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 customer 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.jpg) 142,500 homes ![Natural gas to power](natural_gas.jpg) 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.

<table>
<thead>
<tr>
<th>State</th>
<th>Spending</th>
<th>Electric Conservation &amp; Load Management</th>
<th>Gas</th>
<th>Gas Conservation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Participants</td>
<td>Generator kW</td>
<td>Generator kWh</td>
</tr>
<tr>
<td>MN</td>
<td>$114,975,732</td>
<td>3,597,153</td>
<td>135,564</td>
<td>552,782,775</td>
</tr>
<tr>
<td>CO</td>
<td>$85,167,752</td>
<td>918,709</td>
<td>88,523</td>
<td>410,498,551</td>
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<tr>
<td>WI</td>
<td>$11,856,617</td>
<td>5,100</td>
<td>12,647</td>
<td>58,196,595</td>
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<tr>
<td>TX</td>
<td>$3,309,061</td>
<td>2,508</td>
<td>8,188</td>
<td>14,451,094</td>
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<tr>
<td>NM</td>
<td>$8,635,918</td>
<td>310,068</td>
<td>5,520</td>
<td>38,169,375</td>
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<tr>
<td>SD</td>
<td>$819,918</td>
<td>90,889</td>
<td>1,583</td>
<td>4,734,942</td>
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<tr>
<td>MI</td>
<td>$309,009</td>
<td>4,056</td>
<td>0</td>
<td>2,145,710</td>
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<tr>
<td>ND</td>
<td>$244,059</td>
<td>305</td>
<td>797</td>
<td>26,996</td>
</tr>
<tr>
<td>Total</td>
<td>$225,318,066</td>
<td>4,928,788</td>
<td>252,822</td>
<td>1,081,006,038</td>
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*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

<table>
<thead>
<tr>
<th>Residential Programs</th>
<th>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.</th>
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<tr>
<td></td>
<td>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.</td>
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<tr>
<td></td>
<td>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.</td>
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</table>

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<thead>
<tr>
<th>Business Programs</th>
<th>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:</th>
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<tr>
<td></td>
<td>• Equipment rebate and custom rebate programs that lower the upfront cost for customers to purchase and install energy efficient equipment or process improvements.</td>
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<tr>
<td></td>
<td>• Studies and audits that help customers identify, plan, prioritize and implement energy efficiency projects.</td>
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<td></td>
<td>• Holistic programs that encourage long-term energy management planning to help customers analyze, track and implement efficiency plans rather than ad-hoc efficiency projects.</td>
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<td></td>
<td>• Demand response programs that help lower customers’ electricity demand during peak periods in exchange for lower rates or energy bill discounts.</td>
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<td></td>
<td>• 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.</td>
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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.

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.
Minnesota

Low-income Programs

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.

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.

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.

South Dakota

Residential and Business Programs

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.

North Dakota

Residential and Business Programs

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.

Wisconsin

Residential and Business Programs

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.

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.

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

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.

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.

Business Programs

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:

• 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

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.

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.
### Colorado

**Low-income Programs**  
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 education designed to assist in lowering their energy bills.

In 2016, the Multifamily Weatherization and Non-Profit products exceeded their electric energy savings goals due to higher than forecasted participation.

### New Mexico

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.

### Texas

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.