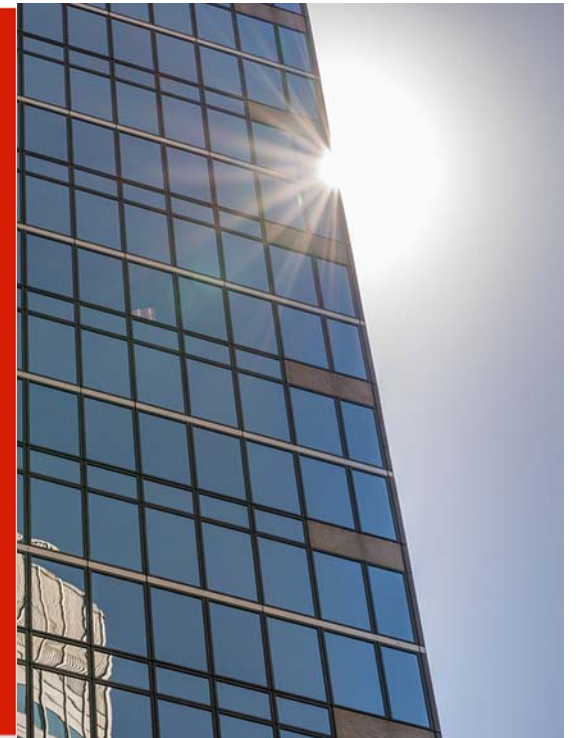




Natural Gas Conservation Conference

Albert Joe, Account Manager

September 19, 2017



Xcel Energy's Energy Portfolio

Includes:

- Electric generation
- Gas transmission, distribution and transportation
- Renewable energy
- Demand Response
- Energy Efficiency rebates and incentives

Xcel Energy's Power Supply - Gas

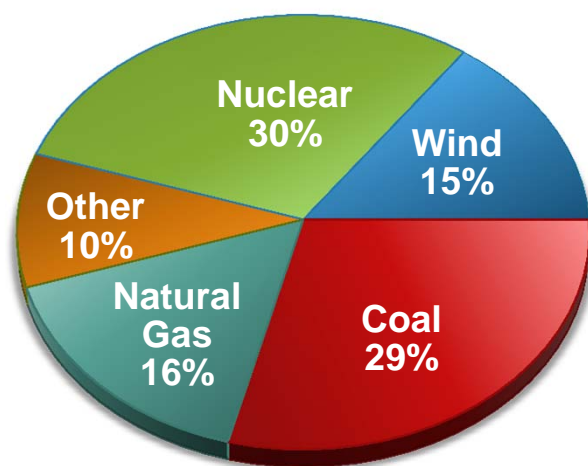
- Natural gas transmission, distribution systems and transportation systems:
 - We have nine natural gas fired plants here in the Upper Midwest, with a generating capacity of about 2,450 megawatts.
 - Xcel Energy delivers natural gas to two million customers in five states.
 - Xcel Energy operates an extensive gas delivery system.
 - Readily abundant in supply basins in the U.S. and Canada.

Natural Gas: Flexible Fuel

- Our natural gas energy sources are a flexible fuel that supports our renewable energy sources.
- Highly efficient combined-cycle gas plants can quickly ramp up or down to respond to changes in renewable energy generation.
 - For example, if wind energy picks up, we can easily back down gas plants to use the wind.
 - When the wind drops off, we can easily increase generation at a gas plant.
- In future years, natural gas will be displaced by renewable energy, and specifically wind energy as our plans to add a significant amount of wind to our system.
- Natural gas will be our back-up to renewable energy sources.

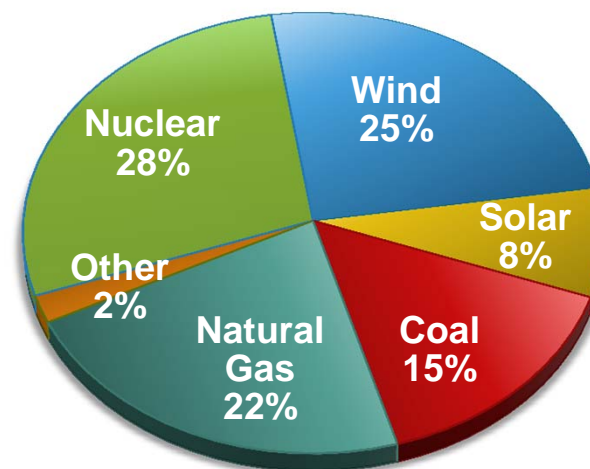
Natural Gas Growth Plan

2016



Natural gas makes up 16 percent of our existing mix.

2030



Our projected growth plan is 22 percent mix by 2030.

Natural Gas Business Development

- Natural gas is part of our overall energy resources that we are continually developing.
 - We have a program to help switch businesses and residents from propane and fuel oil to natural gas.
 - We are constantly working on a competitive basis to win natural gas business.
- To grow our resources internally, we have converted existing energy plants to natural gas:
 - Riverside plant in Minneapolis, High Bridge plant in St. Paul, and Black Dog plant near Burnsville.

Renewable Choice Programs

Xcel Energy's Renewables

**Reduce CO₂
Emissions**



On track to
reduce CO₂
emissions
45% by 2021



The nation's
#1 utility wind
energy provider
for over a decade



National leader
in renewable
energy choices



**Renewable
Resources**

Nearly 25% of
the electricity
all customers
receive comes
from renewable
sources

Renewable*Connect

Subscription-based blend of solar and wind energy

Features

Flexible terms- Choose from monthly, five-year or 10-year subscriptions.

Choice- Decide how much renewable energy you want to subscribe to.

Locked-in pricing- Enjoy more certainty with set price schedules for the contract term.

Green energy- RECs are retired on your behalf, allowing you to claim you use renewable energy.

Get Started

Renewable*Connect is our newest program that can deliver clean, local and reliable energy to your home or business.

Program participation is limited. Please visit xcelenergy.com/RenewableConnect to check availability and learn more.

Windsource

Subscription-based wind energy

Features

Low cost- No upfront fee, just a minimal monthly charge on your electric bill.

Choice- Choose how much wind power you want to purchase, from one 100 kWh block up to 100 percent of your usage.

Green energy- RECs are retired on your behalf, allowing you to claim you use renewable energy.

Get Started

Windsource is an easy, inexpensive way to support green energy, and you can subscribe today. Just complete an online application or speak to our energy experts for help enrolling.

Visit [xcelenergy.com/Windsource](https://www.xcelenergy.com/Windsource) to learn more.

Solar*Rewards Community

Support a solar garden and get paid for solar energy production

Features

Local solar by third-party provider- Contract terms defined by provider; and no installation is required.

Consistency- You still receive electric service and billing from Xcel Energy.

Bill credit- Potential to receive bill credit for your portion of the garden's solar energy production.

Get Started

Contact a solar garden provider who builds gardens, sells subscriptions and can advise you about potential savings, subscription terms and conditions. Solar garden providers contact us to ensure subscribers receiving Solar*Rewards Community service and bill credits.

View the list of solar gardens by visiting [xcelenergy.com/CommunitySolar](https://www.xcelenergy.com/CommunitySolar).

Solar* Rewards

Install on-site solar and receive incentives

Features

Ownership- Generate clean energy through solar panels installed on your home or business.

Use what you need- Fulfill your energy needs by using what your system produces.

Energy credit- Receive a production incentive to offset costs.

Net metering- If you generate more energy than you need, you can sell the excess back to us.

Get Started

Installing on-site solar is a great way to invest in renewable energy. Your system will be integrated with our grid to ensure you receive reliable power even when the sun isn't shining.

Find out about availability and how to apply for incentives by visiting [xcelenergy.com/Solar](https://www.xcelenergy.com/Solar).

Net Metering

On-site solar

Features

Ownership- Generate clean energy with solar or wind installed on your home or business.

Use what you need- Fulfill your energy needs with what your system produces.

Bill credit- If you generate more energy than you need, we will pay you for the excess.

Green energy- RECs are retired on your behalf, allowing you to claim you use renewable energy.

Get Started

Net Metering allows you to generate your own energy and retain the renewable attributes that your solar system produces.

Learn more about how to apply and interconnect to our grid by visiting [xcelenergy.com/Solar](https://www.xcelenergy.com/Solar).

Demand Response Program

What is Demand Response?

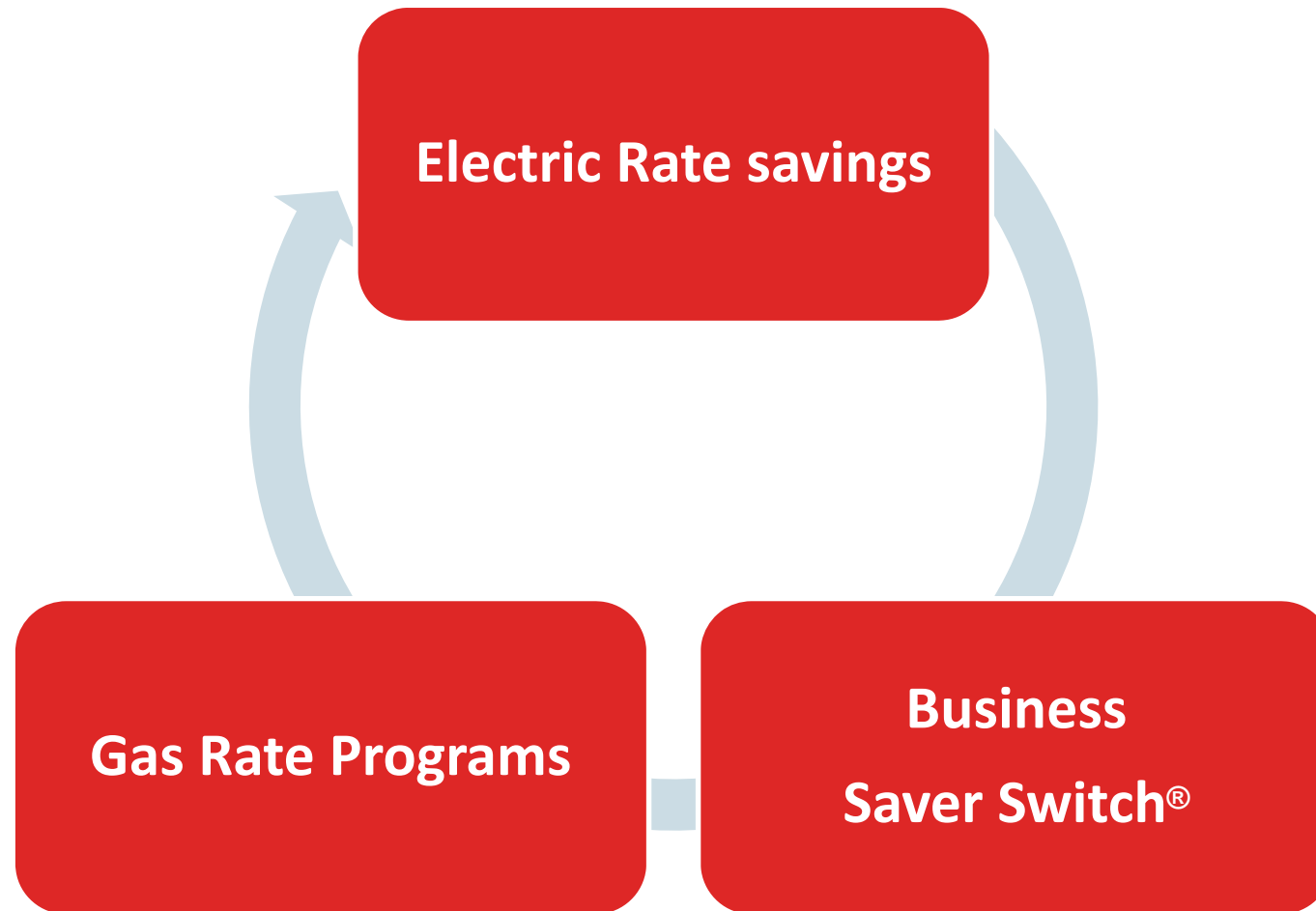
- Goal of demand response is to reduce energy usage during critical peak periods.
- Demand response is changes in electricity or gas usage by end-use (retail) customers from their normal consumption patterns, at the request of their utility, usually during periods of high power prices or when the reliability of the grid or distribution system is threatened.



Demand Response Details

- Demand response programs provide incentives to customers to change their consumption behavior.
- When Xcel Energy calls on customers during a DR event, curtailment actions can include:
 - Temporarily shutting off lights
 - Turning down heating, ventilation, and air conditioning (HVAC) units
 - Shutting off equipment
- DR programs essentially have the same effect as Xcel Energy turning on additional generation, but at far less cost.

Demand Response Options



Energy Efficiency for Business

Our Current Filing

- Xcel Energy files a triennial plan with the DER every 3 years. This year is the beginning of our new 2017-2019 Conservation Improvement Program triennial filing.
- Programs are funded by ratepayer dollars, which are accrued from customer bills as part of the “Resource Adjustment” rider on a customer’s bill.
- *Solar and Wind programs are funded through a separate budget*

Question - when is energy efficiency the best option?

- Answer - All the time
- Former Energy Secretary, Ernest Moniz said, *“Energy efficiency is one of the fastest and most cost effective ways to save money, cut greenhouse gas pollution and help businesses strengthen their bottom lines.”* Department of Energy (DOE)

Energy Efficiency Options

**Studies &
Assessments**

Benchmarking

**Prescriptive
programs**

Custom programs

Holistic programs

Energy Efficiency

- You don't need wind or sun to participate in the many energy efficiency programs offered by Xcel Energy.
- We have programs for electric, gas and combination electric and gas customers.
- We can help you find the program, study or rate option to help your facility or organization become sustainable for now and for the future.

Benefits and Uses of Natural Gas

- Significantly lower emissions than other fuel.
- Interstate pipeline system safest transportation system in the country.
- Used for cooking, water heating, home heating and cooling, gas-fired dryers, fireplaces, and grills; also provides electricity and has industrial applications.
- Expanding our territory to bring reliable and low cost fuel source to customers.

Gas Energy Efficiency Rebates

- Prescriptive rebate options:
 - Boilers
 - Commercial water heaters
 - Commercial furnaces
 - Unit heaters
 - ECMs - ***must have electric service from Xcel Energy**
 - Pipe insulation
 - Heating system improvements
 - Steam trap repair or replacement
 - Boiler tune-up
- Custom rebates
- Xcel Energy-funded studies and implementation rebates



GETTING A NEW HEATING SYSTEM SHOULDN'T MAKE YOU SWEAT.

Rebates Now



 **Xcel**Energy

ALWAYS *delivering.*

Energy Efficiency works

- Over the past five years, Xcel Energy has saved customers over 800,000 decatherms equal to heating approximately 4,000 homes.

2013	2014	2015	2016	2017	Total
183,224	170,404	176,134	202,720	67,619	800,101

- Many of our customers have had successful results partnering with Xcel Energy to save energy and money, including the South St Paul High School.

Gas Business Case Study

Case Study: South St. Paul High School



Case Study: South St. Paul High School

Background:

- A historic school building can be an iconic fixture in a community, often providing a landmark with an endearing presence and subtle prestige. Yet with each year comes energy efficiency challenges. The historic South St. Paul High School building has been operating over 60 years, but keeping it warm during the school year, while balancing limited funding, is an ongoing task.

Strategy:

- Offset the effects of an old steam boiler and other aged equipment, by consulting with Xcel Energy for energy savings ideas. Together they came up with an annual efficiency game plan based on the school's budget and savings that went toward upgrades at a later date.

Case Study: South St. Paul High School

The outcome: South St Paul High School achieved notable savings with rebates and energy savings

Energy Snapshot	
Number of buildings	4
Number of boilers	4
Number of steam traps	56
Therms savings	24,288
Rebate savings	\$1,988
Estimated energy cost savings	\$16,000

Case Study: South St. Paul High School

Testimonial:

- “Since we have been tuning up our boilers every other year, and repairing bad or leaky steam traps, we have been seeing much more reliable performance out of all our equipment. So when we go years without a breakdown or complaints, we know we’re doing the right thing.” Glen Birnstengel, Facilities Manager

Energy efficiency - resources

Dedicated sales people to help you;

- Determine where to start, identify and prioritize cost-effective improvement opportunities and recommend money-saving rebates to shorten the payback of your projects. It's the fastest and easiest way to take aim at achieving your energy goals.
 - Account Managers
 - Key Account Managers
 - Energy Efficiency Specialists
 - Mid-Market Field Reps

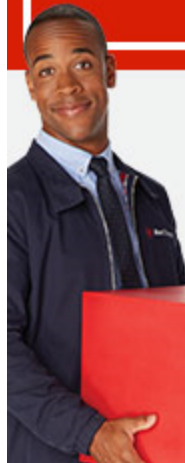
Not sure where to start?

Call your account manager or our Business Solutions Center at 1-855-839-8862



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