

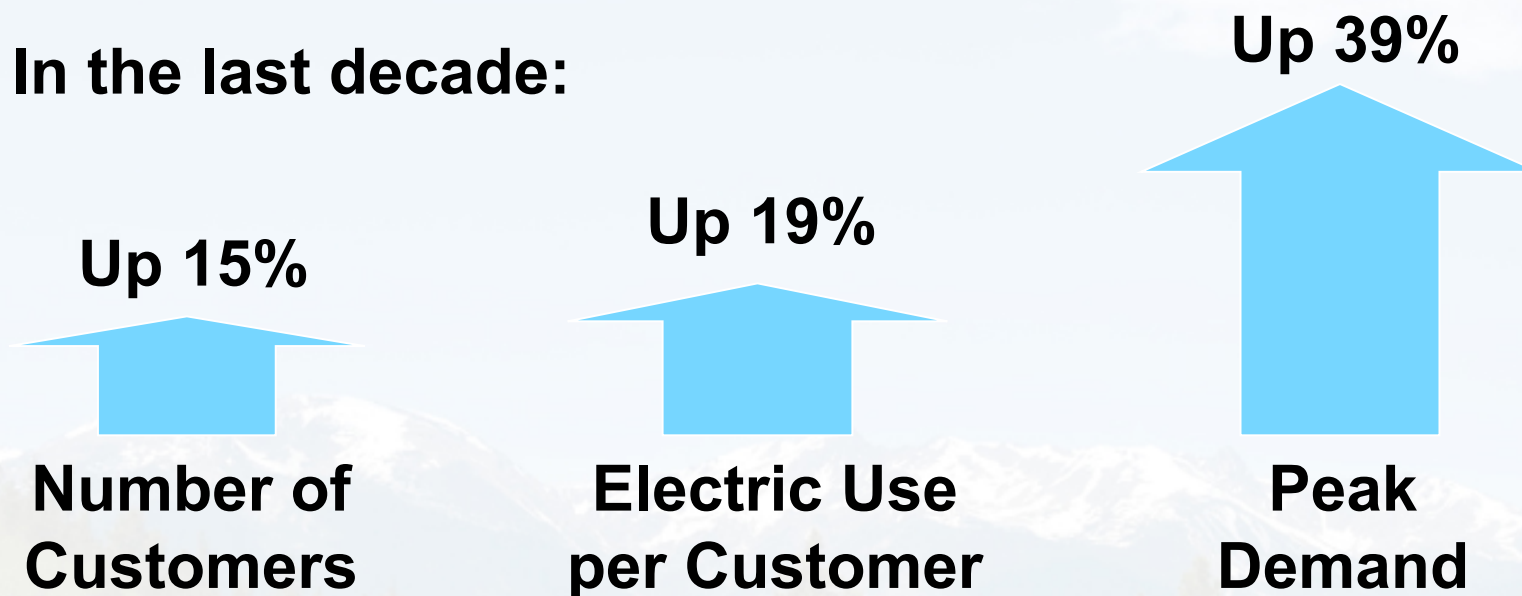
Xcel Energy's Energy Efficiency Programs

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Driver: Colorado's Energy Needs

In the last decade:



Xcel Energy must meet customers' needs

- ▣ Manage supply by obtaining more power
- ▣ Manage demand by reducing customers' usage

Xcel Energy's Environmental Leadership

- No. 1 wind power provider
- Windsource[®]
 - Largest green-pricing program in USA
- Industry-leading energy efficiency programs
- One of largest photovoltaic systems 8.2 megawatts
- Solar*Rewards - 2,100 customers, 12 megawatts
- Voluntary emissions reductions

Reduce Demand

Efficiency programs

- Estimated Capacity to 886-994 MW
- Annual energy use reductions to 3,699 GWh (2009-2020)

Past legislation (2006-2013)

- 320MW demand reduction ~ 64,000 homes
- 800GWh use reduction



530 MW is about the size of Xcel Energy's largest coal-fired power plant in Colorado

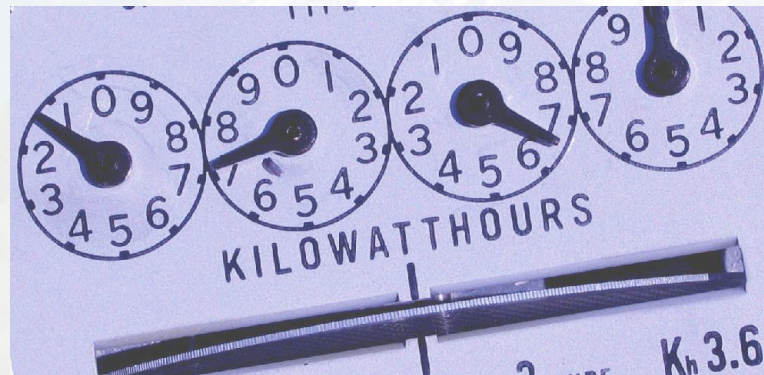
How Xcel Energy Helps

- Provides incentives to adopt energy-efficient technologies
- Rebates provide trade partners a tool to influence a customer's purchase decision
- Xcel Energy brand name and neutral 3rd party endorsement

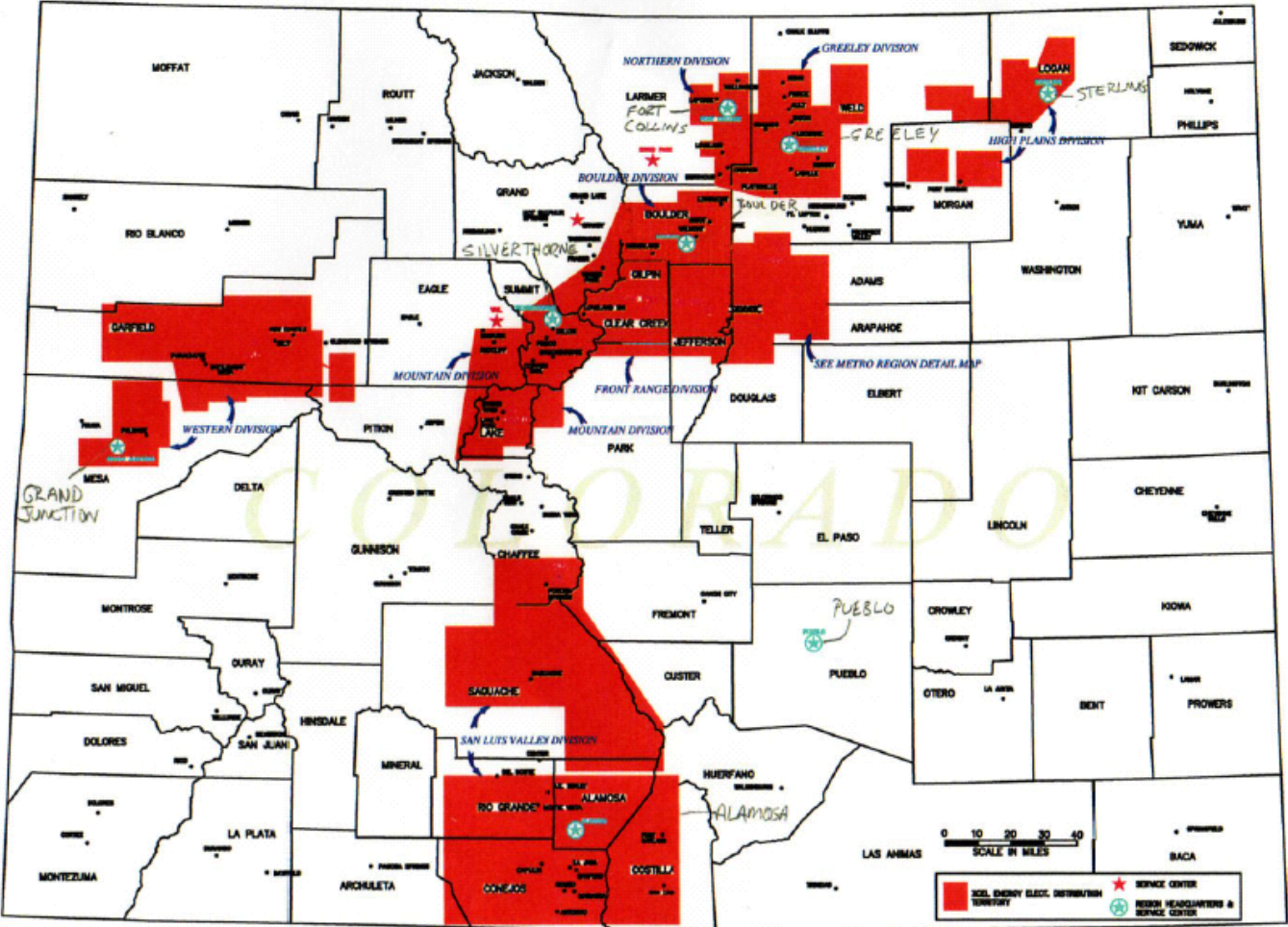
**Results: energy savings and quicker paybacks
for customers**

Xcel Energy's Efficiency Programs

- Cash rebates, as opposed to bill credits
- For existing facilities or new construction
- For Xcel Energy retail electricity & natural gas customers in Colorado



2002 XCEL ENERGY ELECTRIC SERVICE AREAS



AREAS SHOWN ARE APPROXIMATE

Xcel Energy Efficiency 2009-2010 Program Descriptions



Xcel Energy Offers Three Types of Programs

- Prescriptive programs
- Non-prescriptive programs
- Studies/Audits



Prescriptive Programs

Prescriptive programs

Predetermined rebate amounts and related savings for various energy-saving technologies

- No preapproval required
- Qualifying technologies are listed on the rebate applications



Included programs:

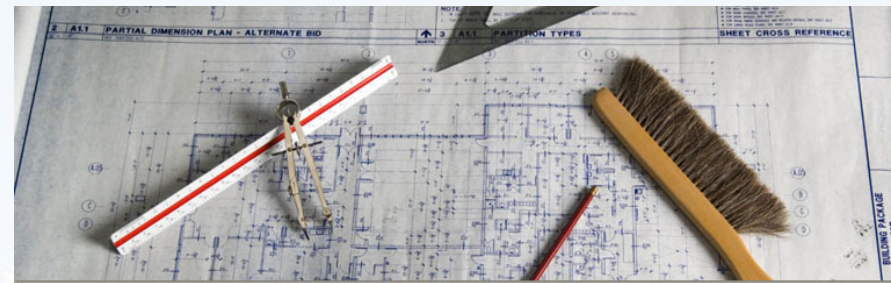
- Lighting
- Cooling
- Motors and variable frequency drives

Non-prescriptive Programs

Non-prescriptive rebates

For equipment & conservation efforts not covered with the prescriptive programs

- **Preapproval required**
- Rebate amounts and energy savings may vary greatly by project



Included programs:

- Custom Efficiency
- Energy Management Systems
- Energy Design Assistance

Study-based & Audit Programs

Studies/Audits

Xcel Energy funds a portion of a study, which may lead to identifying energy-saving opportunities

- **Preapproval required**
- Additional rebate opportunities can be realized by submitting a prescriptive or custom rebate application



Included programs:

- Compressed Air
- Recommissioning
- Refrigeration
- Energy Analysis
- Lighting Redesign

2009-2010 Biennial Filing

35 enhanced or new electric and natural gas efficiency and conservation programs

- Businesses – new rebates, enhanced program customization and natural gas equipment rebates
- Residential – incentives for saving natural gas and electricity
- Low-income customers – special programs to provide rebates and help with in-home weatherization

2009-2010 Business Programs

- New programs
 - Boiler Efficiency
 - Behavioral Change
 - Data Center Efficiency
 - Furnaces
 - New Construction
 - Process Efficiency
 - Small Business Lighting
 - Self-directed
 - Segment-based
 - Standard Offer
- Enhanced existing programs
 - Compressed Air
 - Cooling
 - Custom
 - Energy Analysis
 - Energy Management Systems
 - Lighting
 - Motors and Drives
 - Recommissioning

Program Summary-Starting Points

Program	Rebates	Comments
Energy Analysis	<ul style="list-style-type: none">• Online study is free• On-site study \$200-\$300• Engineering assistance study up to 75%, max \$25,000	<ul style="list-style-type: none">• Implementation rebates via applicable program
Small Business Lighting	<ul style="list-style-type: none">• Same as new lighting prescriptive rebates (implementation phase)	<ul style="list-style-type: none">• Third-party contractor administers program• Turnkey process for small businesses under 400kW• No cost for audit and support

Program Summary-Starting Points

Program	Rebates	Comments
<p>Lighting: Retrofit & New Construction</p>	<ul style="list-style-type: none"> • \$1.50 - \$210/fixture • T8 rebates (retrofit only) require high efficiency ballast with low ballast factor: \$13 - \$22 • Ceramic metal halide rebates – new construction and retrofit: \$12 - \$75 	<ul style="list-style-type: none"> • Occupancy sensor, exit sign, delamping rebates • Custom efficiency rebates require preapproval and based on energy savings • Lighting rebates for high-efficiency lighting in new construction
<p>Lighting: Redesign</p>	<ul style="list-style-type: none"> • Up to 75% study costs up to \$25,000 • Up to \$400/kW saved 	<ul style="list-style-type: none"> • Study must be conducted by certified lighting professional

Program Summary-Custom

Program	Rebates	Comments
Custom Efficiency	<ul style="list-style-type: none"> • \$400/kW and/or \$7/Dth (MCF) 	<ul style="list-style-type: none"> • Retail electric and gas customers only • Any project that involves energy-savings that is not included in prescriptive offers. • Preapproval is required
Recommissioning	<ul style="list-style-type: none"> • Up to 75% of study cost, max \$25,000 • Up to \$400/kW summer peak, or \$0.08/kWh & \$7/Dth 	<ul style="list-style-type: none"> • Improve efficiency of building's existing mechanicals w/ low- or no-cost adjustments
Standard Offer	<ul style="list-style-type: none"> • Study rebates at 50% up to \$0.10/sf • \$250/KW and \$0.05 per annual kWh saved 	<ul style="list-style-type: none"> • Designed for bundled projects • Contains a technical audit phase and an implementation phase • Expect ESCO participation, GEO involvement

Program Summary-HVAC

Program	Rebates	Comments
Cooling	<ul style="list-style-type: none"> • \$3-\$50 per ton plus \$3-\$4 per ton for greater efficiency • \$200/VAV box 	<ul style="list-style-type: none"> • Rebate levels to average 33% of incremental cost
Boilers	<ul style="list-style-type: none"> • \$600/MMBTUH for 85% Non-Condensing Boilers • \$2500/MMBTUH for 92% Condensing Boilers 	<ul style="list-style-type: none"> • Prescriptive rebates for boiler tune ups and controls • Applications available on line
Furnaces	<ul style="list-style-type: none"> • \$80 for 92% AFUE • \$120 for 94% AFUE 	<ul style="list-style-type: none"> • A prescriptive rebate program • Installed equipment must match GAMA specification • Applications available on-line

Program Summary-Industrial

Program	Rebates	Comments
Compressed Air	<ul style="list-style-type: none"> • \$200/airless drain & \$4500/VFD compressors btwn 10-49 HP. • 100% study costs up to \$2500. • 75% of study costs up to \$15,000 • \$400 per kW saved* 	<ul style="list-style-type: none"> • *For system improvements
Motor & Drive Efficiency	<ul style="list-style-type: none"> • From \$25 to \$13,500 	<ul style="list-style-type: none"> • Rebates vary by motor type, HP, & situation • Rebates submitted through custom efficiency • Preapproval is required • Rebates for upgrades & replacement

Program Summary-Ind./Lg. Commercial

Program	Rebates	Comments
Process Efficiency	<ul style="list-style-type: none"> • Study funding with customer contribution capped at 25% or \$7,500 • Rebates per applicable program 	<ul style="list-style-type: none"> • Qualifier: must have saving potential of 2 GWhs or 8,000 Dth • Designed for multi-phase, multi-year plan • Bonus incentives may be given for milestones
Self-Directed Custom Efficiency	<ul style="list-style-type: none"> • \$525/kW saved, or \$0.10/kWh vs. smaller rebates in most other programs • Customer required to do M&V 	<ul style="list-style-type: none"> • Qualifier: must have over 2 MW and 10 GWhs combined energy use • Larger rebates, customer is doing most of the “work” • Rebates can cover up to 75% of incremental cost vs. 50%

Program Summary-Specialty

Program	Rebates	Comments
Data Centers	<ul style="list-style-type: none"> • Studies up to 75%, max. \$25,000 • New data centers go through an EDA type New Construction program • All implementation rebates at \$400/kW 	<ul style="list-style-type: none"> • RFI process underway to select qualified contractors for studies • Two separate paths: one for existing data centers and one for new construction • Preapproval required
New Construction	<ul style="list-style-type: none"> • Program covers cost of energy modeling: \$8,000-\$12,000 to owner's design team • All implementation rebates at \$300/kW and \$7/Dth 	<p>Over 50,000 sq.ft. EDA</p> <ul style="list-style-type: none"> • Basic energy savings • Enhanced, seeking LEED <p>Under 50,000 sq.ft.</p> <ul style="list-style-type: none"> • List of energy-efficient measures to incorporate

Program Summary-Specialty

Program	Rebates	Comments
Energy Mgmt. Systems	<ul style="list-style-type: none">• On-peak up to \$400/kW (8 a.m. – 6 p.m., Mon-Fri)• Off-peak up to \$0.08/kWh (6 p.m. – 8 a.m.)• \$7/Dth (MCF)	<ul style="list-style-type: none">• New EMS where none existed• Replacing non-functioning EMS• Adding functionality to existing EMS

Program Summary-Specialty

Program	Rebates	Comments
Segment-Based	<ul style="list-style-type: none"> • Preliminary report cost is \$8,000; with a 50% rebate • Investigative studies reimbursed at 75%, up to \$25,000 	<ul style="list-style-type: none"> • Marketing program targeted at owner-occupied and leased buildings of at least 50,000 sq.ft. • Implementation rebates per applicable program plus a 30% bonus
Behavioral Change	<ul style="list-style-type: none"> • Indirect marketing program targeted at small and medium-sized businesses 	<p>Energy Efficiency Workshops</p> <ul style="list-style-type: none"> • Free of charge • Conducted by energy consultant <p>Employee Education Campaign</p> <ul style="list-style-type: none"> • On-site education, posters, collateral

Getting Started

- Start with an AUDIT!...online or onsite
- Most popular points of entry:
 - Energy Analysis
 - Small Business Lighting
 - Recommissioning
 - Custom Efficiency
 - Lighting



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