

SIOUX CITY | SEPTEMBER 18-20 | 2024

STRONGER
TOGETHER
ANNUAL CONFERENCE & EXHIBIT

Big Savings – Bigger Impact with Energy Efficiency

Erin Rasmussen, MidAmerican Energy Company



Handouts and presentations are available in the event app.



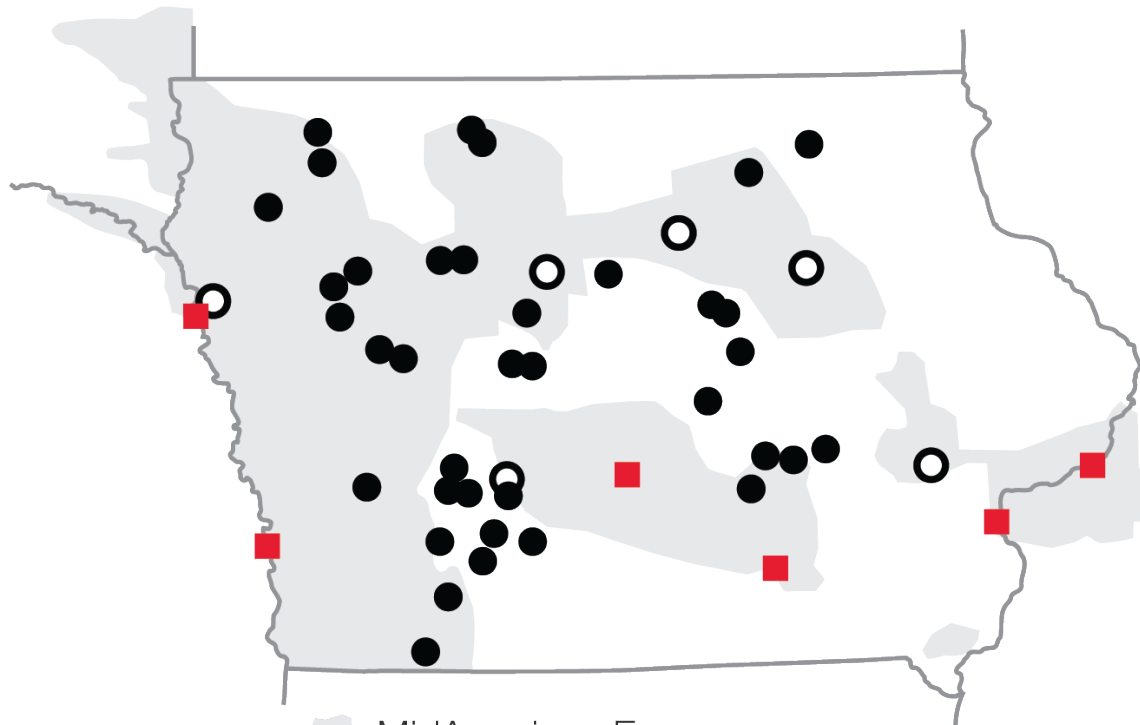
Big Savings, Bigger Impact with Energy Efficiency

Erin Rasmussen

September 19, 2024




MidAmerican Energy Overview



- MidAmerican Energy service area
- Major generating facilities
- Wind farms
- Solar farms

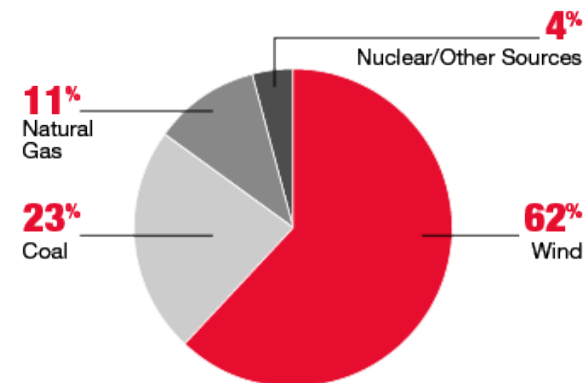
 **797,000**
Natural Gas Customers

 **820,000**
Electric Customers

 **3,100**
MidAmerican Employees

 **423**
Communities Served

GENERATION CAPACITY 2023



Energy Efficiency...A Long Tradition



Helping
customers
save energy
for over 30
years!

Why Energy Efficiency?

“Energy efficiency is one of the easiest and most cost-effective ways to combat climate change, reduce energy costs for consumers and improve the competitiveness of U.S. businesses. Energy efficiency is also a vital component in achieving net-zero emissions of carbon dioxide through decarbonization.”

Department of Energy (<https://www.energy.gov/eere/energy-efficiency-buildings-and-industry>)

Utilize Partners and Resources



- ▶ Start with your utility partner
 - Energy efficiency programs
 - Building/facility audits
 - Efficiency incentives
 - Engineering support
 - Resources



- ▶ Look for state and federal funding
 - Inflation Reduction Act (IRA)
 - Infrastructure Investment and Jobs Act (IIJA)
 - State-specific incentives
- ▶ Work with Iowa Economic Development Authority (IEDA) on funding opportunities



Energy Efficiency in Action

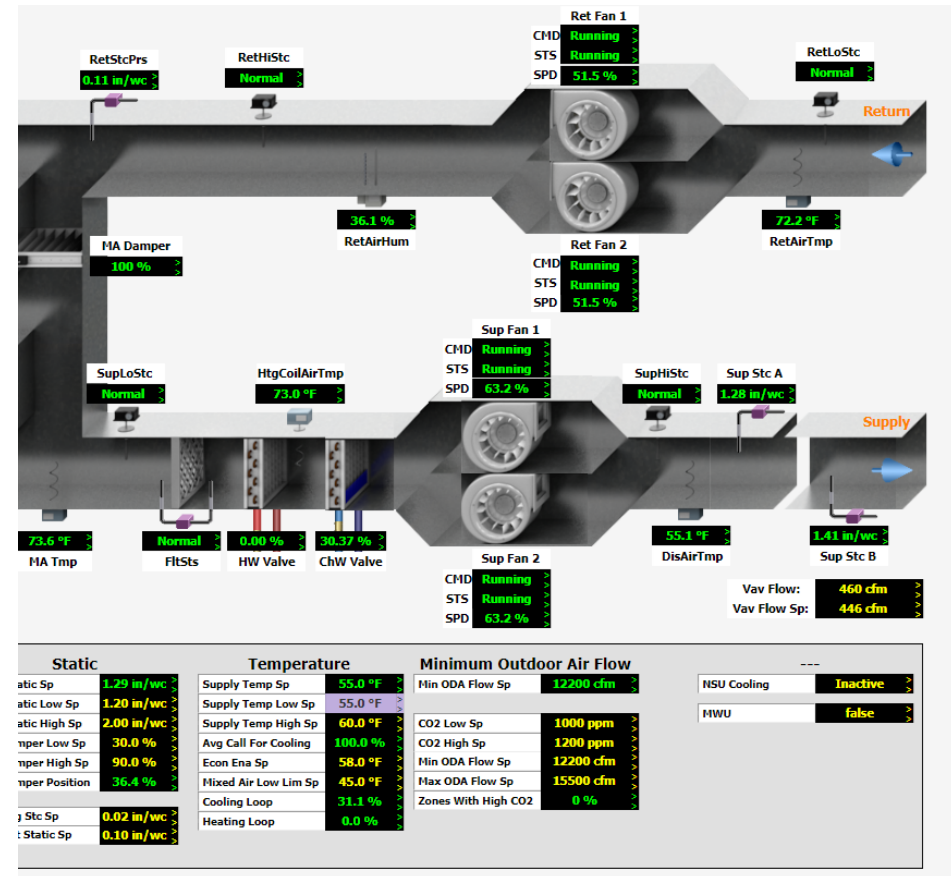
Lighting System Optimization

- ▶ Simple solutions:
 - Install occupancy sensors to turn lights off in areas where lights may be left on for extended periods (e.g., bathrooms, conference rooms, etc.)
- ▶ Low-cost options:
 - Replace fluorescent and HID lamps with LED equivalents
- ▶ Capital upgrade:
 - Upgrade to LED fixtures; consider fixture-level controls that respond to occupancy, daylight, etc.



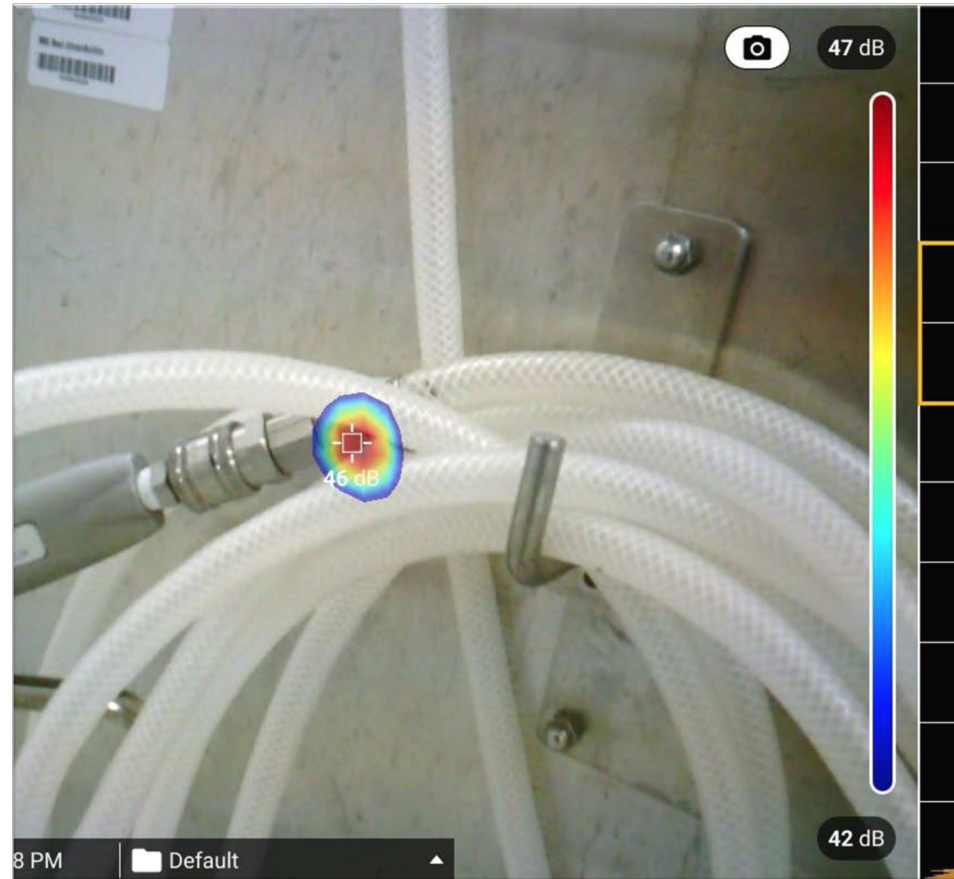
Retro-Commissioning

- ▶ Simple solutions:
 - Implement operating schedules to turn off equipment and set back space temperatures when rooms are unoccupied
- ▶ Low-cost options:
 - Fix broken sensors, dampers and valves, which are important components in optimizing energy consumption
- ▶ Capital upgrade:
 - Install variable-speed drives (VSDs) on fans and pumps to reduce speed when rated equipment capacity isn't needed



Compressed Air System Optimization

- ▶ Simple solutions:
 - Reduce compressed air system pressure, optimize compressor sequencing and repair leaks
- ▶ Low-cost options:
 - Install no-loss condensate drain valves and high-efficiency air nozzles
- ▶ Capital upgrade:
 - Optimize system operation by installing a variable-speed compressor, high-efficiency dryer and outdoor air intake/waste heat recovery ducting





Energy Efficiency Programs

Nonresidential Programs

- ▶ Instant Discounts
 - Lighting and HVAC equipment
- ▶ Nonresidential Energy Solutions (NES)
 - Small Business Express
 - Direct Project Assistance
 - Retro-Commissioning
- ▶ Commercial New Construction
- ▶ Trees Please!



Instant Discounts

- ▶ Incentivize distributors
 - ▶ Residential and nonresidential equipment
 - ▶ Instant savings at time of sale
 - ▶ No paperwork or online application
- ▶ LED fixtures
 - ▶ HVAC
 - Heat pumps (air source and geothermal)
 - Boiler
 - Furnace
 - Central air conditioners
 - PTACs
 - ▶ Heat pump water heaters



Nonresidential Energy Solutions

Small Business Express

- ▶ Small or mid-size facility
 - <100,000 sq. ft.
- ▶ Free energy assessment
- ▶ QSP driven
- ▶ Instant Discounts – enhanced
 - LED lighting
 - HVAC
 - Commercial refrigeration/kitchen
 - Process
 - Compressed air

Direct Project Assistance

- ▶ Larger facilities
 - >100,000 sq. ft.
- ▶ Free facility assessment
- ▶ Standard and custom incentives
- ▶ Energy manager supported
- ▶ Project evaluation and support

Nonresidential Energy Solutions

Retro-Commissioning

- ▶ Larger facilities with energy management systems
- ▶ No-cost investigation to identify savings opportunities through control improvements, maintenance and repairs
- ▶ Energy manager supported
- ▶ Incentives based on first-year energy savings



Commercial New Construction

- ▶ New construction or major renovation projects
 - >5,000 sq. ft.
 - Achieve savings 5% or better than energy code baseline
- ▶ Complementary energy design assistance
- ▶ Financial incentives to offset costs associated with energy efficiency strategies
- ▶ Multiple pathways/tracks



Trees Please!

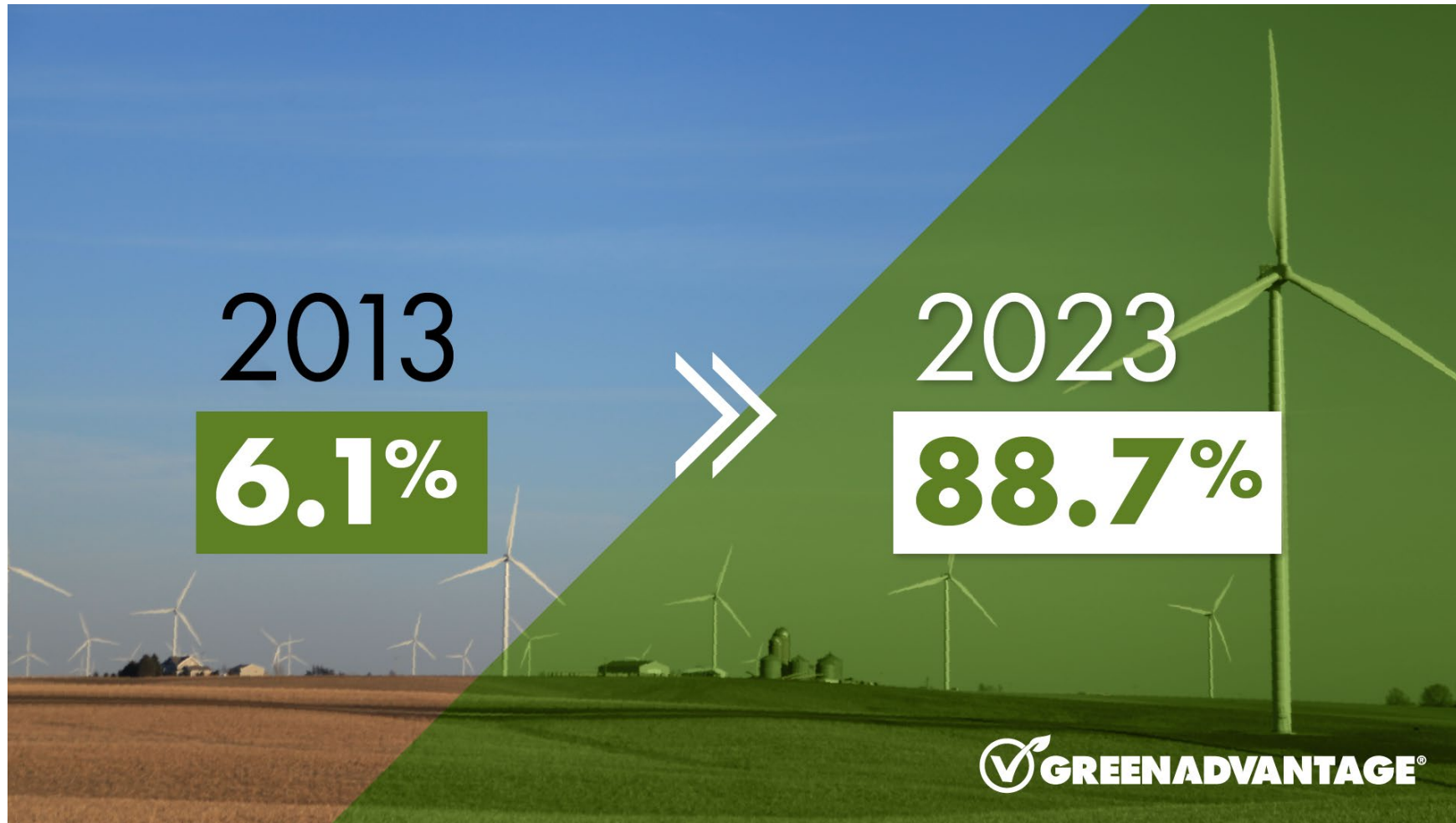
- ▶ Grant program for Iowa municipalities
 - \$1,000 standard grant
 - \$5,000 grant for large cities
- ▶ Grant money must be used for purchase of trees
- ▶ Tree planting must provide energy efficiency benefits
- ▶ Community must have matching funds for grant
- ▶ Over \$4.4 million awarded since 1998





Additional Support

GreenAdvantage



MidAmerican CARES





MIDAMERICAN ENERGY COMPANY

Obsessively, Relentlessly **At Your Service**[®]