing as we continue to implement plans that rely less on coal and more on renewable energy and natural gas generation. From 2005 to 2026, we expect to retire more than 40 percent of the coal-fueled capacity we own.

As part of this transition, we continued construction of the new natural gas combustion turbine at the Black Dog Generating Plant in Burnsville, Minnesota. The 475-ton turbine and generator were lifted into place in early 2017—a major milestone for the project that replaces the plant's last two coal units retired in 2015.

While Xcel Energy is recognized as the nation's No. 1 utility wind provider, most of the wind on our system is provided under long-term power purchase agreements. This is changing as we invest in our "steel for fuel" strategy. We are capitalizing on historic-low wind prices and tax credits to install new wind farms—where the cost to build the projects is offset by future fuel savings. In 2016, our 200-megawatt Courtenay Wind Farm became fully operational, just 15 months after construction began. Located northeast of Jamestown, North Dakota, the project is significant because it is the first we have managed through construction.

We also own and operate 26 hydro plants in Colorado and the Upper Midwest. Our 19 hydro plants in Wisconsin and Michigan celebrated a record-breaking year in 2016 for generating electricity, thanks to some plant improvements and above average precipitation in the region. Over the last several years, we have upgraded some of the older units to increase capacity and efficiency.

Our two nuclear generating plants in the Upper Midwest also had increased performance in 2016, with our Monticello plant in Becker, Minnesota setting its own generation record and proving the value of a

plant expansion project completed in 2015. Monticello also received an “exemplary” rating from the Institute of Nuclear Power Operations, which provides independent verification of our safety and operating performance.

Both Monticello and our Prairie Island plant in Red Wing, Minnesota, play a vital role in delivering reliable base-load power that is emissions free. As part of our clean energy plans to reduce carbon emissions, we are committed to operating the plants through their licensing periods, which don’t expire until 2030.

Transmission and Distribution

Xcel Energy operates thousands of miles of lines, substations and other equipment that safely and reliably deliver electricity to customers.

Transmission

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.

In 2016, we energized nine new substations, upgraded 24 existing substations and placed into service more than 195 miles of new lines. A strong transmission system will ensure continued reliable and affordable service, meet state and regional energy policy goals, and support increased use of renewable energy.

In 2016, we continued to prove our value as a partner in building transmission. In Colorado, we completed a 20-mile 230-kilovolt line from Rifle to Parachute, Colorado, which crosses private property as well as public land operated by the Bureau of Land Management. The new line enhances the reliability of our system, helping to ensure we can meet anticipated load growth in the area.

Xcel Energy is constructing more than 400 miles of high voltage transmission line in Lea and Eddy counties in New Mexico as part of the Power for the Plains initiative now underway through 2020. In summer of 2016, crews conducting archaeological excavations for the project uncovered roughly 26,000 artifacts in Eddy County, including some that may date back over 5,000 years. Xcel Energy is collaborating with SWCA Environmental Consultants and the New Mexico Bureau of Land Management to conduct the work. After the artifacts are analyzed, they will be turned over to the Museum of Indian Arts and Culture in Santa Fe to be curated.

Technology, including the use of unmanned aircraft systems or drones, plays an exciting role in our future. In February of 2016, we became the first utility in the country to receive FAA approval to fly drones beyond line of sight to inspect a transmission line northwest of Amarillo, Texas. In early 2017, working with the FAA, we announced a first-of-its-kind “Partnership for Safety Plan” that will facilitate the use of drones in the National Airspace System. We plan to use the technology to inspect our 20,000 miles of transmission lines throughout our geographically diverse service territory.

Distribution

To distribute electricity to the communities we serve, transformers on our systems reduce the voltage so it can be carried on smaller distribution lines to businesses, neighborhoods and homes. The distribution system includes substations, wires, poles, metering, billing and related support systems involved in the retail side of electricity delivery. Xcel Energy has more than 200,500 miles of distribution lines, more than 2,900 feeders and more than 3.4 million meters in the field.

The need to expand our distribution infrastructure and install new distribution equipment to meet population and demand growth requires continued investment. As we invest in distribution system

upgrades, we are focusing on new technologies through our Advanced Grid Intelligence and Security initiative that will help us meet the increased demands of our digital society and communicate more effectively with our customers.

In 2016, we demonstrated that we are ready when customers need us most by successfully managing 12 major storm events, from tornadoes to extreme snow, wind and ice. In all situations, we were able to restore service to 84 percent of our customers within 12 hours and 95 percent within 24 hours, proving that our storm response is among the best in the industry.

In June 2016, our crews were honored with the Edison Electric Institute's Emergency Recovery Award for quickly and safely restoring power and rebuilding our system after Storm Goliath hit our entire southern territory in Texas and New Mexico over Christmas in 2015.

Natural Gas Service

According to the American Gas Association, Xcel Energy is the fourth largest provider of natural gas service in the country. We currently operate more than 2,400 miles of natural gas transmission and more than 34,000 miles of natural gas distribution pipelines to serve our customers in Colorado and the Upper Midwest.

We continue to upgrade and renew our natural gas pipelines and other equipment to ensure reliable and safe natural gas service for our customers. Low natural gas prices have made it possible to invest in our system and accelerate upgrades with minimal impact to customer bills.

In 2016, we completed two significant, multi-year projects. As part of the East Metro Gas Pipeline Replacement Project, we replaced 11.5 miles of pipeline originally installed in the 1940s and '50s in St. Paul and Roseville, Minnesota. The West Main Project in Colorado replaced 95 miles of 1920s-vintage transmission pipeline along the northern Front Range, from Westminster to the Wyoming border. Both projects successfully navigated complex terrain, including some very populated areas.

We also are finishing up work to install the two-mile high-pressure natural gas pipeline for the new combustion turbine at Black Dog plant in Minnesota. The pipeline project will be complete in 2017.

Natural Gas Supply

Xcel Energy purchases natural gas from third-party producers and relies on a consistent supply 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 our suppliers to conduct their operations responsibly and in compliance with all regulatory requirements. We encourage our natural gas producers to adopt best practices and manage their environmental impact.

System Resource Planning

We are required by some state regulatory commissions to regularly conduct a system resource planning process. The process begins with Xcel Energy filing a proposed long-term resource plan with the regulatory commission, which is then evaluated by regulators, as well as environmental, business and community stakeholders. The plans generally assess the resources we need to serve our customers and meet future energy needs. They also discuss energy efficiency program goals and summarize transmission plans and other resources that we may need, based on our studies of future load growth.

Once the plan is approved, it may result in the need to add energy resources to serve our customers. We then 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.

Bold Energy Plans for the Future

Xcel Energy's proposed resource plan for the Upper Midwest Was approved in 2016. The plan sets a course for transforming our system away from coal to cleaner energy sources and will result in a 60 percent reduction in carbon emissions and a 63 percent carbon-free energy mix by 2030 for the region. Some of the highlights include more than doubling our use of renewable energy sources in the region and retiring two coal units at the Sherco Generating Plant in Becker, Minnesota in 2023 and 2026.

In Colorado, our resource plan is one of a number of initiatives we have proposed under the Our Energy Future initiative. The proposals pave the way for additional emission reductions and clean energy options for customers at an affordable price. In 2016, our proposal to build, own and operate the Rush Creek Wind Farm in Colorado was approved. Construction is now underway on the 600-megawatt project that will be one of the largest wind farms in the state. We also reached a global agreement on renewable energy issues that will expand our solar customer programs, test new billing plans and provide for greater stakeholder engagement. Through our Advanced Grid Intelligence and Security filing, we can provide customers with a smarter, more advanced energy infrastructure. A decision on this is expected in 2017.

Renewable Energy



Our Approach

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

We are fortunate to operate in regions considered rich in wind and sun for producing electricity, which we are putting to use. Not only are we responding to customer interests, but we are reducing carbon emissions and other environmental impacts, diversifying our energy supply, and even, saving customers money. Under our “steel for fuel” strategy, we are building new wind farms that will result in billions of dollars in future fuel savings for customers. The savings are currently so significant because of low wind prices and available tax credits.

We are able to capitalize on low-cost wind in part because of our extensive experience integrating wind on our system. For more than a decade, the American Wind Energy Association has ranked Xcel Energy the nation’s No. 1 provider of wind energy. With more wind capacity than any other U.S. utility, we have invested in advanced forecasting and operating practices that make wind energy more predictable and easier to manage.

We are approaching solar with same level of commitment as wind. By the end of 2016, we had increased universal solar capacity on our system fourfold, compared to 2013. Today, these large-scale solar projects are the most cost-effective option for meeting customer needs. They cost half as much as private, rooftop solar because of economies of scale, technology and the ability to locate panels in the sunniest places. At the same time, we know that some customers want additional choices, including community and privately owned rooftop solar options, and we have a growing number of renewable solutions to offer, including Windsource®, Solar*Rewards®, Solar*Rewards® Community®, Renewable*Connect® and Solar*Connect Community®.

Renewable energy is a vital and growing part of Xcel Energy’s energy supply



Recent Wind and Solar Additions

In 2016, Xcel Energy completed its 2013 commitment to grow the wind portfolio by 40 percent, adding 1,900 megawatts of capacity through nine cost-effective, new wind projects. This includes three wind farms in the Upper Midwest that Xcel Energy now owns and operates: Pleasant Valley, Border and Courtenay.

Located in Stutsman County, North Dakota the Courtenay Wind Farm was the first wind project that we managed through construction. The project provides significant economic development for the area, including 200 construction jobs, eight permanent jobs and \$850,000 in annual tax revenue. Participating landowners will collectively receive \$26.5 million in lease payments over the next 20 years.

In addition to wind, we added 600 megawatts of solar capacity in 2016 that includes nearly 500 megawatts of large, universal solar in three states, all under power purchase agreements. This includes the 120-megawatt Comanche Solar project in Pueblo, Colorado, which is the largest solar project east of the Rocky Mountains, comprised of more than 450,000 solar panels.

The Nation's Largest Multi-state Investment in Wind Energy

Xcel Energy announced plans for 11 new wind farms in seven states, totaling 3,380 megawatts of new wind capacity in early 2017. If approved, the projects will grow our wind portfolio by 3,380 megawatts or 50 percent. This includes investing at least \$3.5 billion in company-owned wind farms, increasing our wind ownership from 850 megawatts today to 3,600 megawatts by 2021. By taking advantage of historic low wind prices and the full production tax credit, the cost to build these projects will be offset by billions of dollars in future fuel savings.

- We already have approval to build, own and operate the Rush Creek Wind Farm in Colorado. The 600-megawatt facility will be among the largest in the state. Construction began in spring of 2017 and will be complete in 2018. It is expected to save customers \$1.1 billion over the life of the project.
- In the Upper Midwest, we have proposed 1,550 megawatts in four states—Minnesota, North Dakota, South Dakota and Iowa. This includes 750 megawatts of self-build projects, plus an additional 400 megawatts of build-own-transfer projects and 400 megawatts through power purchase agreements. Our proposal will save customers about \$4 billion over the life of the projects and grows our wind portfolio by 60 percent in the Upper Midwest.
- We have proposed adding 1,230 megawatts of wind in the Southwest, with plans to build two new wind farms for a combined 1,000 megawatts and buy 230 megawatts of wind energy from another facility through a long-term contract. Our proposal is expected to save customers \$2.8 billion over the life of the projects.

Wind Forecasting

Xcel Energy has used WindWX since 2009—one of the most advanced wind-production forecasting systems in the world. Through a multi-year research and development project with Global Weather Corp. (GWC), an affiliate company of the National Center for Atmospheric Research (NCAR), we helped develop this highly detailed wind-forecasting system.

Wind generation is difficult to forecast due to 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 typically 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.

The WindWX system uses real-time, turbine-level operating data and applies sophisticated algorithms to forecast the amount of wind power that will be produced. Through ongoing work with GWC, 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.

The forecasts, now available worldwide through GWC, are designed to help utilities make better commitment and dispatch decisions, including opportunities to power down less efficient power plants when sufficient winds are forecasted to help meet customer electric demands. So far, we have improved our wind forecasting accuracy by nearly 39 percent, and better forecasting and other operational improvements have saved our customers a total of \$66.7 million in fuel costs through end of 2016.

We continue to set new system records for wind generation because of our significant capacity and ongoing efforts to improve integration. Our most significant milestone occurred on March 6, 2017 when we achieved a daily record—wind generation provided more than 45 percent of our customers' energy for 24 hours throughout our service territory.

Although improved forecasting helps to manage the cost, wind generation is still challenging to operate and integrate on the electric system. Xcel Energy continues to improve processes and seek additional opportunities to lower integration costs, including:

- Cycling coal units offline to accommodate more wind generation and reduce fuel costs, which helped to avoid nearly 690,000 tons carbon dioxide emissions in 2016
- Using 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, which dramatically reduced reserve costs while maintaining system reliability
- Adding more flexible generating resources to more efficiently work with variable wind generation

Xcel Energy's Colorado system is somewhat unique in that it is small and serves a limited geographic area, which presents greater challenges for integrating high levels of variable wind energy. Wind made up 23 percent of our energy supply in Colorado in 2016. For system reliability reasons, we curtailed about 3.3 percent of our total wind generation for the year. Our objective is to always operate the system as cost effectively, efficiently and reliably as possible. We estimate that we used wind to help regulate our Colorado system about 17 percent of the time in 2016. Wind equipped with automatic generation controls can quickly ramp up or down to help balance and respond to generation needs on the system.

Here are steps we continue to take to improve system operations with wind in Colorado:

- Conducting a special screening as part of the resource planning process to account for curtailment costs as we evaluate future resources
- Exploring opportunities to increase the flexibility of our Colorado system by developing a larger, organized market in the West. As a step in this direction, the company received approval from the Federal Energy Regulatory Commission to begin the joint dispatch of its resources with the resources of other Colorado utilities to allow for more efficient and cost-effective, real-time system operations. This is set to begin in June of 2017.

Compliance with State Renewable Energy and Portfolio Standards

Xcel Energy is on pace to surpass renewable energy requirements in the states we serve through at least 2030. New Mexico is an exception, where the company anticipates meeting the state's wind energy requirement through 2024 and has requested a waiver for acquiring additional solar energy from large, universal solar power plants due to constraints under the state's Reasonable Cost Threshold (RCT).

State	2016	Next Increase	Notes
Colorado Renewable Energy Standard	20 percent	30 percent by 2020	30 percent of retail sales by 2020, with 3 percent from distributed generation (DG), including at least 1.5 percent from retail net-metered DG resources and up to 1.5 percent from wholesale DG resources (defined as resources ≤30 megawatts located in Colorado)
Michigan Renewable Portfolio Standard	10 percent	12.5 percent by 2019; 15 percent by 2021	Goal of 35 percent by 2025
Minnesota Renewable Portfolio Standard	25 percent	31.5 percent by 2020	30 percent of retail sales by 2020, with at least 24 percent from wind, plus 1.5 percent of retail sales from solar by 2020, with at least 10 percent of this from on-site solar under 20 kW
New Mexico Renewable Portfolio Standard	15 percent	20 percent by 2020	Solar 20 percent by 2020, Wind 30 percent by 2020, Other 5 percent by 2020, DG 3 percent by 2020 (Xcel Energy is not required to procure additional solar energy because it has already exceeded the state's Reasonable Cost Threshold)
North Dakota Renewable and Recycled Energy Objective	10 percent	Voluntary	Goal of 10 percent by 2015
South Dakota Renewable, Recycled and Conserved Energy Objective	10 percent	Voluntary	Goal of 10 percent by 2015
Texas Renewable Generation Requirement	Statewide Goal	5,800 MW statewide by 2015 (non-wind: 500MW)	Xcel Energy's portion is approximately 3.6 percent of the statewide goal (the 3.6 percent is based on Xcel Energy TX Electric retail sales as a percentage of the total TX electric retail sales)

Wisconsin Renewable Portfolio Standard	12.89 percent		Statewide goal of 10 percent by year-end 2015, and each utility must increase renewable energy 6 percent over its baseline; for Xcel Energy, this is 12.89 percent in 2016
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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 are created by statute or voluntary trading programs to promote market-based, cost-effective development of renewable energy. RECs can be disaggregated or separated from the underlying renewable energy and sold separately to utilities and other consumers.

Xcel Energy uses RECs to confirm or validate 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 or retire RECs can claim to use the renewable energy, according to the Federal Trade Commission's Green Guides. Although, renewable energy separated from or without the associated REC can retain its value and be used for compliance with environmental regulations.

We continue 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 anticipated expiration of RECs, we sell some of our RECs. In 2016, we sold nearly four million RECs, about three million more than in 2015. The renewable energy that generated these RECs came from Colorado, New Mexico, Texas and the Upper Midwest. Our customers benefit by sharing in any profits associated with the sales. REC sales make up a minor portion of our REC holdings

Consistent with The Climate Registry protocols, Xcel Energy does not presently adjust its carbon dioxide emissions reporting for REC sales. However, because the treatment of carbon dioxide attributes associated with REC sales under future greenhouse gas reporting protocols is uncertain, we have calculated that under an alternative carbon-reporting scenario, emissions associated with REC sales would add approximately 1.5 percent of emissions to our total carbon dioxide emissions for 2016. This alternative assumes the avoided carbon emissions related to renewable energy are added back to the company's overall emissions when RECs are transferred.

Advanced Energy Technology



Our Approach

Within the next decade and beyond, it is possible that there will be more change in our industry than we have experienced in the last half century. Rapidly evolving technology is a major driver and will continue to change how we serve customers, as it also changes customer preferences for more sophisticated products and services.

Through collaborations with researchers, technology developers and others in our industry, we actively monitor and stay abreast of developments in emerging and advanced energy technology. We have underway a number of pilot and demonstration projects that are testing the real-world application of cutting-edge technologies and serving customers today

As the backbone of our energy system, the power grid—including all of its distribution, transmission and generation components—will enable and deliver advanced technology solutions. The grid is in the early stages of becoming an integrated network of optimized, centralized and distributed energy resources. It is transforming from a centralized, one-way delivery model to a system of resources that introduce two-way flows.

Changes to the grid will require significant, long-term investment in technologies to keep the system safe and secure, decarbonize it and deliver new energy solutions to customers. This grid transformation is a key piece of our strategic planning that we are implementing through significant regulatory proposals, such as our Advanced Grid Intelligence and Security filing in Colorado, through pilot and demonstration projects, and through policy discussions with our states.

In recognition of our progress and commitment to adopting advanced and emerging technologies, the Colorado Clean Tech Industries Association recognized Xcel Energy as its High Impact Cleantech Company of the Year in 2016.

Advanced Grid Intelligence and Security

Advanced Grid Intelligence and Security (Advanced Grid) is Xcel Energy's long-term strategic initiative aimed at transforming the power grid into an intelligent, integrated network that securely, efficiently, reliably and safely integrates distributed energy resources. As a result, customers will have new tools that empower them with information for controlling and tracking their energy use.

In 2016, we submitted an Advanced Grid Intelligence and Security proposal to the Colorado Public Utilities Commission. Specifically, we requested a Certificate of Public Convenience and Necessity to implement:

- An advanced meter rollout for Colorado electric customers
- Integrated Volt Var Optimization technology (IVVO) to allow customers' appliances to run more efficiently and, in turn, use less energy and potentially reduce monthly bills
- A new communications network, called the Field Area Network (FAN), that provides the infrastructure necessary to support advanced meters and IVVO technology, essentially tying the system together

The nearly \$600 million effort is a natural next step to building a smarter, more advanced energy infrastructure for our customers and allows us to remain a next-generation energy provider. In spring of 2017, the utilities commission held a public comment meeting on our filing, with a decision expected later in the year. If approved, the entire project would be completed in 2021.

By the end of 2016, our Field Area Network (FAN) covered 27 percent of the Denver metro area, and we are well on our way to covering the entire area. FAN enables two-way communication between intelligent devices on the grid—such as advanced meters—and the control center. These communications can include automatically notifying us when customers lose or regain power, improving our ability to identify outages and more efficiently deploying repair crews.

Energy Impact Partners

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 evolving customer needs. The fund is a collaborative, strategic investment platform that provides capital 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. Energy Impact Partners has made seven investments to date that include Autogrid, Sparkfund, Sense, Enchanted Rock, Arcadia Power, Greenlots and Opus One.

Colorado Advanced Clean Technology Projects: Battery Demonstration Projects

Colorado's Innovative Clean Technology program was established in 2009 as a way for the state to enable testing of emerging technologies that promise to lower greenhouse gas emissions and produce other environmental benefits. For Xcel Energy, we have had the ability 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 customers.

Xcel Energy currently has two battery storage demonstration projects 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, we have selected six homeowners who will receive in-home Sunverge battery systems to test with their rooftop solar installations. We are also installing six battery systems, supplied by Northern Reliability, Inc., in right-of-ways or easements. All storage systems will be installed and operational by the end of 2017.

- 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. Both began operating in spring 2017. Panasonic owns a 0.20 MW-AC solar array located atop its building, which is also tied into the system.

GridNXT at SolarTAC

After celebrating its grand opening in 2011, the Solar Technology Acceleration Center (SolarTAC) in Aurora, Colo., developed into a world-class facility for demonstrating and validating some of the most advanced solar technologies available, in a real-world, grid-connected environment. From the beginning, Xcel Energy recognized the potential benefit of SolarTAC 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 the Southwest with more cost-effective, efficient solar energy. Through testing, solar developers were able to make adjustments for cold weather conditions before installing the technology in our service areas.

Last year, the 74-acre site embarked on its next evolution to become a test-bed for solar-enabling products and components. GridNXT at SolarTAC will support the demonstration of advanced technologies for integrating distributed generation, including microgrid capabilities, at the edge or end of the electric distribution system.

In-line with the new mission, Xcel Energy is currently testing a lithium-iron-phosphate battery from Colorado's Iron Edison Company to demonstrate energy storage with rooftop solar in a residence for reliability and other services. The 20kWh battery, combined with a 5.5kW inverter, is being used to support appliances, HVAC, lighting and EV charging under different scenarios.

Supply Chain



Our Approach

Suppliers play an important role in our ability to grow and operate effectively, and the money we spend through our supply chain adds to the overall prosperity of our communities and beyond. Our Supply Chain organization is responsible for the sourcing and procurement of normal goods and services, materials management, fleet management and accounts payable for all of Xcel Energy's utility operating companies.

Local Spending

We do not set specific targets for local spending; however, much of our spending occurs naturally on the local level as we build relationships within our communities. In some circumstances, necessary materials and services cannot be obtained locally or it is not feasible to do.



Nearly **70%** of spending on goods and services went to local businesses

2016 Local Supply Chain Spending

State	Spending
Colorado	\$ 830,106,730
Minnesota	\$ 654,186,787
North Dakota	\$ 253,136,206
South Dakota	\$ 3,885,004
Wisconsin	\$ 195,353,389
Michigan	\$ 158,390,917
Texas	\$ 281,840,855
New Mexico	\$ 24,619,864
TOTAL LOCAL SPEND	\$ 2,401,519,752

Among many other things, the Supply Chain organization is involved in negotiating 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. The group implements vendor, supplier and contractor management strategies and policies, handles accounts payable and puts in place company-wide sourcing and procurement strategies to achieve cost savings.

We sort our annual supply chain spending into 36 categories with more than 800 sub-categories. This data is used to determine risk, opportunity and negotiation leverage with suppliers. We employ a systematic sourcing method to get needed materials and services to the right place at the right time for the right price. The five-step sourcing process used to select suppliers 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:

- maximize investment yield
- achieve operational excellence
- manage risk and opportunities
- support community and environmental leadership

We have developed guidelines for bid analysis for all categories of spend. Within these guidelines, up to 20 percent of the bid analysis weight can be allocated to social and environmental factors such as safety performance, diversity and environmental performance.

2016 Supply Chain Spending Categories

Aggregates	Electrical Materials & Equipment	Marketing and DSM	Staff Augmentation
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

Monitoring Suppliers and Managing Risk

We have a Supplier Qualification program that uses services from Dunn & Bradstreet to 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 confidential data from Xcel Energy must undergo a data security review. We also periodically conduct key risk assessments, looking at categories such as commodity price risk, contract quality and governance processes.

All contractors who provide services or materials at company 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.

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. Additionally, all suppliers are expected to comply with our Code of Conduct.

Supplier Classifications

We classify our suppliers in four tiers based on a combination of overall supplier spend and criticality or risk to operations. Critical suppliers provide key materials and services required to support daily operations. Tier 1 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. See below:

Tier	Annual Spending	No. of Suppliers	% of Annual Spend
Tier 1	More than \$10 million	64	60%
Tier 2	Between \$4-10 million	81	15%
Tier 3	Between \$1-4 million	252	14%
Tier 4	Less than \$1 million	5,838	12%

We support suppliers in non-tier 1 spend classifications through collaborative initiatives and programs. For example, Xcel Energy is 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

We are an active member of the Edison Electric Institute's Supplier Diversity Best Practices Group, as well as the National Minority Supplier Development Council, the Women's Business Enterprise National Council and most local chambers of commerce in our operating territories. In 2016, we spent \$401 million with diverse suppliers, directly and indirectly.

Annual Spending with Diverse Supplier

	Dollars spent	% of total purchases
2016	\$401 million	11.2%
2015	\$395 million	10.3%
2014	\$385 million	10.3%
2013	\$365 million	9.3%
2012	\$265 million	8.7%
2011	\$248 million	8.3%
2010	\$209 million	7.1%
2009	\$153 million	6.9%

2016 Spending with Diverse Suppliers by State

	Dollars Spent
Colorado	\$60 million
Michigan	\$0.75 million
Minnesota	\$45 million
New Mexico	\$17 million
North Dakota	\$52 million
South Dakota	\$0.92 million
Texas	\$36 million
Wisconsin	\$4 million
Other	\$186 million

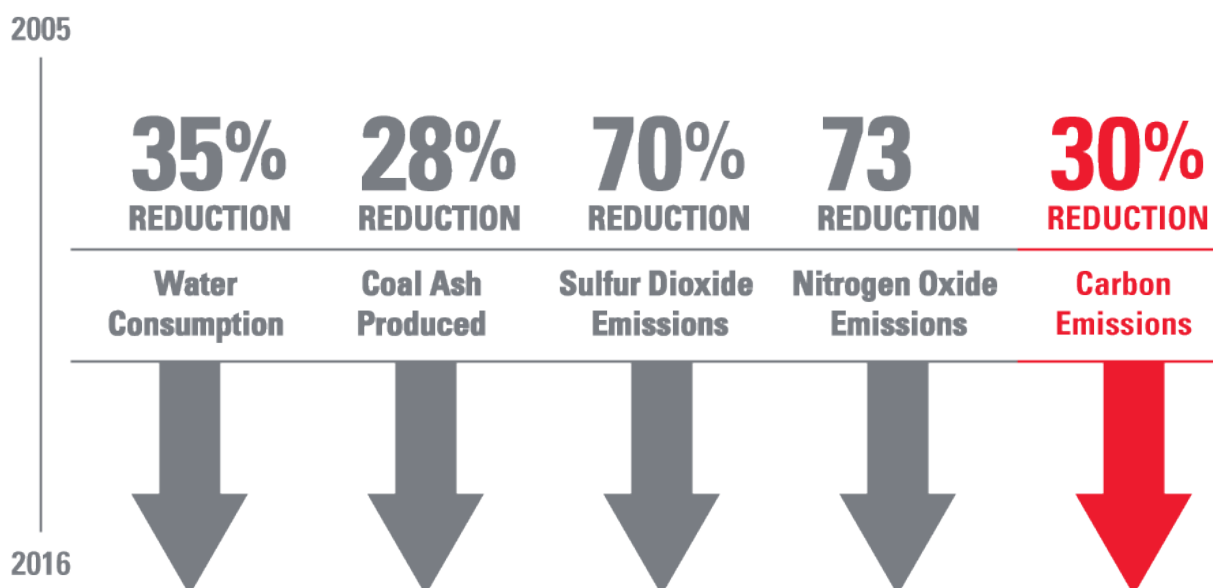
Environmental Policy and Management



Our Approach

As a major U.S. energy provider, Xcel Energy's operations have a fundamental relationship to the environment. Not only do we rely on natural resources to serve our customers—from water to fossil fuels and even wind and sun—but our operations generate emissions and waste that we must carefully manage and reduce. Because of this connection, protecting the environment is one of our core values and a key focus for a more sustainable energy future. We expect our employees and others working for us to consider the environment at all times and continually find opportunities to reduce our impact in a cost-effective way for customers.

Our environmental commitment is based on a foundation of outstanding regulatory compliance, as we work to meet and surpass the many environmental rules and requirements that apply to our operations. Going beyond compliance, our goal is to demonstrate leadership and meet the expectations of our customers and the communities we serve. They depend on us to act responsibly and provide reliable, affordable energy that is increasingly clean—with fewer emissions, waste and other environmental impacts.



Environmental Policy

Our approach to environmental policy is practical, as we seek to balance environmental benefits with providing our customers affordable, reliable energy. We pursue proactive emission reductions and clean energy initiatives that support stakeholder interests and produce measurable environmental improvement while also controlling costs and strengthening the energy grid long term.

Xcel Energy has a corporate environmental policy that sets expectations for aligning our business practices with corporate commitments and environmental requirements. All company employees, contractors and vendors are required to follow the policy.

Engaging on policy issues with stakeholders is essential to our efforts, so we regularly discuss environmental and clean energy issues with policy makers, regulators, the environmental community and other energy providers. We often advance environmental initiatives and constructively participate in addressing issues, while keeping in mind and protecting the interests of our customers, communities and shareholders. In rare instances, we may oppose new regulations or policies when the rules are infeasible or the costs significantly outweigh the benefits.

As we engage on issues, we keep the following principles in mind:

- Xcel Energy strives to comply with all environmental regulations. We have developed and are continually improving our environmental management system to meet the compliance challenges of the next decade, including the growing complexity of environmental regulation.
- On behalf of customers, we have invested substantially in environmental improvements and clean energy. We continue to look for ways to proactively reduce environmental risk. These proactive efforts can reduce cost to customers over the long term. Xcel Energy's proactive emissions reduction projects, such as Clean Air Clean Jobs and the Minnesota Metro Emissions Reduction Project, have allowed us to avoid the cost and disruption seen in other parts of the industry.
- We believe that environmental and climate policy should appropriately recognize the environmental benefits of our proactive efforts made on behalf of our customers and communities. After all, our customers are paying for these efforts and should be rewarded for their leadership in clean energy.
- Environmental and climate policy should drive forward the development of new, cost-effective clean energy technologies. As the nation's No. 1 utility provider of wind energy and a leader in solar energy and energy efficiency 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.
- The most efficient and effective response to environmental mandates, such as stack-by-stack or emission-specific compliance requirements, should be coordinated on a system-wide basis to maximize cost effectiveness and environmental benefits.
- 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 formal environmental management system designed to ensure continuous improvement and compliance with all applicable environmental requirements. Our management system provides:

Oversight	Board of directors—Nuclear, Environment 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
	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

2016 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 potentially 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. In 2016, we conducted 99 internal environmental audits to help ensure compliance.

2016 Compliance Activity

Activity	2015	2016
Notices of Violation or Compliance Advisories	2	4
Penalties Paid	\$0	\$25,000
External Agency Audits or Inspections	83	83
Internal Audits Conducted to Ensure Compliance	89	99

Nichols Harrington Compliance Order

In the summer of 2015, Amarillo, Texas experienced record rainfall and flooding. As a result, several of the retention ponds at our Nichols and Harrington plants exceeded capacity and discharged wastewater to a permitted outfall. The discharged water was contained and migration was held to a minimum. However, several parameters of the discharge exceeded permit limits due to heavy sedimentation washing into the ponds. We reported these exceedances to the Texas Commission on Environmental Quality (TCEQ), which issued a compliance order. We met with TCEQ and petitioned to have the order removed due to the fact that the exceedances were caused by historical rainfall and flooding. TCEQ agreed but concluded that the record rainfall was not an affirmative defense to the permit exceedances. A final penalty of \$15,000 was negotiated in 2016 for settlement of the order.

Environmental Expenditures for 2016

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've reduced emissions through the addition of environmental controls, the total costs of investing in and operating the controls has risen somewhat over time.

Operating expenses for environmental monitoring and disposal of hazardous materials and waste, including nuclear decommissioning and spent nuclear fuel disposal expenses, were approximately:

- \$304 million in 2016
- \$292 million in 2015
- \$292 million in 2014
- \$275 million in 2013
- \$263 million in 2012
- \$265 million in 2011
- \$256 million in 2010
- \$225 million in 2009
- \$213 million in 2008

More detailed information regarding nuclear decommissioning and spent nuclear fuel disposal expenses is provided in our 2016 Form 10-K.

Capital expenditures for environmental improvements at regulated facilities were approximately:

- \$111 million in 2016

- \$184 million in 2015
- \$373 million in 2014
- \$517 million in 2013
- \$255 million in 2012
- \$48 million in 2011
- \$473 million in 2010
- \$89 million in 2009
- \$230 million in 2008

Climate Change and Greenhouse Gas Emissions



Our Approach

Climate change is a growing priority for many of our stakeholders—from large business customers and community leaders with sustainability goals to investors concerned with risk, as well as motivated citizens who want to reduce their carbon footprints. We understand this concern and the demand for action, as our stakeholders look to climate science and see the potential for adverse climate impacts. That's why we have worked for more than a decade to address the risk of climate change and reduce carbon emissions associated with generating electricity.

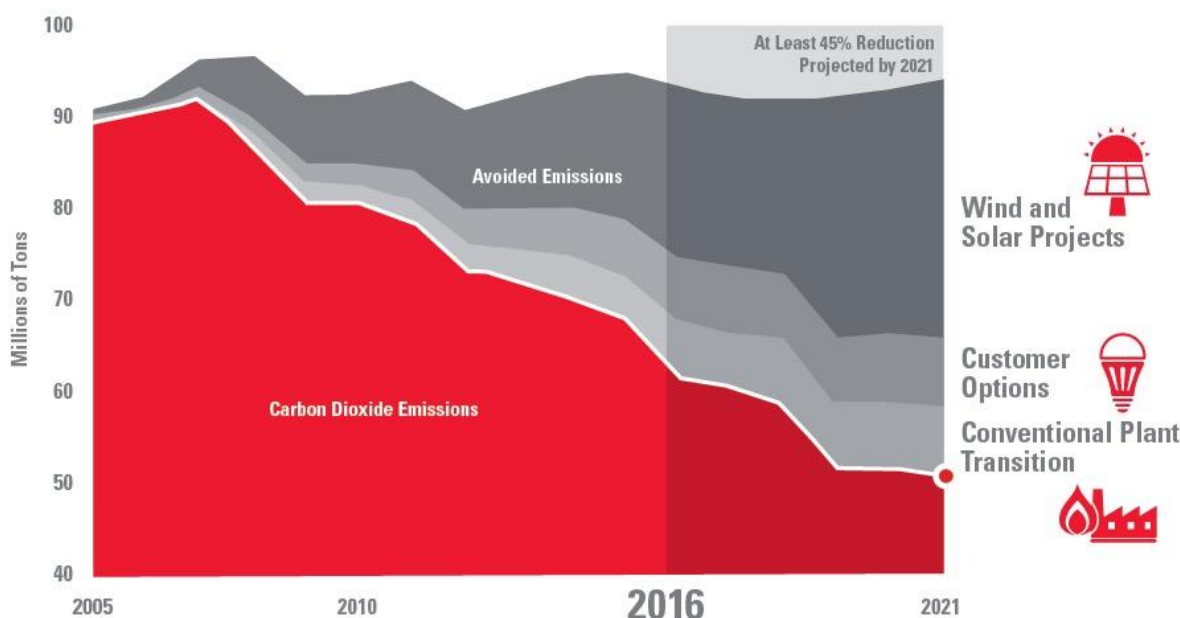
Since 2005, we have reduced our carbon emissions by 30 percent, as we work toward a more ambitious emission-reduction target of 60 percent by 2030. Based on our experience, we believe we can achieve this goal as long as there are continued favorable economics and a supportive regulatory environment.

We are steadily delivering on a cleaner, more sustainable energy future—one that provides our customers with the affordable, reliable energy service they expect but with more energy from renewable sources and with fewer emissions and other environmental impacts. In addition to the concern over climate change, a number of factors are enabling our transition to clean energy and the change happening within our industry, including new advanced technologies and evolving customer demands.

Through our economic clean energy strategy, we are transforming the way we produce, deliver and encourage the efficient use of energy by focusing on three key areas:

- **Increasing the use of wind and solar energy.** Renewable sources made up 25 percent of our energy supply in 2016, and by 2021, we expect more than 40 percent of our energy will come from these clean energy sources.
- **Offering customers renewable and energy-saving options to support their environmental priorities.** Our goal is to be a valued and trusted partner in helping customers to achieve their climate and other environmental objectives. For customers who want more—even up to 100 percent renewable energy—our selection of renewable options is growing, providing a range of programs to meet different customer interests and circumstances. We also offer a comprehensive portfolio of energy-efficiency programs for customers, which annually save about a terawatt-hour of electricity.
- **Transitioning our conventional plant fleet.** By retiring aging coal units, adding flexible natural gas and continuing to operate carbon-free nuclear plants, our conventional plant fleet is cleaner, more efficient and more responsive for operating with variable, renewable generation. By 2026, we will shut down more than 40 percent of the coal units we owned in 2005.

Xcel Energy's Clean Energy Strategy is Driving Reductions in Carbon Emissions



By focusing on clean energy, we have achieved a number of milestones. We were recognized by EPA, the Center for Climate and Energy Solutions and The Climate Registry with a 2016 Climate Leadership Award for excellence in greenhouse gas management. The American Wind Energy Association has ranked Xcel Energy the nation's No. 1 utility wind provider for more than a decade, beginning in 2005.

Perhaps most importantly, we are making this transition at a low cost to customers. By engaging with stakeholders, we know that energy affordability is a top priority, but our stakeholders also expect cleaner energy. At the same time as we have made tremendous investments in clean energy, we have managed to maintain energy rates competitive with the national average, with the average Xcel Energy customer bill actually going down over the past four years.

Our Pathway to a Low-carbon Future

For us, the most significant way we can demonstrate climate leadership is to reduce carbon dioxide emissions from the energy we produce, which make up more than 99 percent of our greenhouse gas emissions. Our current emissions performance surpasses U.S. goals in international negotiations, and is ahead of what EPA's Clean Power Plan would have required us to do. For example, the U.S. commitment in the Paris climate agreement is 26 to 28 percent below 2005 levels by 2025—an emission-reduction level we have already surpassed.

In 2016, Xcel Energy reduced carbon emission 30 percent compared to 2005 levels, a reduction level we originally did not expect to achieve until 2020. A number of factors came together during the year to produce these results, including an increase in wind and solar production, generation records set by our Monticello nuclear and Upper Midwest hydro plants, and the retirement of three coal units in 2015.

Over the next five years, we expect to achieve at least a 45 percent reduction in carbon emissions from 2005 levels. Our ability to meet this target depends largely on upcoming coal unit retirements in 2017 and the implementation of our proposed wind energy plans, which if approved, will be completed in 2020.

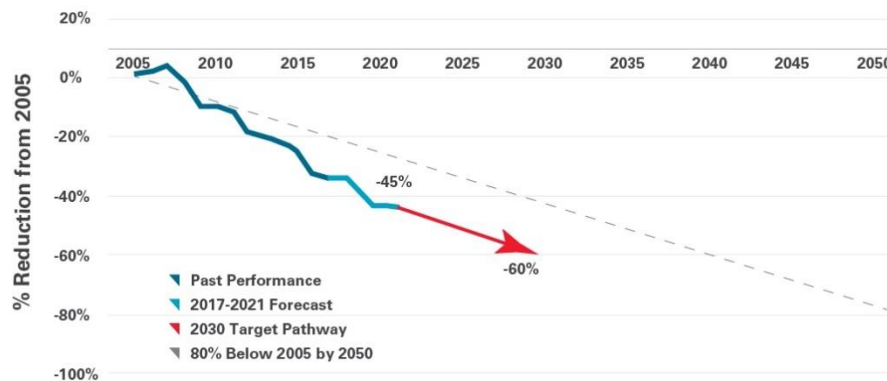
Considering the future beyond 2021, our goal is to achieve a 60 percent system-wide reduction in carbon emissions by 2030, if we continue to have favorable economics and a supportive regulatory environment. We plan to retire two large coal units in Minnesota during this timeframe and expect additional wind and solar development.

Our 2030 emissions-reduction target of 60 percent aligns with potential policy outcomes and with customer and community-driven goals for a low-carbon future. Some of the states, cities and businesses we serve have targets that are based on or are in-line with international and national discussions.

Beyond 2030, we anticipate that emissions reductions will likely continue, assuming that we can:

- Continue to increase variable renewable energy on our system
- Relicense our nuclear generation or replace it with other carbon-free generation
- Extend purchase contracts for renewable resources
- Obtain cost-effective natural gas
- Realize continued advancements in power technology

Xcel Energy Carbon Emissions Pathway

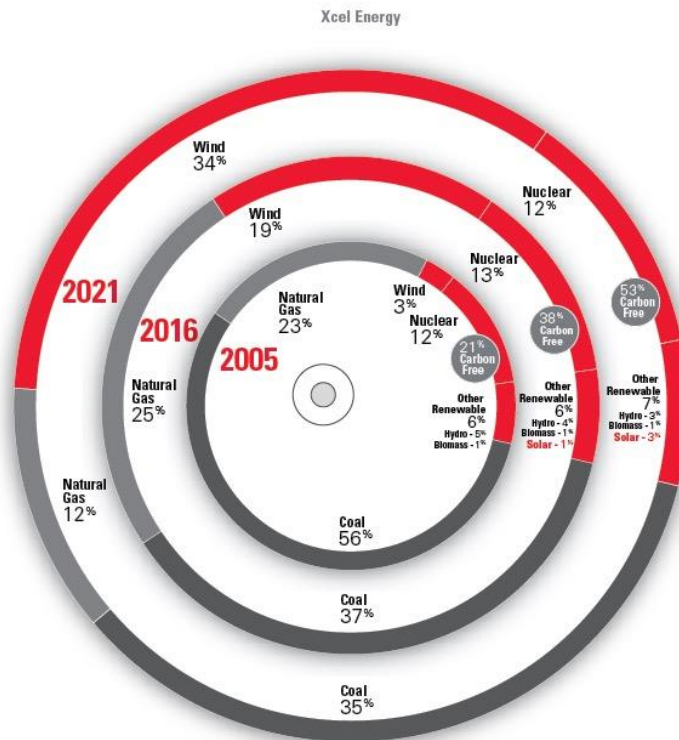


New Carbon Target:

60 Percent Reduction by 2030

The Clean Energy Transition

Our clean energy strategy is transforming the energy we provide customers. Since 2005, we have systematically shifted our reliance on coal-fueled generation, incorporating more wind power and cleaner natural gas. We anticipate a company-wide energy mix by 2021 that is at least 50 percent carbon free, assuming approval of our proposed renewable energy plans.



Over the next five years, we expect to invest approximately \$5.5 billion in clean energy projects. This includes capital spending on renewable energy and related transmission projects, as well as spending on our advanced grid intelligence and security initiative.

Carbon Policy and Regulation

We have managed significant federal policy uncertainty on carbon emissions for the past several years. In the most recent development, President Trump signed an Executive Order in March 2017, signaling his administration's plans to halt or significantly modify the EPA's Clean Power Plan that was intended to regulate carbon dioxide from the nation's existing power plants. EPA will now start a long, complicated process to withdraw the rule, which requires the same full rulemaking process, including detailed factual support for the rule repeal and public comment periods, required when promulgating a rule.

While the Clean Air Act's existing authorities are not optimal to regulate greenhouse gases, we think that in the short term having a federal climate rule in place under the Clean Air Act is in the best interest of our customers. A federal climate rule would displace some types of climate lawsuits that could cause unnecessary costs for customers and investors. A federal climate rule, if well designed, could also facilitate state-led processes to address carbon emissions while still respecting the states' strong role in their own energy policies.

Over the longer term, Xcel Energy has long held that federal legislation could create a better policy than the existing Clean Air Act authorities to regulate carbon emissions. Federal legislation, with input from each state, would better balance the cost and fairness issues inherent in climate policy and could address many of the issues in the Clean Air Act, such as the differentiated treatment of new and existing sources.

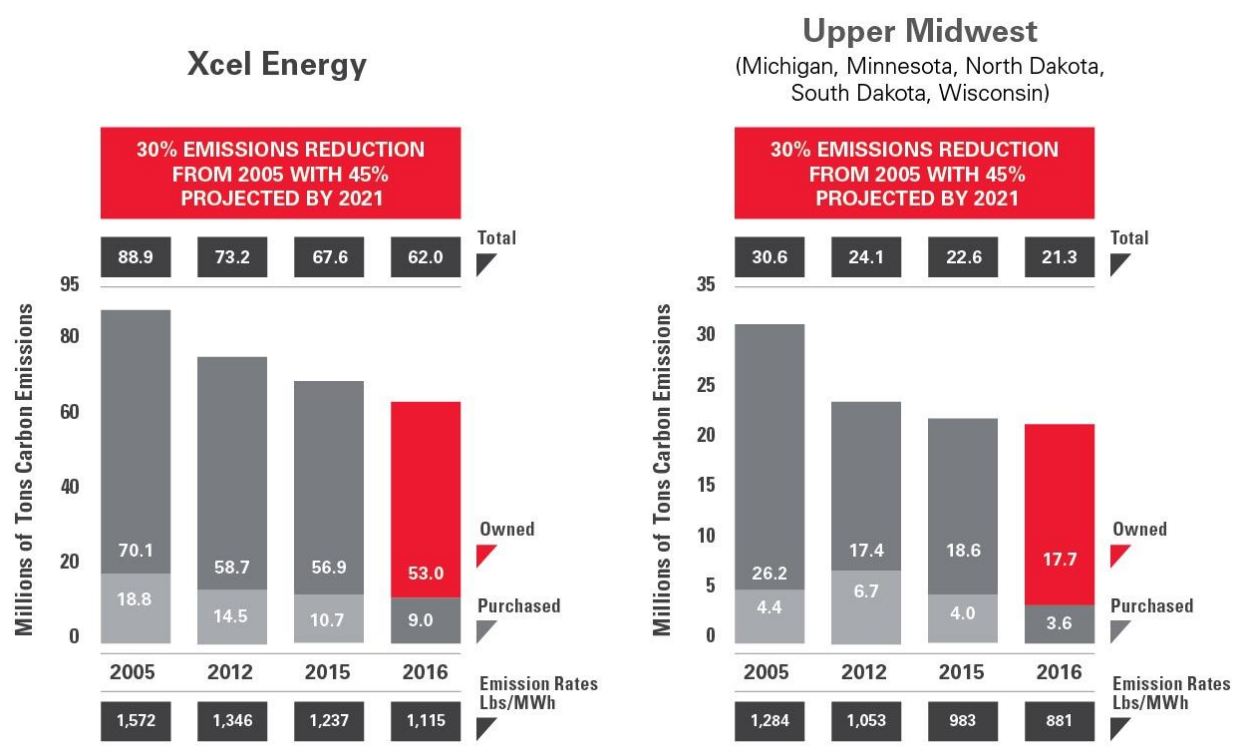
As we have long advocated on behalf of our customers, any legislated federal policy to regulate carbon emissions should:

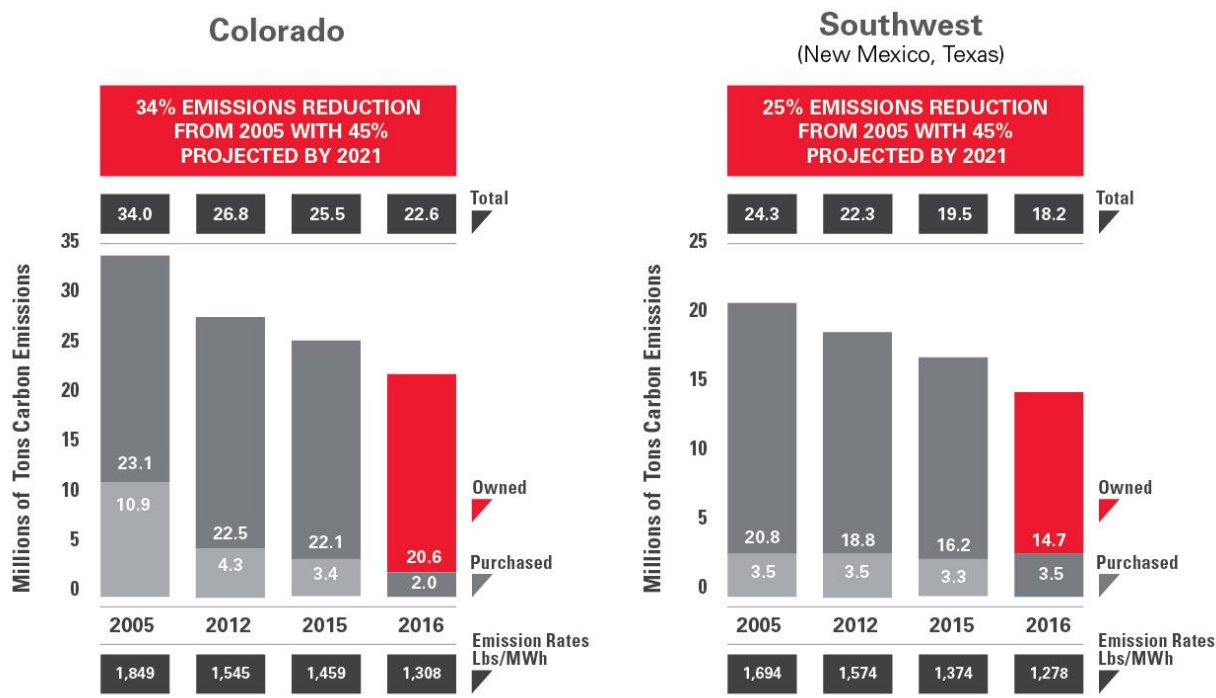
- Fairly recognize the emissions reductions that utilities have invested in
- Encourage development of technologies, such as advanced renewables, energy storage, carbon capture and sequestration, and next-generation nuclear technologies, to unlock the potential for ongoing significant reductions
- Supersede existing Clean Air Act authorities
- Be flexible to allow emissions reductions to be made most cost-effectively—cap and trade, carbon tax and clean energy standard frameworks all can offer this flexibility
- Above all, support the energy transition now underway without adding unnecessary costs

Regardless of future climate policy outcomes, our plans make economic and environmental sense. As always, we will work with our states, communities and customers to work toward their preferred energy and environmental outcomes. We intend to keep moving forward with this clean energy strategy. Given the importance of these issues to our company and customers, we will continue monitoring policy and regulatory proposals to address climate change in the energy sector.

Carbon Dioxide Emissions Reporting

Compared to 2005, Xcel Energy reduced carbon dioxide emissions from electric generation by 27 million tons per year in 2016, equivalent to removing five million cars from the road annually.





Xcel Energy's greenhouse gas emissions from 2005 to 2015 have been third-party verified and registered with The Climate Registry.

Methane Emissions

Our efforts to reduce greenhouse gas emissions also extend to managing methane emissions from our natural gas distribution system. Xcel Energy serves about two 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 very minimal methane emissions.

Methane emissions made up less than one percent of our total greenhouse gas emissions (517.2 million cubic feet or 273,578 short tons CO₂e) in 2016. While this is a very small portion of our total company-wide emissions, we work to minimize our methane emissions through cost-effective improvements to our natural gas system.

Some of Xcel Energy's methane emission reduction efforts include:

- Replacing the cast iron pipe and unprotected steel pipe on our system, originally installed 50 to 100 years ago. So far, we have completely replaced all 880 miles of cast iron pipe in Colorado and Minnesota and have nearly eliminated bare-steel pipe.
- Using pressure reductions and other methods to reduce methane emissions during pipeline maintenance and repairs.
- 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 reducing emissions at these facilities.

To support these efforts, we are voluntary members of several industry groups devoted to improving the natural gas system and reducing methane emissions. We have been a member of the EPA Natural Gas Star program since 2008, with a continued commitment to replace aging pipeline. As a participant in the Natural Gas STAR program, we have reduced our natural gas emissions by a total of 316 million cubic feet or 167,151 short tons CO₂e—equivalent to the carbon dioxide emissions of nearly 20,000 homes using electricity.

Xcel Energy also joined the EPA's Natural Gas STAR Methane Challenge Program in March of 2016 as a founding member to further our commitment to reduce methane emissions from our natural gas distribution system. Under the program, we expect to achieve emissions reductions in excess of 50 percent, as we work to minimize methane emissions from venting pipelines during scheduled construction starting in 2017.

In addition to these programs, we also work with the natural gas industry and environmental organizations to understand methane emissions from the delivery system. Xcel Energy is a member the Natural Gas Downstream Initiative, a collaborative effort with other major gas utilities, facilitated by MJ Bradley & Associates. The initiative is focused on opportunities that can substantially reduce methane emissions and support safe, reliable and cost-effective service. We also participate in research studies to help us fully understand the potential issues associated with providing our customers' energy service.

All of these programs support our proactive approach to operating and maintaining the natural gas system that benefits customers.

Our Facilities, Fleet and Material Management



Our Approach

Just as we are committed to protecting the environment as part of our utility operations—in the generation and delivery of energy—the same is true for other parts of our business where we can make a difference. This includes working to improve the overall efficiency of our extensive vehicle fleet and of the many office buildings and service centers that we occupy throughout our service territory, as well as with the materials we purchase, and ultimately, must dispose of once they are no longer useful. In all cases, we look for opportunities to manage our resources in ways that benefit the environment, while also reducing costs and providing other benefits.

Conservation at Xcel Energy Facilities

Xcel Energy owns or leases more than 150 office building and service centers throughout the eight states that we serve, and we strive to align our building management activities with our core value of protecting the environment. We also have the opportunity to set an example and “walk the talk” when it comes to 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 while conserving resources. Looking beyond efficiency, we have incorporated a number of environmentally safe 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.

In 2008, we proactively began managing our facilities to reduce environmental impact, and by the end of 2016, we accomplished the following through projects at our buildings and service centers:

- Saving more than eight million kilowatt hours, including 179,714 kilowatt hours for the year
- Conserving more than 170,100 therms of natural gas
- Reducing water usage by 4.7 million gallons, including 51,043 gallons for the year

Our energy management initiative in 2017 plans to continue working 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 and the company's 2017 capital budget to identify energy improvement opportunities to support.

LEED Certified Facilities

We continue to seek LEED (Leadership in Energy and Environmental Design) certification for our facilities. 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.

Xcel Energy currently has 15 facilities that are LEED certified throughout the eight states where we operate:

Building	Location	Certification
1800 Larimer	Denver, Colorado	LEED Platinum Certified
401 Nicollet Mall Headquarters	Minneapolis, Minnesota	LEED Silver Certified
Alamosa Service Center	Alamosa, Colorado	LEED Certified
Arvada Service Center	Arvada, Colorado	LEED Silver Certified
Ashland Service Center	Ashland, Wisconsin	LEED Silver Certified
Carlsbad Service Center	Carlsbad, New Mexico	LEED Certified
Faribault Service Center	Faribault, Minnesota	LEED Certified
Greeley Service Center	Greeley, Colorado	LEED Certified
Hugo Training Center	Hugo, Minnesota	LEED Silver Certified
Ironwood Service Center	Ironwood, Michigan	LEED Certified
Montrose Service Center	Montrose, Minnesota	LEED Certified
Maple Grove Fleet Building	Maple Grove, Minnesota	LEED Certified
Newport Service Center	Newport, Minnesota	LEED Certified
Red Wing Service Center	Red Wing, Minnesota	LEED Certified
St. Cloud Service Center	St. Cloud, Minnesota	LEED Certified

We have plans to register projects at the following facilities:

Building	Location	Pending LEED Registration
Amarillo Headquarters	Amarillo, Texas	Registered/Underway
SkyPark Headquarters	Eau Claire, Wisconsin	Five-year log of activity
Hudson Service Center	Hudson, Wisconsin	Registered/Underway
Phillips Service Center	Phillips, Wisconsin	Registered/Underway

Fleet Management

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 improved driver safety while also reducing idling and fuel consumption, wear and tear on vehicles, and emissions. In 2016, we estimate that the use of telematics saved approximately 175,000 gallons of fuel and more than \$500,000 in fuel costs.

Several year ago, Xcel Energy signed on to the Edison Electric Institute's Fleet Electrification Commitment by agreeing to spend at least 5 percent of the company's annual fleet capital budget on electric vehicles and associated charging. With the availability of vehicle models on the market today, we are now essentially replacing all sedans in our fleet scheduled for retirement with electric hybrid vehicles. Additionally, we are testing various trucks as the technology for medium- and heavy-duty EPTO vehicles matures—electric power take off vehicles use batteries to run the boom function of the vehicle only. We currently have about 30 electric vehicles in our fleet—about triple the number of vehicles we had in 2015.

Material Management

Xcel Energy actively works to recycle or reuse materials that the company no longer uses. Recycling simultaneously diverts waste material from landfills while conserving natural resources, as used materials become raw materials for the production of new products.

We began a major effort in 2016 to recycle "cobra head" style streetlights after launching a five-year project to replace them with new energy-efficient LED fixtures throughout our service territory. We are investing in the new technology to support the energy goals of the communities we serve, and to gain operational efficiencies that reduce costs. The new LED fixtures use about 40 to 60 percent 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. In 2016, we recycled more than 270 tons of material from lights that were removed.

In another unique recycling effort, we turn waste polyethylene plastic pipe into a versatile plastic lumber product. Since 2009, we have collected excess waste pipe from natural gas construction projects and ship it to a recycling facility, where the plastic pipe is transformed into the lumber. In 2016, about 53 tons of pipe were used for lumber.

As an electricity provider, wood poles make up a large part of our business and a significant waste stream. Each year, we beneficially reuse about 6,500 wood poles. In Colorado, about 90 percent of the wood poles that cannot be returned to stock or refurbished for reuse are donated to the Wild Animal Sanctuary in Keenesburg, Colorado. The organization uses them for fencing, platforms and other structures on its 400-acre preserve for lions, tigers, bears and other wild creatures. The partnership with the Wild Animal Sanctuary is unique because of the volume of poles the organization can accept.

Protecting Air Quality

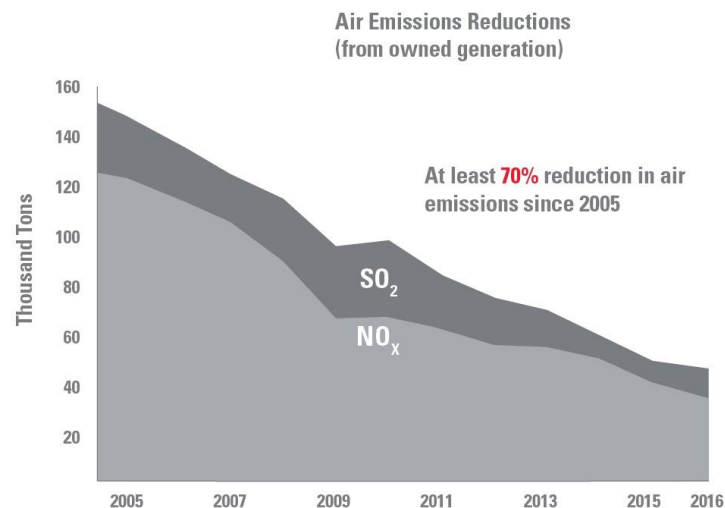
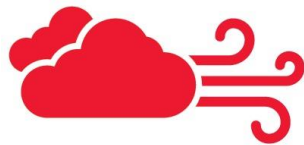


Our Approach

We are committed to improving air quality and strive for our generating plants to meet or surpass all clean air requirements. We continually evaluate our operations to look for proactive, cost-effective opportunities to reduce emissions. As part of our clean energy strategy, we have undertaken comprehensive emission-reduction projects, such as Clean Air Clean Jobs in Colorado and the Minnesota Metro Emissions Reduction Program, which have transitioned our conventional generating fleet for the future and significantly reduced emissions. Both projects were proposed and designed with the participation of local policy makers, regulators and other stakeholders to help our company and the states where we operate meet current and future environmental requirements.

We also are increasing the use of emissions-free wind and solar energy and are implementing plans to own new wind farms that offer our customers low-cost clean energy.

We have installed state-of-the-art emission controls on some coal plants, retired other coal plants and replaced some with cleaner, more flexible natural gas. With half the emissions of coal, natural gas-fueled plants can efficiently ramp up or down to respond to variable wind and solar energy, which is a definite advantage as we increase the renewable resources on our system. This provides our customers with cleaner and more efficient energy while maintaining reliability and affordability.



Clean Air Clean Jobs Comes to a Close

With construction complete, Xcel Energy's Clean Air Clean Jobs project has essentially wrapped up and is producing benefits for customers. All that remains in the seven-year effort is the official retirement of two coal units. Valmont Unit 5 in Boulder ceased coal operations in March of 2017 and Cherokee Unit 4 in Denver will switch from coal to natural gas by the end of 2017.

Xcel Energy worked with a coalition of policy makers and legislators to support the passage of Colorado's Clean Air-Clean Jobs Act in 2010. Under the legislation, we were directed to propose and implement a comprehensive plan for reducing emissions of nitrogen oxides by at least 80 percent from 900 megawatts of coal-fueled generation.

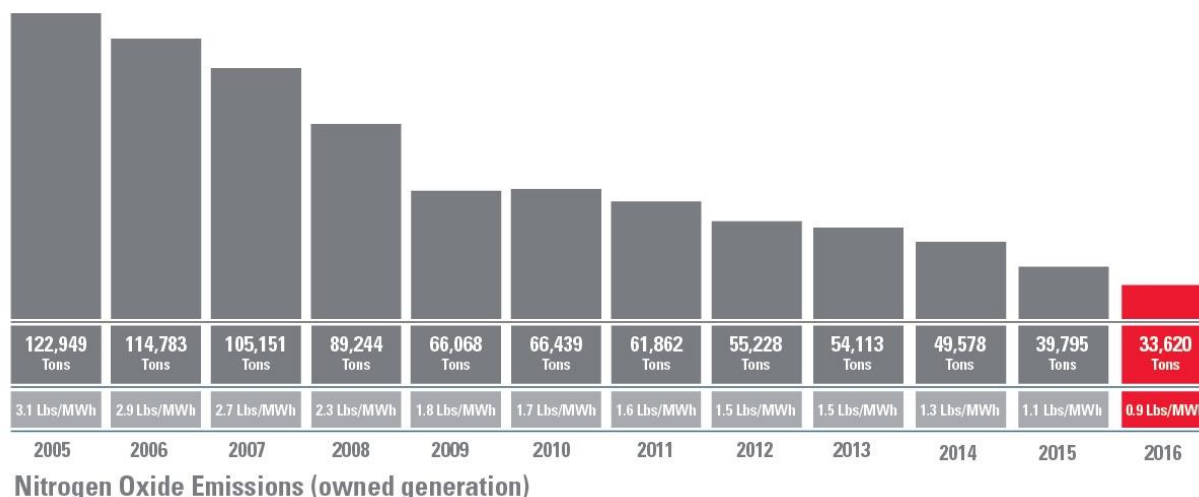
After extensive public review, the Colorado Public Utilities Commission approved the project and it became part of Colorado's State Implementation Plan to address Regional Haze. It is also anticipated to help both the state and Xcel Energy meet future environmental requirements. The \$1 billion project is estimated to have an average-annual rate impact for customers of approximately 2 percent over a 10-year period.

Under the project, we built a highly efficient natural gas combined-cycle unit at Cherokee Generating Station that began operating in 2015. The new 570-megawatt plant replaces power from six retired coal units, totaling 700 megawatts, with the final 352-megawatt unit at Cherokee plant switching to natural gas. Additionally, modern emission controls were installed at two coal plants, Pawnee and Hayden generating stations.

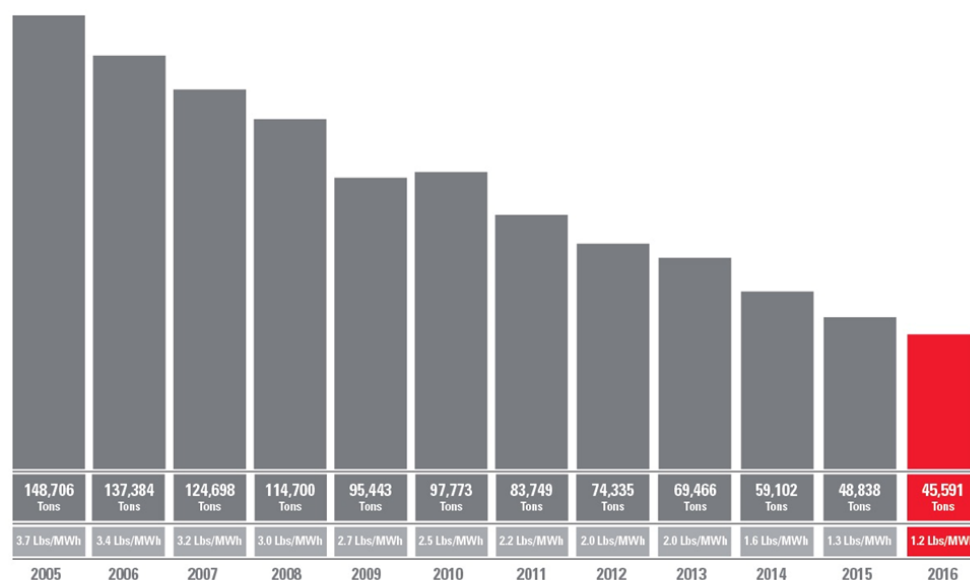
The entire project was completed on time and under budget, with emission savings that are greater than expected. Both sulfur dioxide and emissions of nitrogen oxides are down 90 percent from the affected units, compared to original projections of 83 percent and 86 percent, respectively. Mercury emissions are down 90 percent, compared to original projections of 82 percent.

Air Emission Reporting and Reductions

Since 2005, Xcel Energy has reduced emissions of nitrogen oxides by 73 percent company-wide from the generating plants it owns.

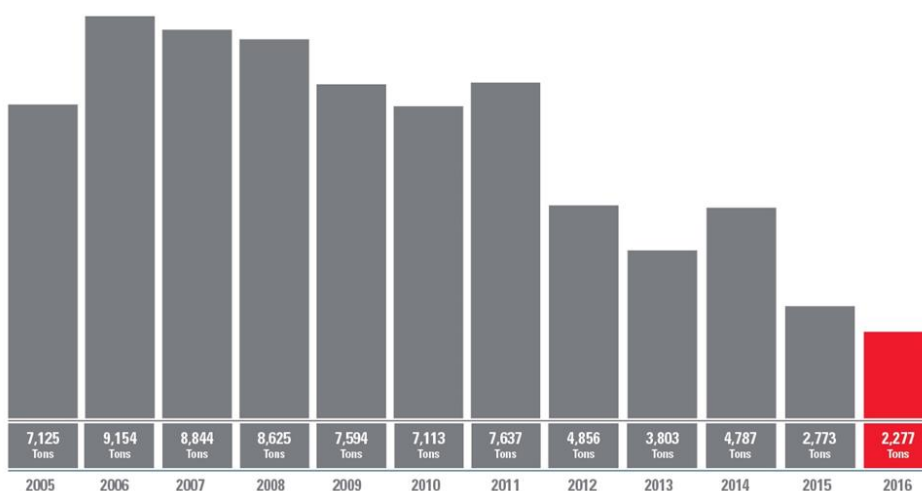


Sulfur dioxide emissions are down 70 percent company-wide since 2005 from Xcel Energy's owned generating plants



Sulfur Dioxide Emissions (owned generation)

Particulate matter emissions are down 68percent company-wide since 2005 from Xcel Energy's owned generating plants.



Particulate Matter Emissions (owned generation)

Air-related Regulatory Developments

Regional Haze and Visibility

The Clean Air Act requires EPA and states to routinely evaluate impacts to visibility at national parks and wilderness areas through regional haze. These evaluations may require our facilities to install additional emission controls to reduce visibility impacts of sulfur dioxide, nitrogen oxides and particulate matter emissions.

In Minnesota and Colorado, regional haze state implementation plans are approved and include emission controls and other measures put in place at our Sherco Generating Plant and through Clean Air Clean Jobs. However, issues with regional haze requirements in Texas remain unresolved as EPA has proposed federal implementation plans. These plans are under review by EPA and Xcel Energy is working to secure an outcome that is consistent with the regional haze regulation and cost effective for our customers and other stakeholders.

In January 2016, EPA issued its final regional haze rule requiring reduced emissions at Texas power plants, with the goal of improving visibility in Guadalupe Mountains National Park in southwest Texas and Big Bend National Park in southern Texas. Xcel Energy's Tolk Generating Station near Muleshoe, Texas, is among the plants for which EPA has prescribed new emissions controls through the rule. Under the final rule, Tolk is required to meet a new emissions limit for sulfur dioxide by February of 2021, based on the expected performance of dry scrubbers. Installing scrubbers on the plant is estimated to cost approximately \$400 to \$600 million.

Because this rule exposes our customers to significantly higher energy costs while producing very little, if any, improvement to visibility in national parks, we filed an appeal, along with the state of Texas and others. The rule was stayed, pending the outcome of litigation, and in December 2016, EPA requested that the Fifth Circuit Court of Appeals remand the rule for further consideration. We, along with others, requested that the rule be vacated in response to EPA's request. In April 2017, the court decided to hold the litigation in abeyance and remand the rule to EPA for further consideration and review.

In addition, EPA has proposed a rule to satisfy Best Available Retrofit Technology requirements to address visibility at Class I protected areas in Texas and neighboring states. The proposal seeks to require the installation of dry scrubbers to reduce sulfur dioxide emissions from Harrington Units 1 and 2 in Amarillo, Texas at a cost of approximately \$300 to \$400 million. Again, we have concerns with the requirement because it imposes significant costs to our customers while producing little, if any, improvement to visibility. We plan to file comments opposing the rule, which EPA must finalize by September of 2017.

Ozone

Ozone, commonly referred to as smog, is formed from the reaction of nitrogen oxides and volatile organic compounds in the presence of sunlight. EPA finalized a new ozone standard of 70 parts per billion (ppb) in 2015. In early 2017, EPA signaled that it may reconsider the standard. Any changes to the standard will require a notice-and-comment rulemaking, which could take up to two years.

All parts of our service territory in the Upper Midwest and Southwest are in attainment and will likely stay in attainment with the 70 ppb standard. The areas we serve along Colorado's Front Range are already in non-attainment for ozone under earlier, less-stringent standards, and will likely go further into non-attainment if the more stringent standard remains in place.

All of our coal units and many of our combined-cycle natural gas units are controlled for nitrogen oxides through pre-combustion controls, post-combustion controls or both. Any new requirements on our Colorado plants would likely occur in the early 2020s.

We will continue to monitor the situation and work with our states on meeting any revised or current standards.

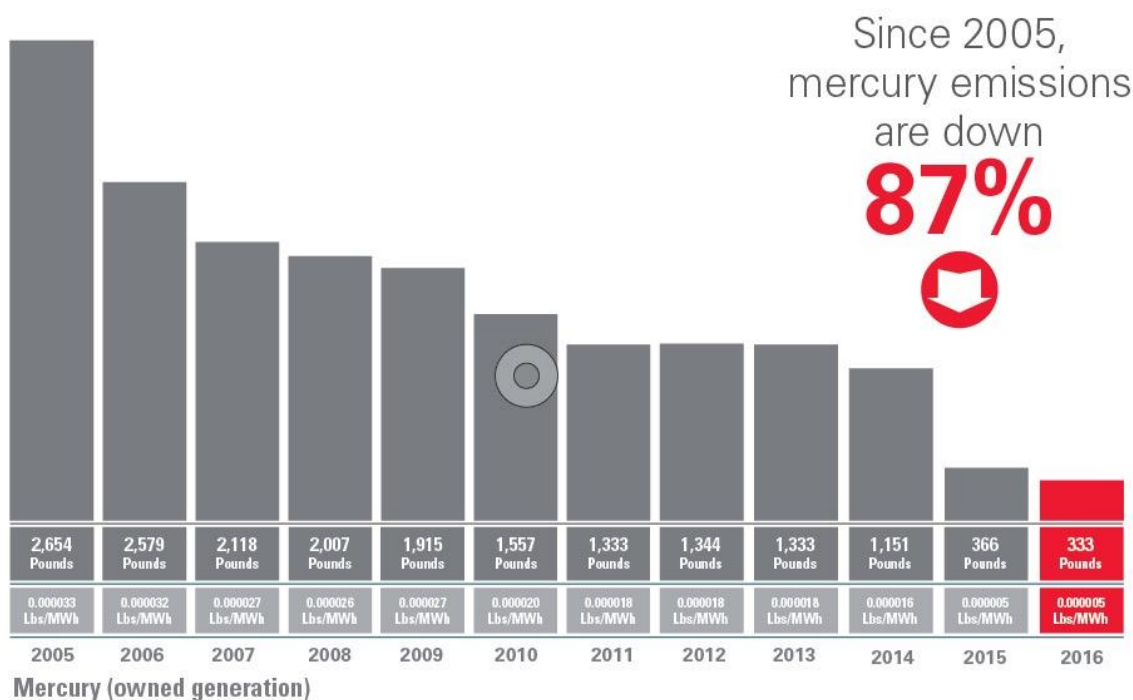
Mercury and Other Hazardous Substances



Our Approach

Through our proactive clean energy strategy, we are retiring aging coal units and replacing them with wind and solar energy and cleaner natural gas plants. As a result, releases of mercury and other hazardous substances are down, along with carbon emissions and other environmental impacts from our operations.

In addition, we have worked with state and federal regulators for years to monitor, regulate and reduce power plant mercury emissions. Our company was one of the first in the country to install continuous emission monitoring systems for mercury at several power plants and eventually install controls.



We annually report these emissions through EPA's Toxic Release Inventory program, which shows that overall all of our releases are down 25 percent compared to 2005 levels.

Mercury and Air Toxics

EPA's Mercury and Air Toxics Standards (MATS) are the first national emissions standards for mercury and other hazardous air pollutants from coal and oil-fired generating units. Under MATS, generating units greater than 25 megawatts must meet emission limits. Xcel Energy is well positioned for MATS compliance.

Specifically, MATS applies to mercury, acid gases (hydrochloric acid) and non-mercury metals, such as arsenic, beryllium and lead. Here are ways we have met the standards in all our operating regions:

- Our Clean Air Clean Jobs project in Colorado is eliminating or reducing emissions as we retire aging coal units. Plus, the remaining coal units on our Colorado system are equipped with controls that meet all MATS emission requirements.
- We have installed activated carbon controls on the units at our Harrington and Tolk plants in Texas with the goal of reducing mercury emissions by 90 percent.
- We currently use activated carbon injection to control mercury emissions at our Sherco and Allen S. King plants in Minnesota, which were required by state statute. In 2015, we complied with the MATS by ceasing remaining coal operations at Bay Front Unit 5 in Wisconsin and also at Black Dog Units 3 and 4 in Minnesota.

After MATS took effect for the industry, the Supreme Court decided in June 2015 that EPA must consider cost in its justification for the standards. The rules remained in effect while EPA worked on their cost analysis. In April of 2016, EPA issued its supplemental finding that it is appropriate and necessary to regulate hazardous air pollutants from coal- and oil-fueled generating units. While others have filed legal challenges to the supplemental filing, Xcel Energy is not challenging it. We will continue to monitor developments in relation to this standard. In spring of 2017, the court put this litigation on hold while EPA evaluates what, if any, changes to make to it.

Community Right to Know and the Toxic Release Inventory Program

For three decades, EPA has administered the Emergency Planning and Community-Right-to-Know Act or EPCRA. 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. We report to EPA annually our releases, which are the result of using coal, oil and refuse-derived fuel (processed municipal solid waste) to produce electricity. These fuels contain trace amounts of TRI reportable substances, including barium, chromium, copper, lead, manganese, mercury, nickel and zinc. When fuels are combusted, they release these substances. We report releases by facility, and a facility's releases may change slightly from year-to-year since they are based on the amount of electricity produced and the associated fuel that is consumed. Releases also may vary because of minor differences in fuel composition and mineralogy depending on the mine or other fuel source.

The majority of our TRI releases are controlled at our facilities as part of the combustion residuals or coal ash that we capture and prevent from entering the air. We capture about 80 to 90 percent of these substances and safely dispose of them in managed landfills, along with the coal ash where they are

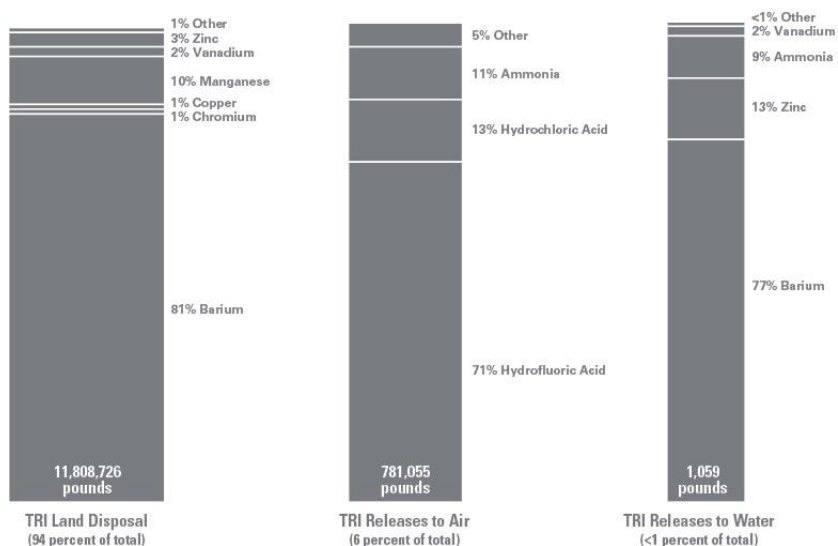
contained. Some of the ash we capture is reused for beneficial purposes, such as concrete products, roadbed material and other encapsulated uses.

TRI releases disposed in managed landfills have generally increased because the pollutants are captured by new air emission controls instead of released to the atmosphere at some of our coal-fueled power plants and as a result of changing regulatory requirements. In total since we began TRI reporting, we have reduced TRI releases as we retire aging coal plants and repower them with natural gas or replace the energy with wind and solar power.

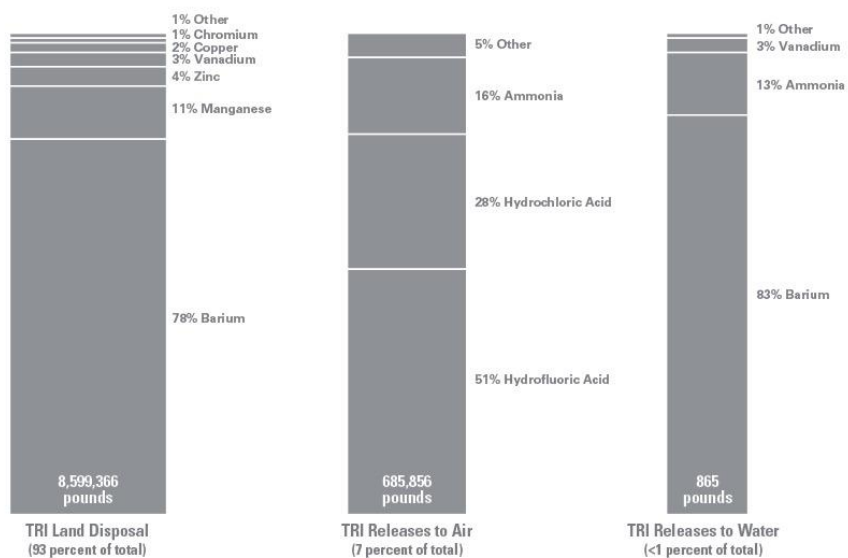
Since 2005, our TRI releases have been reduced by 25 percent.

2015 TRI Releases

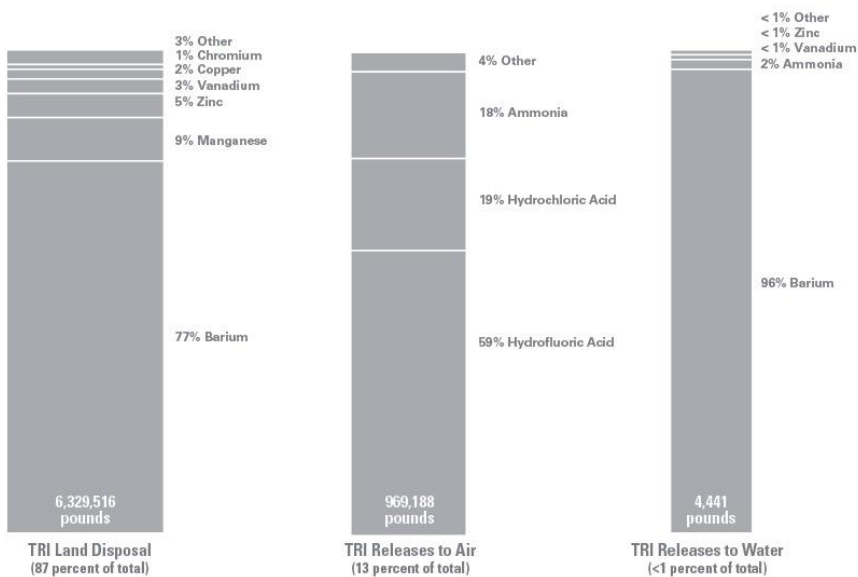
(most current reporting year)



2014 TRI Releases



2013 TRI Releases



Releases provided here are from 12 generating plants in locations throughout our service territory. For individual plant information visit the EPA's TRI Explorer website or contact corporateresponsibility@xcelenergy.com.

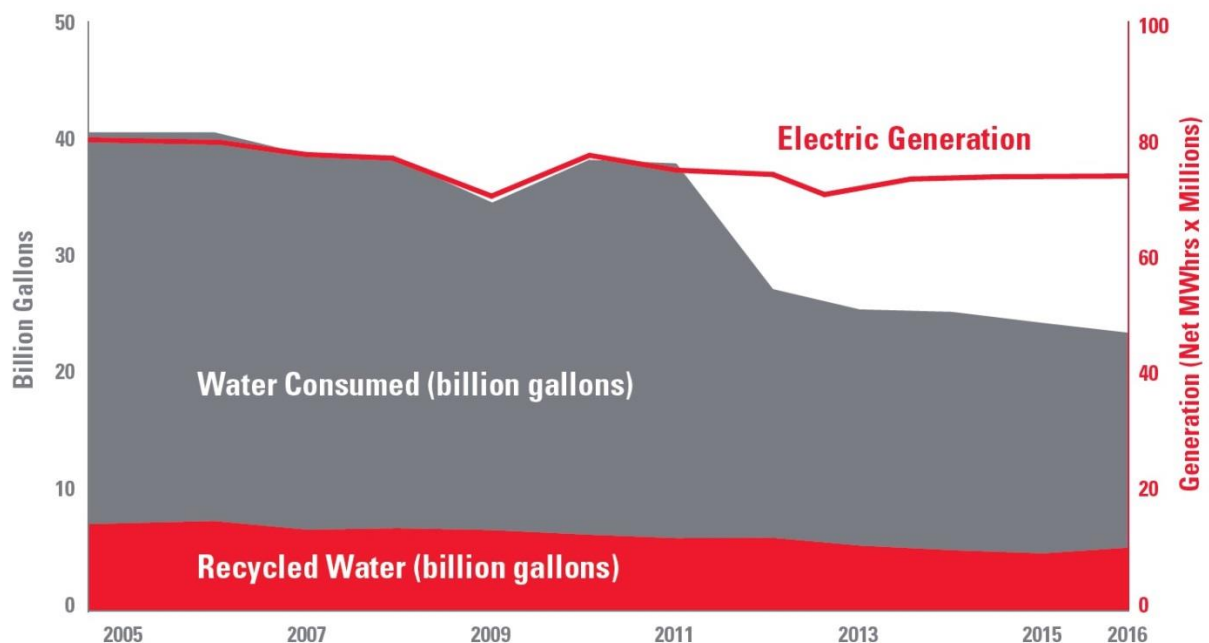
Water Management



Our Approach

By far, the majority of Xcel Energy's water use is for generating electricity, compared to water used in office buildings. A reliable water source is essential to producing power at our hydroelectric and thermal generating plants. We carefully manage water resources by seeking responsible and secure supply options, working to conserve water where we can and ensuring we maintain water quality, especially when water is used and then returned to the environment. As we increase the use of wind and solar generation, we save water as these energy sources require no water to produce power.

Since 2005, we have reduced water consumption associated with electric generation more than **35%**



Water Use

Xcel Energy uses water to generate electricity. At our hydroelectric plants, rushing water is the fuel that operates plant turbines to produce power. But by far, most of our water use occurs at thermal generating plants where water is used to produce steam for generating electricity and also for cooling equipment.

Cooling makes up more than 95 percent of a thermal power plant's water needs, depending on plant operations. Thermal plants generally use one of two cooling options that are uniquely designed for optimal heat transfer to water. This allows the plants to operate at maximum efficiency and generate the most electricity possible from the fuel source.

Open-loop Cooling

For open-loop cooling, water is taken from a river, lake or reservoir and used to cool and condense the steam that drives turbines to produce electricity. Water is then returned to the river, lake or reservoir in accordance with all state and federal permits or requirements and in a condition that protects water quality for human use and the environment. Nearly all of Xcel Energy's thermal power plants in the Upper Midwest and one plant in Colorado (Valmont Generating Station) use open-loop cooling, also referred to as once-through cooling.

Closed-loop Cooling

With closed-loop cooling, water runs through cooling towers to cool and condense the steam used to drive turbines to produce electricity. Cooling towers require relatively low water volumes to operate efficiently. They operate in a way that minimizes fresh water withdrawals by reusing water multiple times in the cooling water system and providing reuse water for other plant operations. Nearly all of Xcel Energy's thermal power plants in Colorado, Texas and New Mexico and one plant in Minnesota (Sherco Generating Station) use closed-loop cooling. A portion of the water in closed-loop cooling systems may be returned to the river, lake or reservoir in accordance with all state and federal permits or requirements. Water may also be stored in evaporation ponds.

Several advanced, closed-loop cooling technologies are now available that may be built into new thermal plants for reducing water use. While these systems require less water for cooling equipment, they may be less efficient for producing electricity and are best incorporated into facilities located in areas with extreme water scarcity that warrant the use of more expensive technology.

Hybrid Cooling

Both water and air are used for hybrid cooling. Air cooling reduces the need for water when ambient air temperature is sufficient to support the necessary cooling, but uses more water during other times of the year when heat transfer to air is inefficient. Electric production with hybrid cooling requires more fuel and produces less electricity than water cooling because of the less efficient steam cycle and additional electric load required by cooling fans. Only Unit 3 at Xcel Energy's Comanche Generating Station in Colorado uses hybrid cooling.

Dry cooling

Air cooling is used to condense steam. In addition to being expensive to construct, dry cooling uses more fuel and produces less electricity than water cooling, due to a less efficient steam cycle and additional electric load required by cooling fans. Additionally, heat transfer limitations during some months may limit plant generation capacity, potentially requiring additional power purchases to support system demands. Xcel Energy does not currently operate thermal plants that use dry cooling.

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—water is acquired for our thermal and hydroelectric plants through water rights and other agreements. 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; and 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 have pursued an integrated water supply portfolio strategy, including owned or self-supplied water rights, reservoir storage, groundwater rights and a number of other supplies, including municipal and recycled water supplies. Our portfolio 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.

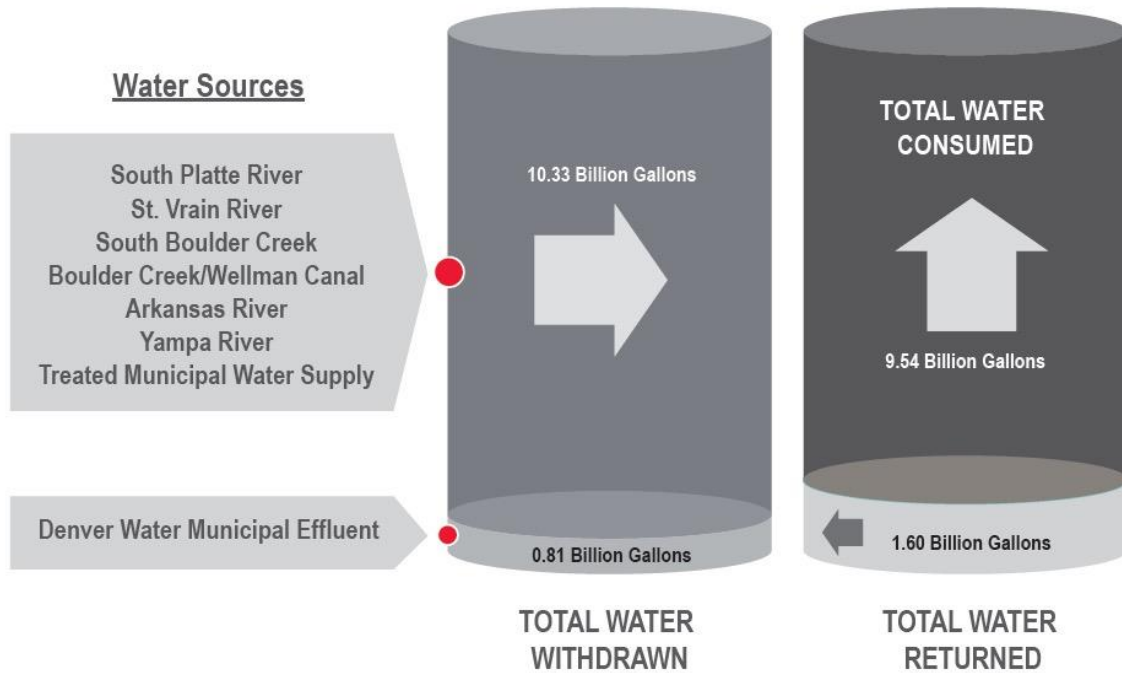
Xcel Energy is a Tier 1 water supplier, which means we own water supplies dedicated for our own use. In Colorado, our owned water supplies or rights are available depending on regional water supply conditions in accordance with Colorado's prior appropriation system.

Xcel Energy and other Tier 1 suppliers have taken concrete steps to increase resiliency of the water supply system after the recent historic, multi-year drought in the West, which identified weaknesses. We expended significant resources to address these issues and improve our water supply and the resiliency of our systems. The Tier 1 suppliers that we do business with 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.

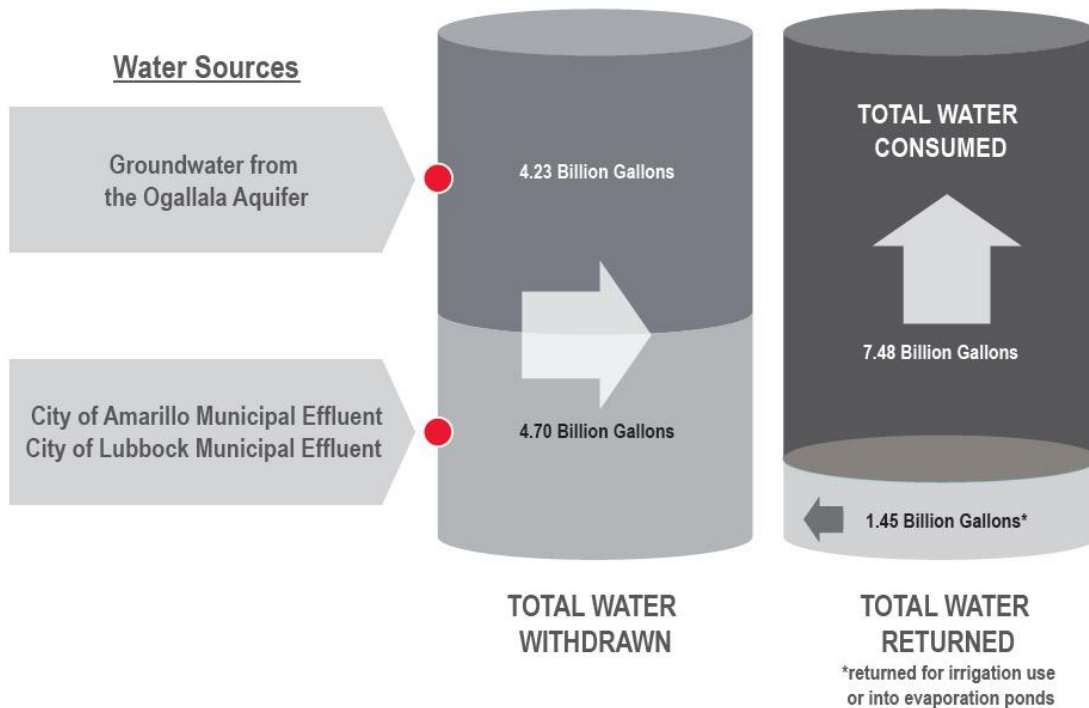
Finally, Xcel Energy has pursued recycled water where available and feasible, which minimizes the competition between water needs for power generation and needs for environmental, recreational, municipal or other industrial uses. Recycled water use has the added benefit of increasing the reliability of our water supply portfolio because it is virtually drought-proof.

According to the Colorado Division of Water Resources Cumulative Yearly Statistics 1996-2008, thermoelectric power generation makes up less than 0.5 percent of the state's water usage, with agriculture making up 86 percent of usage and the remainder going to meet municipal, recreational and other industrial needs. We anticipate the western and southwestern portions of our service area will experience drought conditions in the future. We continue to work with water boards, management organizations, farmers and ranchers, utilities and local communities to develop innovative partnerships and agreements to help meet different water needs during dry times.

2016 Colorado Water Supply and Consumption



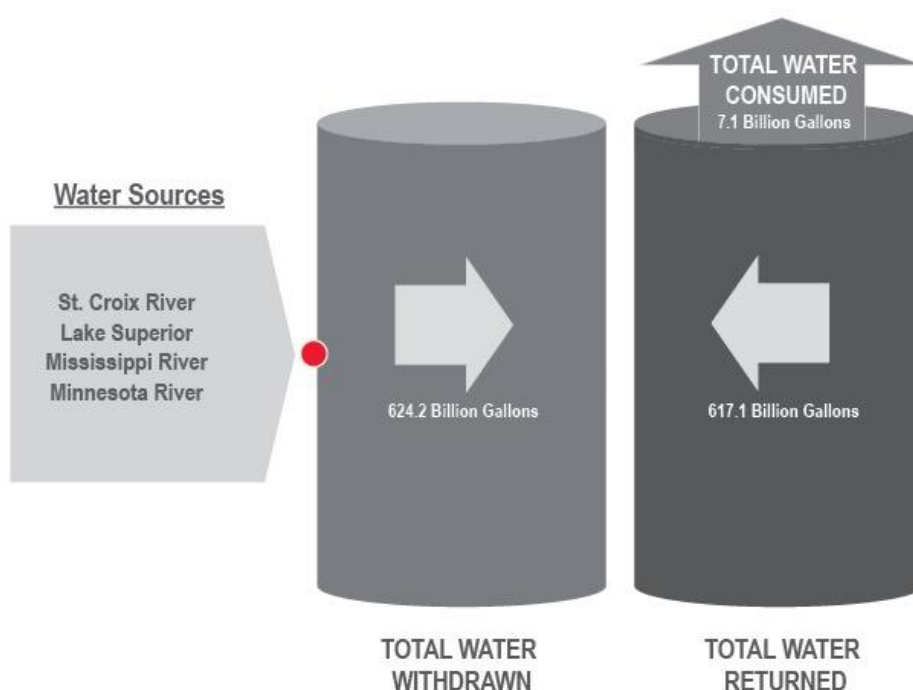
2016 Southwest Water Supply and Consumption



Thermal Operations in the Upper Midwest

In Minnesota, Wisconsin and other northern states where water is more abundant, our thermal plants are permitted to use and return water to nearby rivers and other waterways. We also take a strategic approach to water use in these areas by monitoring weather patterns and using meteorological forecasting models to predict and prepare for an adequate water supply during times when unusually dry conditions are likely to persist. During drought years, we evaluate the use of alternative cooling options for each facility and implement prudent temporary measures to provide supplemental thermal cooling. In time of energy emergencies, our permits have provisions that allow some plant operating flexibility, along with additional environmental monitoring requirements to ensure protection of aquatic wildlife and biota.

2016 Upper Midwest Water Supply and Consumption



Hydroelectric Operations

Xcel Energy operates 26 hydroelectric plants, including six in Colorado, one in Minnesota and 19 in Wisconsin and Michigan. These plants are built on rivers and other waterways where rushing water can flow through turbine generators to produce electricity. The Cabin Creek Generating Station near Georgetown, Colorado, is a pumped-storage hydroelectric plant and is unique to our system. Water is pumped from a lower reservoir to an upper reservoir where the water is released through a tunnel to turn turbine generators.

Hydroelectric plants do not consume water in the generation process even though water does naturally evaporate 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.

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

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

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 the aquatic environment. It is important that we return the water we use to rivers and waterways in a usable condition and in compliance with stringent regulatory requirements.

Water Conservation

Our water consumption associated with power generation has decreased approximately 35 percent from 2005 to 2016. We look for cost-effective opportunities to conserve water and have developed a number of innovative efforts to reduce water usage at our plants, especially the use of fresh or high quality water.

- We use water as efficiently as possible in our operations. Water is circulated through the cooling process at our closed-loop plants multiple times—up to 25 times at some plants. When it is no longer suitable for cooling, water is used in coal-ash handling processes, with emission controls, for site irrigation and other uses.
- In Texas, we use recycled municipal effluent at our Harrington, Nichols and Jones facilities, and our Tolk Plant uses effluent from Plant X for a portion of its water supply.
- Recycled municipal water from metro Denver is used for cooling water at the Cherokee Plant. Overall, this recycled water accounts for approximately 50 percent of Cherokee's water consumption and about 10 percent of our total water consumption in Colorado.
- We have reduced water use 30 to 50 percent for Comanche Unit 3 by incorporating a low-water use system with hybrid cooling technology that provides additional air cooling capability.

- Once the Clean Air Clean Jobs project is complete with the retirement of about 700 megawatts of coal-fueled generation, we anticipate decreasing overall system water usage in Colorado by about 15 percent. Since 2010, we have reduced total consumptive water use by 14 percent in Colorado.
- Diversifying our energy supply can help reduce water usage. In 2016, 20 percent of our energy supply came from wind and solar energy, which does not require water.
- When customers save energy through our energy efficiency programs, they also help save water.

Water Partnerships, Innovative Agreements and Stakeholder Efforts

Water is a fundamental resource that has become more stressed as communities grow and as weather patterns fluctuate. In addition to people, water affects habitat and wildlife. Through engagement in the communities we serve—including participation on water boards, in management organizations and in regulatory forums—we are finding solutions and forming partnerships. We also have supported local projects and community initiatives through the Xcel Energy Foundation.

- Xcel Energy personnel participate regularly in stakeholder organizations for the water basins in which the company has interests. Our staff serves on boards and as officers overseeing eight ditch companies in Colorado where the company owns significant water rights. Conflicts involving water are often identified and resolved through these organizations and boards.
- 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 and surrounding suburbs, we have an agreement to “relax” a portion of our water requirements for Shoshone during dry years. In 2013, Colorado experienced below-average moisture, which marked the first year that we implemented this agreement, originally established with Denver Water in 2006. Rather than maintaining 1,250 cubic feet per second in the river to run Shoshone, we reduced our use to 704 cfs and allowed Denver Water and other Colorado Front Range water providers to store river flows above this amount for municipal use.
- We have an agreement with the city of Longmont in northern Colorado that helps preserve high quality water for municipal use. We exchange annually up to 5,000 acre-feet of high quality water acquired under our water rights with the city’s lowest quality water or effluent. The city routinely discharges its effluent to the South Platte River where we take it to use at our power plants, including Fort St. Vrain, Cherokee and Pawnee plants. We have a similar agreement with the city of Westminster to provide high quality water from Clear Lake in exchange for municipal effluent to use at our plants.
- In dry years Colorado farmers typically lack the full water supply needed for growing 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.
- The Xcel Energy Foundation funds a statewide initiative of the Colorado Foundation for Water Education to help raise awareness about water as a limited and valuable resource. By connecting Coloradans with information and activities focused on water, including library and museum exhibits, speakers and video presentations and a water website, the organization strives to motivate residents to become more proactive participants in the state’s water future and increase support for better managing and protecting Colorado’s water and waterways. In addition to funding, Xcel Energy water resources staff volunteer with and support this effort.

- 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 Minnesota. The coalition focuses on energy, water and waste issues. In the water area, the coalition is working on “greening grey infrastructure” or promoting infrastructure and practices designed to mimic the natural water cycle.

Regulatory Developments

Waters of the United States (WOTUS)

In June of 2015, EPA and U.S. Army Corps of Engineers finalized the new definition of what water bodies and topographic features are considered WOTUS. This definition broadened the scope of waters subject to federal jurisdiction under the Clean Water Act. The rule defined seven categories of waters that are jurisdictional, several of which are very broad and can allow case-by-case determinations. Under this new definition, more utility projects are subject to federal Clean Water Act jurisdiction. Xcel Energy, along with other industries and states, raised concerns about the scope of the rule throughout the rulemaking process. Multiple states, including most of the states we serve, are suing EPA on grounds that the final rule impinges on state rights, exceeds its authority and is unconstitutional. In October 2015, an appellate court had stayed the rule, pending the outcome of this ongoing litigation.

President Trump issued an Executive Order in early 2017 directing EPA and U.S. Army Corps of Engineers to conduct a comprehensive review and revise the WOTUS rule. Any new or revised rule will require public comments before it can be issued.

Water Quality

EPA periodically evaluates wastewater sources and establishes federal effluent limits based on technology improvements for various types of dischargers and updates its technology based Effluent Limitations Guidelines (ELG) under the Clean Water Act. EPA published its final, revised ELG for the steam electric power generating industry in November 2015. The final rule applies to power plants that use coal, natural gas, oil or nuclear materials as fuel and discharge treated effluent to surface waters, as well as to impoundments at utility-owned landfills that receive combustion residuals. Since the ELG is implemented in individual facility National Pollution Discharge Elimination System (NPDES) permits, the impact to Xcel Energy facilities is not immediate. As permits are renewed the new ELG will be implemented, if appropriate. Facilities will be required to comply no sooner than November 1, 2018 but no later than December 31, 2023. For Xcel Energy, we have three impacted facilities: Sherco, King and Comanche plants. We are currently evaluating compliance technologies for these facilities.

EPA issued a notice stating that it is reconsidering the rule and postponing the rule’s compliance dates. We will continue to monitor this situation.

Cooling Water Intake

EPA has developed rules for cooling water intake structures under section 316(b) of the Clean Water Act, which requires that the location, design, construction and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact. Under the final rule published in August 2014, existing facilities that withdraw more than two million gallons per day from waters of the United States and use at least 25 percent for cooling purposes are required to implement measures to reduce impacts to aquatic organisms. Xcel Energy is undertaking impingement and

entrainment studies at its qualifying facilities. The results of these studies will determine the extent of modifications needed. Xcel Energy is currently evaluating the most appropriate method to demonstrate that closed-cycle cooling is in use at these facilities.

Waste Management



Our Approach

Xcel Energy has high standards for managing waste from our operations. In keeping with our company's core value to protect the environment, we have an excellent record in meeting and surpassing the rules that apply to how our waste is managed. When possible, we seek innovative solutions and opportunities to reduce, reuse and recycle these materials.

Our primary waste streams come from producing and delivering energy, including coal ash that comes from using coal to generate electricity and the materials and equipment associated with the maintenance and repair of our transmission and distribution systems, as well as our natural gas system.

Coal Ash Management

Coal-fueled power plants produce a number of coal combustion residuals or byproducts commonly referred to as coal ash. In 2016, our generating plants consumed about 24.6 million tons of coal, supplied from mines in Colorado and the Powder River Basin in Wyoming, and produced an estimated 1.9 million tons of coal ash.



Coal ash produced at Xcel Energy power plants is down **28%** since 2004

We reused approximately 24 percent of the ash our plants produced in 2016. Throughout our system, we try to recycle coal ash whenever appropriate for beneficial use, such as in concrete products, roadbed material and engineered-fill material. At our Texas coal-fueled plants, 100 percent of the ash is beneficially used replacing products that would normally be generated from natural resources. 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.

Ash that is not reused is properly disposed either in company- or third-party owned and operated landfill sites. More detailed information on our coal ash management practices is available on XcelEnergy.com.

In December 2016, we closed three small, inactive coal ash impoundments at the Black Dog Generating Plant in Burnsville, Minnesota, after the plant ceased coal operations in April 2015. We removed approximately 31,000 cubic yards of ash and other material and replaced it with clean soils to fill the depression. In addition, while doing work on impoundments at the Rocky Mountain Energy Center in Keenesburg, Colorado, we removed 63,723 tons of sediment and dredged solids so that we could reline existing impoundments.

Coal Ash Summary (estimated in tons)

	2014		2015		2016	
	Produced	Reused	Produced	Reused	Produced	Reused
Colorado	874,062	290,353	955,489	144,771	934,063	127,657
Southwest	335,074	335,074	280,710	280,710	274,785	274,785
Upper Midwest	886,106	186,428	770,347	155,962	699,401	55,982
TOTAL	2,095,242	811,855	2,006,546	581,443	1,908,249	458,424

New Rule for Managing and Disposing Coal Ash

The U.S Environmental Protection Agency's final rule for coal combustion residuals became effective in October 2015. The new rule 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 in the rule is exempted. We believe Xcel Energy's facilities are well positioned to comply with the new rule without significant impact to operations and cost. A number of parties, including industry and nongovernmental organizations, are challenging the rule. We will continue to monitor the outcome of the litigation, which may result in modifications.

In addition, in December 2016, the Water Infrastructure Improvements for the Nation Act was signed into law, which includes provisions that allow the coal combustion residuals rule to be implemented through a state or federal-based permit program and that give EPA enforcement authority.

Waste Disposition Summary (in tons)

We track and properly dispose of different waste streams associated with our operations. These come from maintenance, repair and upgrade activities at our generating plants, service centers and in the field—at our substations, power line and pipeline locations.

Xcel Energy is committed to pollution prevention in business planning and decision making processes. It is our policy that all wastes generated by Xcel Energy must be managed at facilities that are properly licensed. All of our vendors that we contract to manage wastes are required to have a valid contract established in accordance with Xcel Energy's Supply Chain procedures and guidelines. Regulated wastes must be managed through the exclusive use of approved vendors that are systematically evaluated by our Supply Chain, Environmental Services and Legal departments. Our program requires routine audits of

those waste vendors that accept more highly regulated waste streams, such as hazardous wastes, asbestos, PCBs and used oil.

Scrap metal waste is significantly higher for 2016 due to the replacement of older streetlights with more energy efficient LED streetlights. Xcel Energy agreed to scrap the lights rather than reusing and continuing to operate the less efficient lights (link to project information). Special wastes increased in part due to the refurbishment activities for cooling towers, rail spurs and sediment dredging projects.

The increase in hazardous waste for 2015 was the result of special boiler maintenance work at our power plants. The increase in asbestos is due to facility improvement projects.

	2012	2013	2014	2015	2016
Hazardous	98	42	65	553	31
Universal ¹	30	35	37	64	78
PCB related ²	449	438	335	342	517
Asbestos	2,221	553	271	1,755	546
Scrap metal	6,345	14,242	5,753	5,235	20,841
Special ³	10,633	8,924	15,050	12,676	16,978

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

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

³ 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 equipment that contains PCBs 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 completed its efforts to remove all known PCB (500 ppm or more) equipment from its system, including transformers, capacitors and other regulated categories of equipment. This equipment was targeted, removed and replaced with non-PCB equipment. In many cases, we retrofitted systems to accommodate the removal and replacement of regulated equipment 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

	2012	2013	2014	2015	2016
PCB and PCB-contaminated oil (gallons disposed)	53,470	23,075	25,951	34,782	21,378
PCB and PCB-contaminated equipment (units removed from service)	721	714	764	711	632

Legacy Manufactured Gas Plant Projects

In the 1800s up 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 years ago, and some of the properties where the MGP 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

Xcel Energy is part of an extensive remediation project underway in Ashland, Wisconsin. During the late 1800s and early 1900s, the lakefront in Ashland was one of the busiest industrial ports in the country. It was the site not only of a legacy MGP, but also 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. In Wisconsin, we have owned a portion of the Ashland site since 1986.

The site is being cleaned under the supervision of EPA and the Wisconsin Department of Natural Resources (WDNR). EPA has identified several parties responsible for the cleanup. Under an agreement with the U.S. Department of Justice, EPA and WDNR, we have conducted Phase I of the project, which includes remediation of the impacted soils and groundwater at the site. The soil cleanup was completed in early 2015, and a long-term groundwater pump and treatment program is in place.

After successfully completing a pilot study in 2016 for wet-dredging impacted sediments from Lake Superior, Phase II of the cleanup began in early 2017. We are removing wood waste, construction debris and impacted sediments from the site through the end of the year and expect to begin site restoration efforts next year.

Wildlife and Habitat Protection



Our Approach

We all appreciate and value our natural environment, so it's important that we work to preserve it for generations to come, including the plants, animals and other living things. For Xcel Energy, protecting wildlife and special habitat is a priority and a key component of our environmental commitment, especially given the footprint of our operations—from our thousands of miles of transmission line right-of-ways to the acreage and waterways surrounding our generating plants and wind farms. We must coexist with a wide array of wildlife species, including animals, birds, bats and fish, along with their habitats.

We consider our impact on wildlife as we upgrade, design and build facilities. We typically conduct risk assessments and studies to determine potential impacts, and then take steps to help avoid and minimize those impacts. Xcel Energy has a long history of working proactively with wildlife agencies and conservationists on special programs, research studies and regulatory efforts that focus on protecting wildlife and their habitats. If we do have impacts, we have programs in place to help us document and report incidents to regulatory agencies, and then determine if we need to take corrective actions to prevent future issues.

We also support conservation efforts through the Xcel Energy Foundation and grants under our environmental focus area. 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 installed web-based cameras to share the birds and their nesting habits. We currently have four bird cams that feature three different raptor species: bald eagles, great horned owls and peregrine falcons. The program has been tremendously popular with our customers, educators and others who are interested in the birds.

Avian Protection Plans



Under our Avian Protection Plans, more than 2,600 electric transmission and distribution locations have been retrofitted with equipment to protect birds.

Xcel Energy was the first utility in the country to enter into a historic agreement with the U.S. Fish and Wildlife Service to work on plans that proactively address potential issues involving birds and power-line structures, while also helping the company comply with federal avian protection laws.

In 2002, our utility operating companies entered into separate voluntary memorandums of understanding with the U.S. Fish and Wildlife Service to work together to address avian issues by developing an Avian Protection Plan for each operating company. Transmission and distribution lines and equipment can be attractive to birds for roosting and building nests and can pose a collision hazard that may result in death or injury. In addition, migratory birds and bald and golden eagles are protected by the federal Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. Our Avian Protection Plans are a critical initiative for protecting birds and complying with these federal avian 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 design standards have been updated to include any new or modified construction to meet avian standards to prevent or mitigate incidents.

In Colorado, we have retrofitted almost 1,700 locations. In our Texas and New Mexico region, we have retrofitted about 750 locations to date and have plans to retrofit an additional 546 locations during routine maintenance activities in the coming years. In the Upper Midwest, we have retrofitted more than 200 locations so far. Additionally, the Avian Protection Plan for the Upper Midwest region has been updated to reflect current design standards to ensure the continued success of our protection measures.

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.

Our transmission crews continue to assist the Minnesota Department of Natural Resources with their annual bald eagle banding efforts in St. Paul. Prior to fledging, the eagles are retrieved from their nest by an Xcel Energy employee, with the aid of a bucket truck, and are transported to the ground for banding and collecting blood work by DNR personnel.

Protecting Wildlife Near Wind Turbines

Wind energy continues to be 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 evaluated, sited, constructed, monitored and operated to minimize impacts to wildlife and protected species.

Before construction, we carefully select wind farm sites to help avoid impacts to birds and other wildlife. As part of this, we work with wind project developers, the USFWS and appropriate state wildlife and natural resource agencies on 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. This includes following the USFWS's Land-based Wind Energy Guidelines, conducting multiple surveys and following other best practices.

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 that there won't be potential issues. We report injuries or fatalities to USFWS and appropriate state agencies to ensure that additional mitigation measures can be developed if necessary. 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 have taken the right steps. .

We have also tested promising new technology at our Pleasant Valley Wind Farm in southern Minnesota with RES Americas, an independent wind operator. This technology includes the use of IdentiFlight to detect and identify eagles up to 1,000 meters and can automatically adjust turbine operations when tied to the SCADA system. We will continue to review and evaluate new and proven technologies as we grow our wind portfolio.

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.

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.

Enhancing Pollinator Habitat

The decline of pollinator species, including bees, wasps and butterflies, is quickly becoming a critical environmental issue because of the resulting ecological and economic consequences, such as impacts to food production. Utility right-of-way and fee-owned land including our substations and power plants present ideal opportunities for creating and enhancing pollinator habitat. We can modify land management practices, such as mowing frequency, reseeding mixtures and pesticide spraying practices, while still managing to maintain system safety and reliability.

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 creating and restoring pollinator habitat. We currently have more than 1,100 acres of active pollinator habitat in Minnesota and Wisconsin and more than 200 acres in development. The projects include nearly 25 active and potential pollinator habitat sites in our Minnesota and Wisconsin territories. Some of the habitat is located at our High Bridge Generating Plant in St. Paul and along our transmission line right-of-ways in Wisconsin.

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.

We also continue to be a partner in the conservation and protection of the Karner blue butterfly—a small, federally endangered butterfly that is limited to habitats which support wild lupine plants and are most prevalent in Wisconsin. In 1999, Xcel Energy partnered with the Wisconsin Department of Natural Resources and other stakeholders to prepare an innovative statewide Habitat Conservation Plan. As part of the plan, we voluntarily agreed to various mitigation, land management and conservation commitments.

Xcel Energy continues to participate in annual meetings with the DNR and other utilities to evaluate ongoing conservation efforts. The staff also leads lupine and butterfly field surveys to ensure that our activities, such as transmission line rebuilds and new gas pipeline construction, will not result in adverse impacts to the Karner blue butterfly and its habitat.

Greater Sage-Grouse Conservation Plan

In Colorado, Xcel Energy helped develop the Northern Eagle/Southern Routt Greater Sage-Grouse Conservation Plan and is a signatory on the plan. This plan describes and sets forth a strategy for long-term management of the greater sage-grouse in concert with other resource values and land uses at a landscape scale. It serves as the beginning of a cooperative effort between private landowners and state and federal agencies to conserve greater sage-grouse and their habitats in Northern Eagle and Southern Routt counties.

Lesser Prairie-Chicken Conservation Agreement

Xcel Energy has 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 mitigate impacts to this species of prairie grouse in areas where we operate. The USFWS listed the lesser prairie-chicken as a threatened species in 2014 due to the rapid decline in its population over the past 15 years. In 2015, a court vacated this listing and the USFWS is currently reexamining whether to relist the species.

Rangelands in our Colorado, New Mexico and Texas service territories serve as important habitat for the lesser prairie-chicken, and under the conservation agreement, Xcel Energy implements conservation measures on enrolled properties that help protect this habitat. The company paid an enrollment fee of \$60,000, and pays mitigation fees based on anticipated development activities on enrolled properties. For enrolled projects, we also follow avoidance, minimization and mitigation measures during operation, maintenance and new construction activities. These measures may include burying distribution lines within a certain distance of active breeding areas and using mono-pole construction in certain lesser prairie-chicken 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 the range states of Colorado, Kansas, New Mexico, Oklahoma and Texas. Since the program began, industry partners have committed more than \$60 million in enrollment and mitigation fees to pay for conservation actions, and landowners across the range have agreed to conserve more than 130,000 acres of habitat through 10-year and permanent conservation agreements. The 2016 WAFWA survey showed population trends have been stable after five years of data collection.

Vegetation Management

Xcel Energy's Vegetation Management department manages millions of trees across approximately 50,000 miles of distribution right-of-way and 19,000 miles of transmission right-of-way throughout our service territory. For more than 21 years, the Arbor Day Foundation has recognized us 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.

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 where the vegetation is too tall for herbicide applications. When necessary, our contractors apply herbicides that are registered by EPA and the appropriate state regulatory agency. The herbicides are applied by licensed applicators.