Leading the Clean Energy Transition

We have ambitious goals and bold plans to deliver a sustainable energy future that benefits both our customers and the planet.

Now, more than ever, there is growing urgency to address the risk of climate change. We hear this from our customers and communities, as well as from policymakers, investors and others. It's a priority we share, and one we're tackling through a leading clean energy strategy that covers all parts of our business.

Our greatest contribution is through making the electricity we provide customers even cleaner. By 2050, we aim to deliver 100% carbon-free electricity, with an aggressive interim goal to cut carbon emissions 80% by 2030.

To reach this target, we're collaborating within our states on groundbreaking clean energy plans that incorporate record levels of wind and solar power and retire our coal plants. We've also engaged within the industry and with others to create a pathway for developing the new zero-carbon, 24/7 power technologies we need to eliminate the last 20% of carbon emissions from our system.

Just as we're committed to delivering clean electricity, we have a comprehensive strategy for reducing greenhouse gas emissions across the natural gas system—from drill head to burner tip. We're focused on providing the cleanest natural gas possible to customers, from both our system and the suppliers we do business with. Through new programs and technologies, we will also help customers reduce their carbon emissions from using natural gas in appliances and equipment.

Governance

While each board committee of Xcel Energy's Board of Directors has a role in aspects of managing risks associated with climate change, the Operations, Nuclear, Environmental and Safety (ONES) Committee has specific responsibilities for the oversight of climate-related risks. The ONES Committee oversees all operational aspects of the business including those related to Xcel Energy's environmental strategy and performance, which includes the company's clean energy strategy and carbon reduction initiatives. Within the company, the senior vice president, Strategy, Planning and External Affairs serves the role of chief sustainability officer. This position reports to the chairman and CEO and is responsible for environmental policy, strategy, governance and sustainability reporting, including the management of climate-related risks, and regular briefings and discussions with the board.

Beyond our operations, clean electricity can power a cleaner economy, and it starts with transportation—the country's largest source of carbon emissions. Our vision is to power 1.5 million electric vehicles by 2030 in the places we serve. By increasing EV adoption, we will improve air quality, grow our business and save customers billions in fuel costs. That's the very definition of sustainability.

We recognize our bold plans can only succeed if we continue meeting our customers' most basic needs, ensuring the reliable, affordable energy that runs their lives. Along with this, we believe in using science to validate that we have the right clean energy transition plans in place, happening at the right levels and pace to make a meaningful difference. That's why we've taken the extra step of engaging with experts to confirm that our goals and plans align with the targets of the Paris agreement.

HIGHLIGHTS

- From 2005 through 2020, we reduced carbon emissions approximately 51% from the electricity provided to customers. This puts us over halfway to delivering 100% carbon-free electricity by 2050.

- We cut carbon emissions company-wide in 2020 by approximately 6 million tons, a 12% reduction, compared to 2019 levels—equivalent to taking nearly 1.2 million cars off the road for a year. It's our second consecutive year of achieving a record decline in carbon emissions from the electricity we provide customers.

- Xcel Energy received a national Climate Leadership Award for top Organizational Leadership. The award recognizes our industry-leading carbon reduction efforts, as well as our support for customers and communities in achieving their clean energy goals.

- With support from more than 50 civic leaders, customers, industry and communities, Xcel Energy announced its vision to power 1.5 million electric vehicles in its service area by 2030, which is expected to deliver $1 billion in customer fuel savings and reduce 5 million tons of carbon emissions annually by the same year.

- Over 15 years ago, we were among the first in our industry to tie executive compensation to environmental performance. Today, executive compensation is tied directly to carbon reductions.

- Xcel Energy supports the Task Force on Climate-related Financial Disclosures and fulfills its recommendations in the report **Managing Risks and Opportunities in a Clean Energy Future**. The report also includes a climate scenario analysis that tests the resilience of our strategy.

- We released a report in 2020 that details our clean energy strategy for reducing greenhouse gas emissions across our natural gas business. It complements a similar report we published on our carbon-free vision for electricity. For both our electricity and natural gas systems, we engaged climate modeling experts, including a lead author for the Intergovernmental Panel on Climate Change, to test our strategies against the targets of the Paris agreement.

- We joined ONE Future, a consortium of more than 40 natural gas companies committed to collectively limiting methane emissions across the entire natural gas supply chain to 1% or less. For the portion of the supply chain that we own and operate, we are committed to achieving a methane emissions rate of less than 0.2%, in line with ONE Future's stated target for distribution systems.

- The Climate Registry recognized our greenhouse gas emissions reporting with its top all-star status for excellence. For 14 consecutive years, our carbon reporting has been third-party verified in accordance with The Climate Registry—we are the only power company with this length of consecutively verified data.

Our Pathway to Carbon-free Electricity

Approximately 99% of greenhouse gases associated with our electric operations are carbon dioxide from the use of fossil fuels to generate electricity. Because of this, our clean energy strategy and long-term goals are primarily directed toward reducing carbon emissions from the electricity that serves customers.

Our vision to serve customers with 100% carbon-free electricity by 2050 and interim goal to reduce carbon emissions 80% by 2030 are comprehensive. They include all emissions associated with delivering power to customers, including emissions from electricity we produce (scope 1) and purchase from third-party suppliers (scope 3).

Reducing carbon emissions 80% by 2030

We are confident that with the technologies economically available today we can achieve our interim goal to reduce carbon emissions 80% by 2030 from 2005 levels affordably and reliably for customers. We have engaged with stakeholders in our states, mainly through the resource planning process, to develop plans and proposals.

- **Colorado Clean Energy Plan**: In November 2021, we modified our proposed Colorado Clean Energy Plan based on a partial non-unanimous agreement between Xcel Energy and more than a dozen stakeholders. The revised plan accelerates the coal action timeline and aims to reduce carbon emissions 87% in Colorado by 2030. We will approximately double renewable energy and battery storage on our Colorado system while maintaining affordable and reliable energy service. The revised plan also lays the path for fully exiting from coal, while supporting our employees and communities. We propose to convert the Pawnee Generating Station from coal to natural gas in 2026 and accelerate retirement of Comanche Unit 3 to 2034 while limiting our use of the plant beginning in 2025. Under previously announced plans, we will retire the Hayden and Craig plants by 2028. Additionally, the Colorado Power Pathway Project proposes in total 560 miles of new transmission lines that will enable delivery of additional renewable energy to customers and other Coloradans. We expect a decision on our plans by early 2022.

- **Upper Midwest Energy Plan**: We've proposed closing all our coal units in the region, including Sherco Unit 3 and the Allen S. King Plant, a decade ahead of schedule. To ensure reliable, affordable energy for customers, we will extend the use of nuclear energy at the Monticello plant, use cleaner natural gas, and increase wind and solar energy. The plan would reduce our carbon emissions in the region more than 80% by 2030 from 2005 levels. We expect a decision on the plan by end of 2021.

- **Ongoing System Changes in the Southwest**: We completed a major wind energy expansion in 2020, adding more than 1,200 MW to our Texas and New Mexico system. We plan to exit from coal in the region by switching the Harrington Plant to natural gas in 2024 and retiring the Tolk Plant in 2032, pending regulatory approval. We already operate Tolk seasonally or as economically appropriate. We will propose a new energy plan for New Mexico in July 2021 that will likely include additional low-cost clean energy projects to benefit customers.

100% Carbon-free Electricity by 2050

Looking beyond 2030, we need advanced, carbon-free, 24/7 power technologies to eliminate the remaining 20% of carbon from the system. These technologies include:

- Advanced wind and solar energy systems

- Long-duration storage and advanced demand efficiency

- Advanced, dispatchable and renewable super hot rock deep geothermal

- Zero-carbon fuels, such as hydrogen
- Advanced nuclear energy, both fission and fusion
- Carbon capture, utilization and storage

To ensure these technologies are ready when we need them at an affordable price, there must be more innovation done today. Because we cannot do it alone, we are working with others who share our interests on the research, development and deployment of advanced technologies. In early 2021, we joined the Low-Carbon Resources Initiative led by the Electric Power Research Institute and GTI. It's a five-year focused research and development commitment to create the pathways to advance low-carbon technologies for large-scale deployment.

In addition, we are pursuing policy objectives to support increased research and development, as well as programs and incentives to foster commercial demonstration and early deployment of promising technologies. Once new technologies are developed, we need an infrastructure or ecosystem in place to streamline the permitting, installation and operations, helping to accelerate their adoption.

In early 2021, we helped launch the Carbon-Free Technology Initiative that is focused on implementation of federal policies to help ensure the commercial availability of affordable, carbon-free, 24/7 power technology options by the early 2030s. It's a project spearheaded by Xcel Energy's chairman and CEO, Ben Fowke, through his leadership of the Edison Electric Institute. In addition to the Edison Electric Institute and its member companies, participants include Clean Air Task Force, Bipartisan Policy Center, Center for Climate and Energy Solutions, ClearPath, Great Plains Institute, Information Technology & Innovation Foundation, Nuclear Energy Institute, and Third Way.

Learn more about the Carbon-Free Technology Initiative at **carbonfreetech.org** and in the **Public Policy brief** in Xcel Energy's Sustainability Report. Information on our company's technology projects is in the **Energy Innovation brief**, and our increased use of wind and solar power is in the **Renewable Energy brief**.

The Role of Natural Gas in Integrating Renewable Energy and Reducing Carbon Emissions

Natural gas is enabling a clean energy future today. We are retiring coal-fueled power plants and producing more electricity with clean wind and solar power and are doing so reliably and affordably for customers thanks largely to natural gas. While we continue to add unprecedented amounts of wind and solar energy to our system, natural gas is replacing most of our retiring coal generation because we need it to help balance the system and achieve our goal of reducing carbon emissions 80% by 2030.

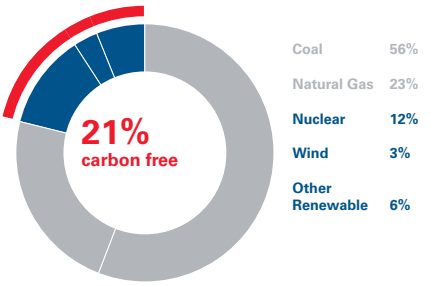
To meet our 100% carbon-free vision by 2050, we are advocating for research and development into technologies that can make natural gas generation carbon free, such as hydrogen blending and carbon capture, utilization and sequestration.

We published a report in 2019, **Building a Carbon-free Future**, that details our goals and clean energy strategy for electricity. The report is available on xcelenergy.com.

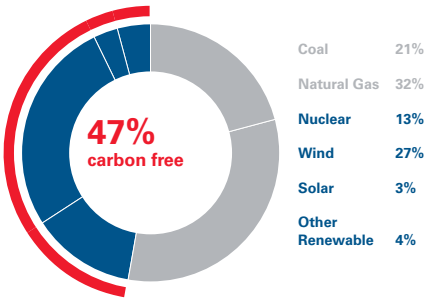
2020 Electricity and Carbon Emissions Reporting

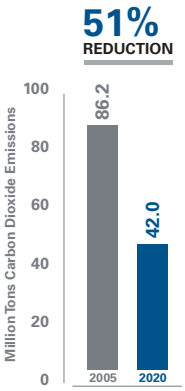
Our changing energy mix and carbon emission reductions from electricity serving customers, compared to 2005.*

2005 Energy Mix – Xcel Energy

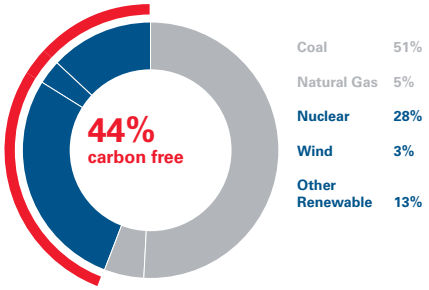


2020 Energy Mix – Xcel Energy

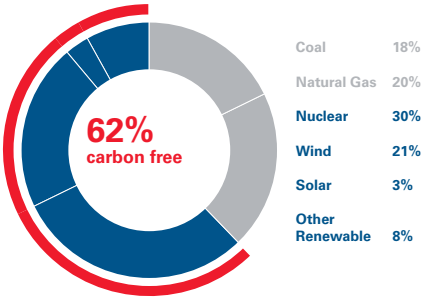


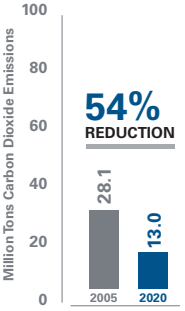


2005 Energy Mix – Upper Midwest

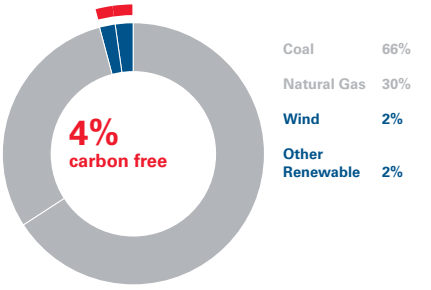


2020 Energy Mix – Upper Midwest

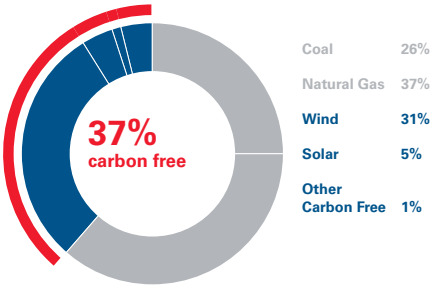


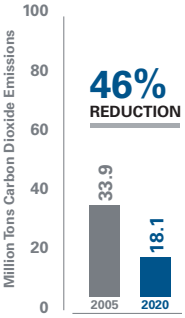


2005 Energy Mix – Colorado

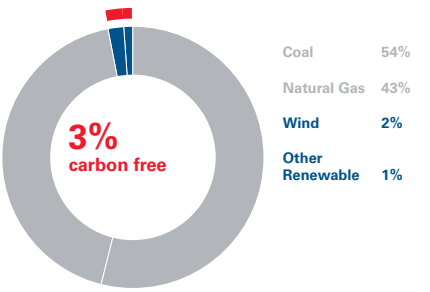


2020 Energy Mix – Colorado

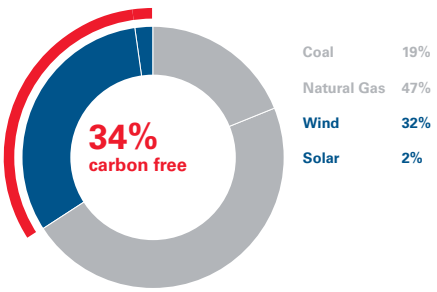


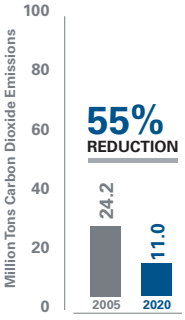


2005 Energy Mix – Southwest



2020 Energy Mix – Southwest





*2020 carbon emissions reductions are considered preliminary until they are third-party verified.

Xcel Energy's Greenhouse Gas Reporting

For well over a decade, Xcel Energy has supported timely, transparent public reporting of carbon dioxide and other greenhouse gas emissions across our operations. Our emissions reporting covers both the electricity we produce and purchase from third-party suppliers, providing a more complete accounting of our carbon footprint.

We've always measured our progress using a 2005 baseline. It's the first year we began consistently measuring and tracking our greenhouse gas emissions, and 2005 is also a common baseline year for national and international standards.

Our comprehensive reporting is based on The Climate Registry and its Electric Power Sector Protocol, which aligns with the World Resources Institute and ISO 14000 series standards. We joined The Climate Registry as a founding member in 2007 to help establish a consistent, transparent standard for calculating, verifying and reporting greenhouse gases. For 14 years (2005 through 2018), we have third-party verified, registered and publicly disclosed our greenhouse gas emissions through The Climate Registry and are the only power company with this length of consecutive, verified reporting. We contracted with a new verifying agency in 2020, a change we are periodically required to make. Because of this, we expect our 2019 emissions to be third-party verified by mid-year 2021 and 2020 emissions to be third-party verified by the end of 2021.

The greenhouse gas emissions that we report to The Climate Registry includes our emissions from all sources: owned and purchased electricity, electricity sales to the wholesale market, natural gas distribution, and other sources, such as business travel and employee commuting.

Our carbon emissions results published in this report track our progress in reducing carbon emissions from the electricity provided to customers and in reaching our vision to deliver 100% carbon-free electricity by 2050. During times when we have more electricity than we need to serve our retail and wholesale customers, we sell electricity into wholesale markets where it is purchased by others to serve their customers. The carbon emissions from sales of excess electricity are excluded from our goal and associated carbon reporting because the energy does not serve our customers, and the purchasers—if they follow accepted greenhouse gas reporting protocols—should include those emissions in their reporting.

Our energy mix reporting provides by fuel type all the electricity on Xcel Energy's system for the year, including electricity produced at our power plants, purchased from others, and supplied for customers participating in renewable choice programs (Windsource®, Renewable*Connect®, Solar*Rewards® and Solar*Rewards Community®).

Generally, Xcel Energy receives a Renewable Energy Credit (REC) for every megawatt hour of renewable electricity generated. RECs are retired to meet renewable portfolio standards and the Certified Renewable Percentage, saved for future compliance, or sold depending on market opportunities. In reporting progress against our carbon reduction goals, Xcel Energy does so based on actual carbon emissions from energy provided to our customers, independent of whether there was a REC associated with that energy.

More detailed carbon reporting, including scope 1, 2 and 3 emissions, is provided in the **Data Summary for Xcel Energy's Sustainability Report**, along with information about renewable energy and REC sales. Customers can find carbon emissions intensities for use in their own reporting or goal tracking in our **Carbon Emission Intensities Information Sheet**.

A Leading Clean Energy Strategy for Our Natural Gas Business

Customers rely on natural gas to affordably heat their homes and businesses. It's an energy workhorse, and there are no cost-effective substitutes available today. We believe that because of the vital role natural gas plays in our economy and low-carbon future, more must be done to address its environmental footprint.

There are two sources of greenhouse gases from natural gas. Methane, which can be released during the production and delivery of natural gas, and carbon dioxide from the combustion of natural gas in appliances, such as furnaces and water heaters. We're implementing a plan that covers all segments of the natural gas supply chain to reduce both methane emitted during production and delivery and carbon emissions from combustion. We're committed to delivering the cleanest natural gas possible to customers and working with our suppliers to reduce methane emissions while helping customers reduce their carbon emissions from using natural gas.

Delivering the Cleanest Natural Gas Possible to Customers

We continue to invest approximately $1.4 billion in projects that are improving the integrity and reliability of our natural gas system while reducing methane emissions. Through these projects, we've replaced all the older cast iron and approximately 95% of the bare steel pipe on our system with improved plastic and protected steel pipe.

We also joined EPA's voluntary Natural Gas STAR program in 2008 to further reduce methane emissions by implementing best management practices, which include:

- Actively avoiding natural gas releases during system construction work—when we enter a pipe for scheduled construction or other work, we try to move the natural gas into low-pressure mains or defuel the system to avoid releasing methane directly to the atmosphere
- Increasing surveys to detect methane releases during inspections and maintenance and conducting multiple system surveys within a year to decrease repair time
- Replacing existing high-bleed controllers with low-bleed or no-bleed controllers where possible

We became a founding partner in EPA's Methane Challenge program in 2016 and pledged to reduce methane emissions by 50% or more from the venting of pipes during scheduled natural gas construction projects. As a result, we've reduced venting of methane by 95% in 2018 and 87% in 2019, avoiding approximately 51,000 million cubic feet of natural gas from venting to the atmosphere.

We report methane emissions from our natural gas distribution system in the **Data Summary for the Sustainability Report** and provide more information about our natural gas business in the **Reliable and Secure Energy brief**.

Leveraging Our Buying Power to Influence Suppliers

As a natural gas distribution company, we depend on suppliers for the natural gas we deliver to customers. While we do not have direct control over our suppliers' activities, we can use our relationships and purchasing power to move suppliers to improve transparency and adopt best practices for reducing methane emissions. Our goal is for the natural gas we purchase to be produced, processed and delivered with the lowest methane emission rate possible.

The first step is to better understand the practices and methane intensity of natural gas producers. We participate in two industry groups that promote the use of best practices for reducing emissions and transparent reporting:

- The MJ Bradley Natural Gas Supply Collaborative (Supply Collaborative) is a group of natural gas purchasers calling for producers to disclose a set of quantitative and qualitative performance indicators for reporting methane, as well as other reporting on environmental and social topics
- The Natural Gas Sustainability Initiative (Sustainability Initiative), sponsored by the Edison Electric Institute and American Gas Association, is developing a uniform protocol for calculating methane intensity that can be used across the entire natural gas supply chain

We're also working to better understand the methane intensity of natural gas we purchase. Starting with our 2021 natural gas procurement, we are requesting that suppliers disclose information on their methane performance. This includes the methane intensity calculated with the Sustainability Initiative protocol and information on management best practices that minimize or prevent high emission events following the Supply Collaborative best practices. The combination of reported methane intensity and implemented best practices will allow us to identify which suppliers are producing natural gas with low methane emissions. Additionally, we're working with our gas suppliers to understand the availability of certified gas, which is gas verified by a third-party to have low methane intensity.

Finally, we participate in Our Nation's Energy (ONE) Future, a consortium of more than 40 natural gas companies committed to collectively limit methane emissions to 1% or less by 2025 across the entire natural gas supply chain. Through participation, we can share technology solutions with other companies and influence the entire natural gas supply chain to reduce emissions.

Within the overall 1% target, ONE Future establishes individual emission targets for each segment of the natural gas supply chain. In joining, we've committed to go beyond these targets and keep our methane emissions rate at less than 0.2% from all areas of our natural gas operations, including the distribution system and some minor transmission, storage and processing facilities.

With new protocols on the horizon and other changes, our methodology for reporting methane emissions is evolving. We will begin reporting methane emissions through ONE Future in 2021. We also will follow new, stringent requirements in Colorado that seek to regulate emissions from oil and gas operations that are a precursor to ozone. We will submit emissions information from our transmission and storage operations to be combined with the emissions from other transmission and storage operations in the state. This emissions inventory will be used to establish a benchmark for comparing future emissions and encouraging best management practices to reduce emissions.

Helping Customers to Reduce Their Carbon Emissions Through Voluntary Programs

The building sector—homes and businesses—is currently a much lower source of greenhouse gas emissions compared to other sectors of the economy. As the electric power sector reduces emissions, the building sector becomes a larger share of economy-wide greenhouse gas emissions, particularly for cities, states and individual companies. For some of the cities we serve, such as Minneapolis, natural gas is already the largest source of emissions.

More than 80% of the homes in the colder states we serve—Colorado, Michigan, Minnesota, North Dakota and Wisconsin—rely on natural gas for heating. It is an efficient, safe, reliable and affordable way to fuel homes, providing significant value for customers and the environment. Through better building practices, efficient appliances and our conservation programs, our customers have cut back their natural gas consumption nearly 20% over the past two decades.

The challenge going forward is that there are few cost-effective alternatives to natural gas for heating in colder climates. We are focusing in three areas to expand customer options and offer voluntary new programs.

- **Lower natural gas use**: We're expanding our conservation programs and making sure our customers have access to the most efficient solutions available for managing their natural gas use.

- **Beneficial electrification**: We're interested in those opportunities where electrification reduces emissions, keeps customer bills low, optimizes use of the power grid, and achieves goals consistent with state energy policies. We currently offer programs that encourage new all-electric building developments, where we avoid the cost of extending the natural gas system, and we're beginning to pilot smart electric water heaters that operate with the power grid to take advantage of periods with high wind and solar generation. Additionally, we're exploring electric air source heat pumps combined with natural gas furnaces for backup that are connected to smart thermostats to maximize cost and environmental benefits.

- **Low-carbon supply options**: Because some energy uses are extremely difficult to electrify or some customers may prefer gas for specific purposes, we are exploring alternatives, such as renewable natural gas, advanced hydrogen and power to gas. A significant benefit to these solutions is that they use existing natural gas infrastructure.

Find more information about our customer energy efficiency programs in the **Energy Efficiency and Electric Vehicles brief** in Xcel Energy's Sustainability Report.

We published a report, **Net-Zero Vision for Natural Gas**, that details our clean energy strategy for our natural gas business. The report is available on xcelenergy.com.

Using Climate Science to Guide Our Clean Energy Transition

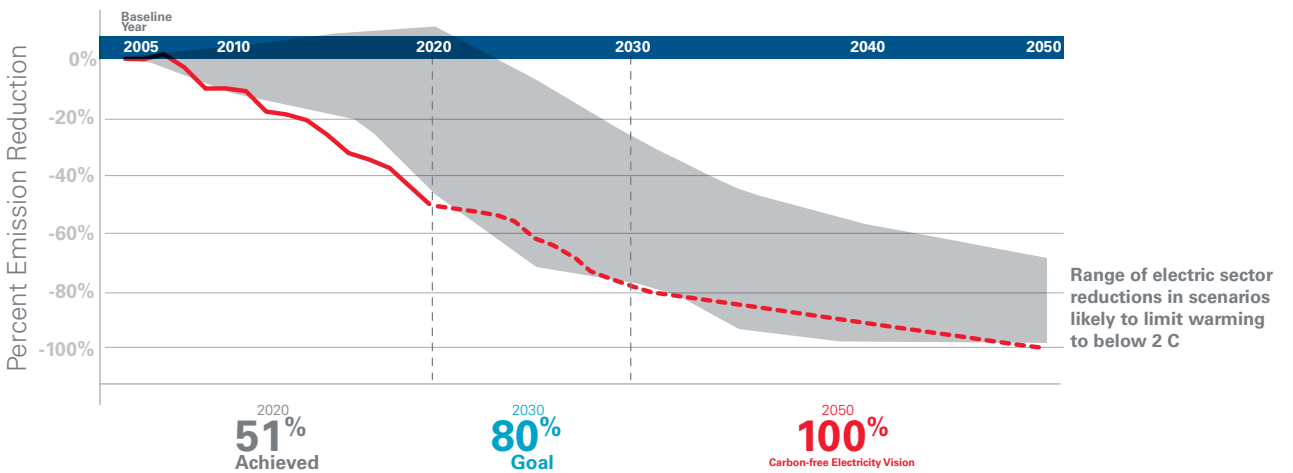
We continue to use the most recent climate science to inform our clean energy strategy.

Evaluating Our Carbon Vision for Electricity

We first contracted with climate modeling experts, including a lead author for the International Panel Climate Change (IPCC), to understand how our vision for delivering 100% carbon-free electricity by 2050 and interim goal to reduce carbon emissions 80% by 2030 relate to global temperature goals.

These experts consulted the newest IPCC emission scenarios database and analyzed carbon emissions for the electric sector in industrialized countries, within global greenhouse gas scenarios that have a high (66% or greater) probability of achieving the 2 degrees Celsius goal and those more likely than not (50% or greater) to achieve the 1.5 degrees Celsius goal.

Xcel Energy's carbon emissions trajectory aligns with emission scenarios likely to achieve the international goal to limit warming to 2 C and is even consistent with the 1.5 C goal.

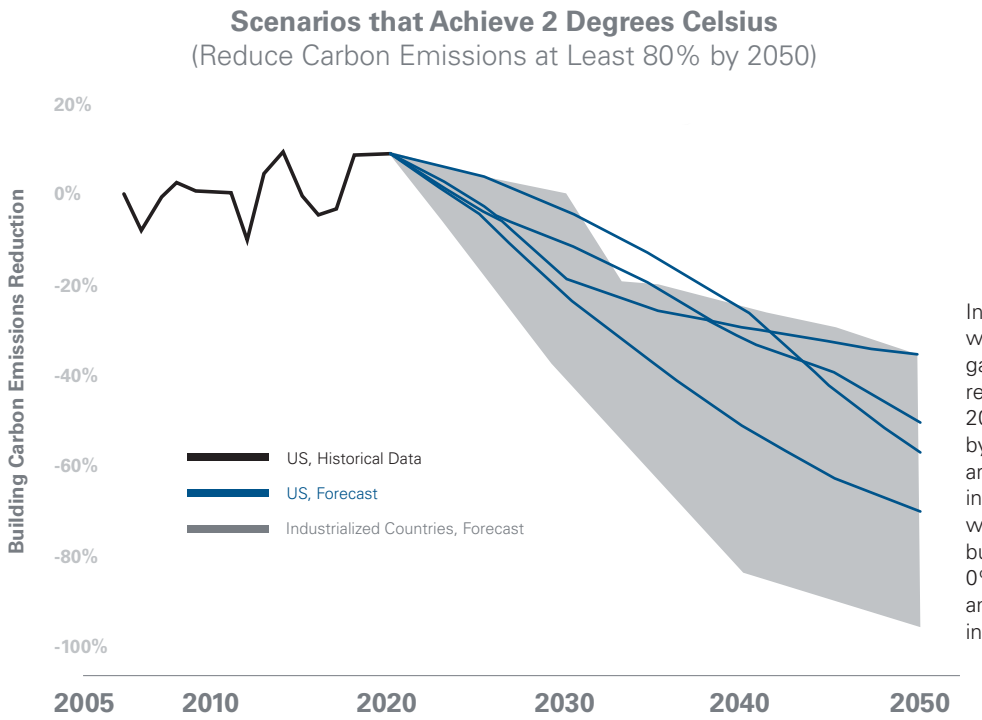


The dark gray shaded area in the chart above represents the range of electric sector reductions in scenarios likely to limit warming to below 2 C. Xcel Energy's carbon emissions reduction trajectory to 2050 was then compared with the emission scenarios. Based on this analysis, our reduction targets are clearly consistent with—even on the low end of—the electric sector reductions in scenarios that achieve the international 2 C goal. Even more encouraging, this analysis shows that our emission trajectory is also consistent with the more aggressive 1.5 C goal.

Analyzing the Future Use of Natural Gas in Buildings with the Climate Science

We engaged with the same expert who conducted our electric system study to test the future use of natural gas in buildings against scenarios likely to achieve the temperature goals of the Paris agreement.

Study results show a range of outcomes for natural gas in a low-carbon future. Our strategy is consistent with and can help drive these outcomes.



In scenarios that limit warming to 2 C, natural gas use in buildings is reduced 0% to 20% by 2030 and 30% to 75% by 2050. Reductions are more aggressive in scenarios that limit warming to 1.5 C, with building use reduced 0% to 30% by 2030 and 55% to 85% in 2050.

The study finds there is no single emissions reduction target we need to meet. Instead, there are a range of emissions reductions that will achieve the same climate goals driven by the cost and availability of technology, especially in colder climates that rely the most on natural gas for heating. Over the next decade, our voluntary strategy for reducing carbon emissions from natural gas use in buildings can achieve the same range of emission reductions as the scenarios in the study do.

The full analysis for the electricity study is available in our report, **Building a Carbon-free Future**, and the report on the climate science for natural gas use in buildings, Natural Gas Use in the U.S. Building Sector in Global Low Carbon Pathways, is available on **xcelenergy.com**.

A Bold Vision for Electric Vehicles

One of the most cost-effective ways we can cut carbon emissions in our economy is to make it easier for customers to use cars, trucks and buses powered with increasingly cleaner electricity. To support EV adoption, our company announced a bold vision in August 2020 to power 1.5 million electric vehicles in our service area by 2030.

Through new electric vehicle (EV) customer programs and charging infrastructure, we are expanding our clean energy leadership to transportation, developing innovative partnerships with our communities, customers and others. Under our goal, 20% of all cars on the road in the states we serve would be electric, saving customers an estimated $1 billion in annual fuel costs by 2030 and removing approximately 5 million tons of carbon emissions annually by the same year.

We're also helping lead the way in our own operations, with plans to electrify all sedans by 2023, electrify all light-duty vehicles by 2030, and having 30% of our medium- and heavy-duty vehicles electrified by 2030.

Our EV vision will allow everyone in the communities we serve to experience the benefits of electric transportation, whether they own an EV, take transit, or benefit from improved air quality. In addition to cutting carbon emissions, our vision is expected to improve ground-level ozone by reducing nitrogen oxide emissions by almost 1,500 tons and fine particulate matter by more than 270 tons annually by 2030.

Regulators in Colorado and Minnesota approved our groundbreaking Transportation Electrification Plans that support EV adoption among business and residential customers and pave the way for dozens of new programs and services in those states. We're also rolling out programs in Wisconsin and have proposed a Transportation Electrification Plan in New Mexico to support that state's developing EV marketplace.

Find more information about our EV plans in the **Energy Efficiency and Electric Vehicles brief** in Xcel Energy's Sustainability Report.

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