



PARTNERS IN ENERGY

An Xcel Energy Community Collaboration

Bloomington's Energy Action Plan Partners in Energy Debrief

City of Bloomington | Bloomington Public Works December 9, 2019

Agenda & Objectives



Agenda

- 1. Welcome & Introductions
- 2. Bloomington's Energy Action Plan in Review
- 3. Implementation Successes and Challenges
- 4. Partners in Energy Experience
- 5. Next Steps





Bloomington's Energy Action Plan in Review



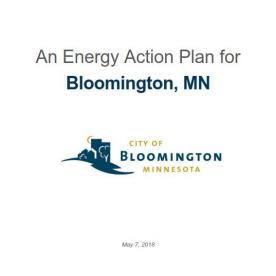
Bloomington Energy Action Team











One Bloomington:

We are a community that includes all residents, working together to accomplish the same goals. We live in different neighborhoods, but we're not defined by boundaries. We are united, not by sameness, but by our desire to build a strong community that we can all enjoy. **We are One Bloomington.**

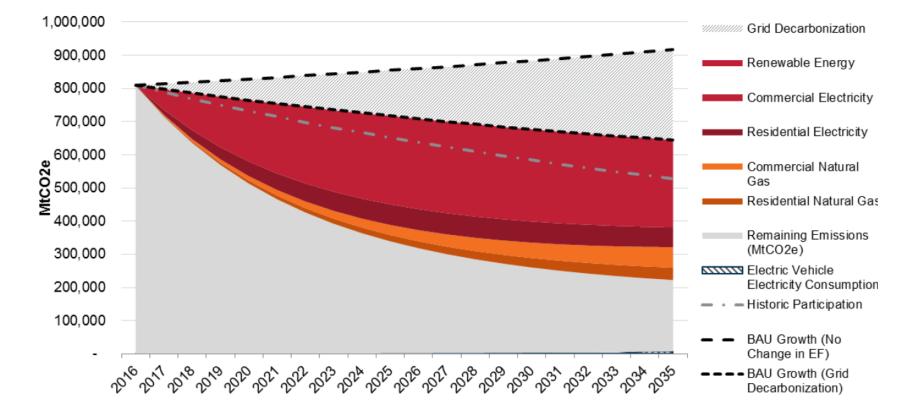


Bloomington's Energy Action Plan



Emissions Goal:

75% reduction in city-wide energy-related greenhouse gas emissions by 2035



Bloomington's Energy Action Plan



Transportation Goal:

Pursue all viable opportunities for promoting the elimination of vehicle emissions, including...

- Support for electric vehicles,
- Increased public transportation,
- Higher-density and mixed-use zoning,
- Additional biking and pedestrian infrastructure, and
- Telecommuting.



Bloomington's Energy Action Plan



Focus Areas: Business Municipal Residential **Electric Vehicles**





Implementation Overview



Implementation Overview



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Home Energy Squad[®] outreach

- Social media posts
 - Testimonials
- Tabling at events
- Income-qualified outreach

Windsource promotion

- Windsource Challenge

Electric Vehicle outreach

- Farmer's market and Oak Grove
 Presbyterian events
- Social Media
- Congregation outreach
- Multifamily outreach
 - Ongoing

POWER YOUR HOME WITH SOLAR ENERGY

Residential Solar Checklist

BEFORE YOU BEGIN

Reduce the amount of energy your homes uses by increasing your home's energy efficiency. Signing up for a Home Energy Squad' visit is a great way to identify energy-saving improvements. During your visit you will receive free energy-saving installations such as: LED light buils, a programmable thermostat, door weather stripping, and more. Visits also include a blower door test to measure for air leaks, an insulation inspection, a safety check on your heating system, and help with next steps. Visit **blm.m/HES** or call **612-328-6220**.



Bloomington MN City Government

"My Home Energy Squad visit was so easy. The crew took care of everything, suggested upgrades, and sent a polite follow-up email for 3% financing on new equipment. Here is a picture of my daughter with the new cool-to-the-touch LED bulbs." Joe, actual Bloomington resident

Sign up for a Home Energy Squad visit today. blm.mn/HES



Implementation Overview



- Bloomington Best Practice Energy Tours
 - 6 tours completed to date
- Business Case Studies and Success Stories
 - Two case studies
 - Video promotion
- Energy Assessment buydown
 - Free walk-thrus at businesses in Lyndale Corridor
 - City buy-down of discounts for 15 Xcel Energy Turn Key Services Assessments







Business Focus Area

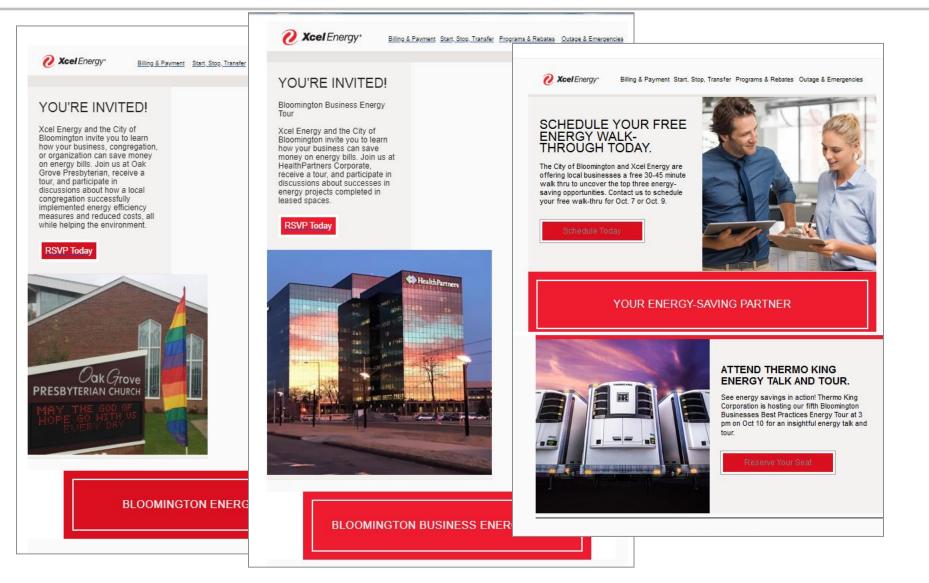


Business Focus Area

70 businesses participate in an energy audit or recommissioning study

Double baseline energy efficiency program participation 10 additional businesses subscribe to renewable energy or a solar garden







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From the very beginning, the owners of Minnesotabased Quality Bicycle Products (QBP) wanted to create a brand that reflected their values of superior products and customer service. As part of that mission, they've incorporated sustainability into their business, to lower their energy bills, reduce their carbon footprint and give employees another reason to feel good about working there.

As a result of that goal, maintenance staff at QBP's Bloomington location integrated a number of sustainable improvements throughout the campus, to include high-efficiency equipment, parking lot rain gardens, reused construction materials, and solar panels. They built efficiency in from the ground up on an addition to a building in 2007, awarding them LEED Gold certification for their efforts.

All of these individual company projects fit into a larger community goal the city has to reduce energy use, take advantage of renewable technology and get others to get in on the effort.

SMART LIGHTING CHOICES

Lighting improvements pay back quickly, which is why lighting is often the first thing a company will upgrade in an effort to use less energy and lower bills. QBP began in the warehouse of their Bloomington facility by installing a networked lighting system. The system allows them to program their lighting with automated shut-offs based on location and time of day.

"The bulbs are set up to use daylight harvesting to take advantage of ambient light," says facilities supervisor Duke Rembleski. "If daylight makes the room bright enough, the lights shut off." For example, the first row or two of lights near the windows may turn off on sunny days, but on cloudier days, they'll turn on to the minimum output needed to reach the 40 percent threshold.

We can run differe that show us how kilowatt-hours we with daylight hary

Facilities Supervisor Duke Rembleski

> WAREHOUSE LIGHTING Project: Digital Lume and outbound warel Estimated project co \$86,400

Total annual energy 327,500 kWh Annual energy cost \$31,400

Annual maintenance \$5,400 Rebate & bonus amo

mple payback:

Bloomington MN City Government

Donaldson Company worked with Xcel Energy and identified 100+ ways to save energy. Projects ranged from weather stripping doors to installing or upgrading programmable controls. The first 40 projects are estimated to have saved the company just over \$56,000 annually, resulting in a simple payback of less than four years.

Read more about this and other sustainability success stories at blm.mn/sustainability.



BLOOMINGTONMN.GOV Sustainable Bloomington In 2016, the Bloomington City Council completed a strategic planning.





At Donaldson Company in Bloomington, Minnesota, continuous innovation and improvement are part of the company culture. For over 100 years, this filtration system

•••• ortunities within its own in 44 countries, to operate waste.

> nent has paved the way for a d energy related projects that ve resources and money. into the City of Bloomington's duce energy use, invest in incourage others to join in

rr Bill Coldwell began energy n's global headquarters by six company-owned campus cel Energy's Process Efficiency e half-million-square-foot campus portunities. The assessment ommendations. With the list in ze and begin implementing ess, completing 40 projects in

thodical plan, starting with ing on to the projects with ays. By starting with smaller, ble to garner support for

rr stripping doors and conducting or upgrading programmable g equipment operating schedules. mated to have saved the company esulting in a simple payback of

f more as savings continue to

. Many of the assessment not completed within the

We think about saving energy in everything we do. It's in our genes."

Donaldson Facility Engineering Manager Bill Coldwell



PROCESS EFFICIENCY SNAPSHOT

Project: Process Efficiency Assessment

Number of projects implemented: 40

Estimated project cost: \$228,000

Annual energy costs savings: \$56,000

Total rebate amount: \$19,200

Simple payback: Under 4 years

Bloomington Best Practice Energy Tours



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Tours of energy efficient businesses and nonprofits, sponsored by the Sustainability Commission and hosted by business and organizations

Impact:

- 6 tours held in 2018 & 2019
- 30-50 attendees each
- Expanded efforts to include nonprofits and congregations





Business Case Studies and Success Stories



Creating case studies and digital stories to share businesses successes and best practices



Impact:

- Two case studies completed
- Two videos completed, one in the works
- Case Studies and videos shared on social media



Energy Assessment Buy-down



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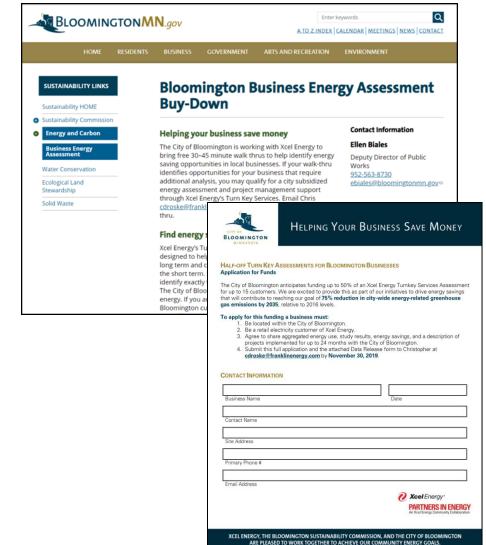
The City of Bloomington bought down the cost of 15 energy assessments

Direct outreach to eligible business

Impact:

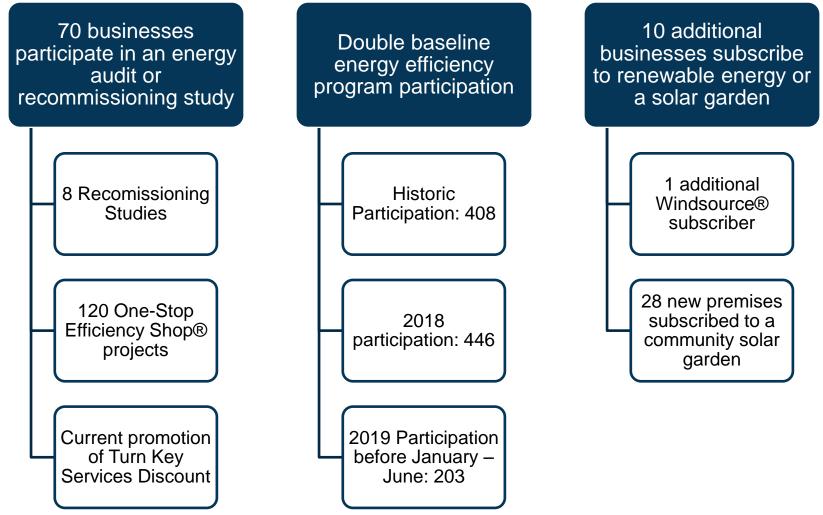
- Contacted 34 businesses and nonprofits
- 12 free walk-thrus completed
- 7 recommended for a full Turn Key Services Assessment

Question: What follow-up is needed?





Business Focus Area



Numbers are compared to 2016, the baseline year, unless noted



Municipal Focus Area

Goals



Municipal Focus Area

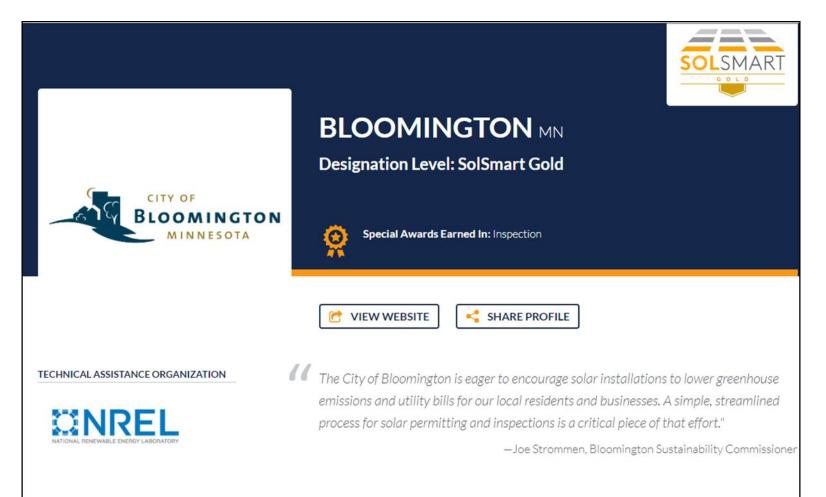
Hire a full-time sustainability professional Benchmark city facility energy use and develop a strategic plan for identifying savings opportunities and begin plan implementation

Join SolSmart and review city practices around solar

SolSmart Designation

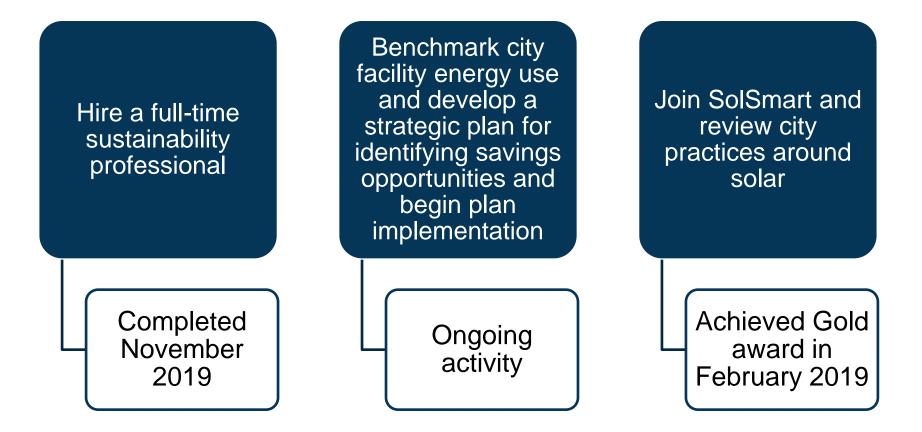


Municipal Focus Area





Municipal Focus Area





Residential Focus Area

Goals

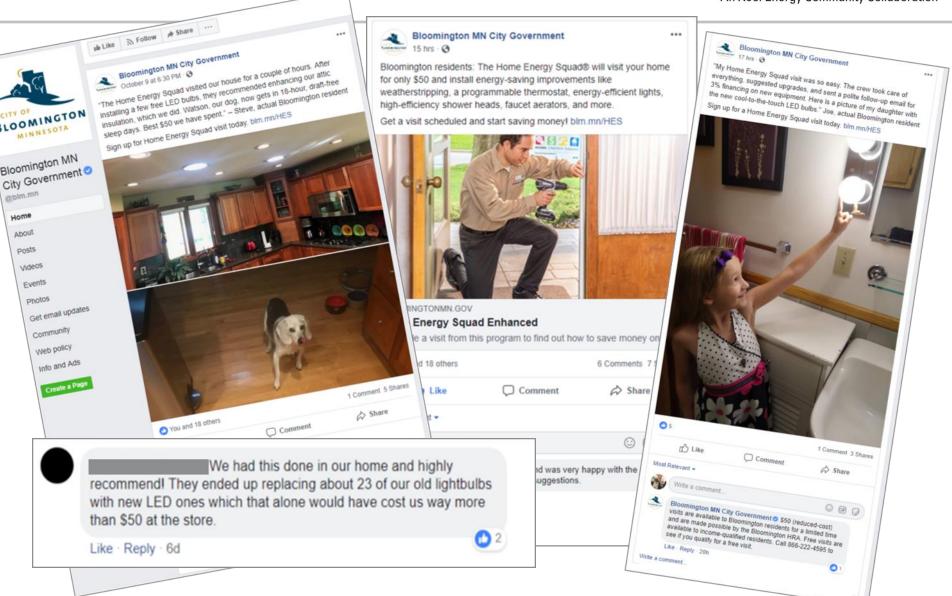


Residential Focus Area

Home Energy Squad[®] visits: 350 in 2018 and 500 in 2019 Windsource and Renewable* Connect: 350 in 2018 and 500 in 2019 At least four multifamily buildings engage in energy efficiency programs annually during 2018 and 2019



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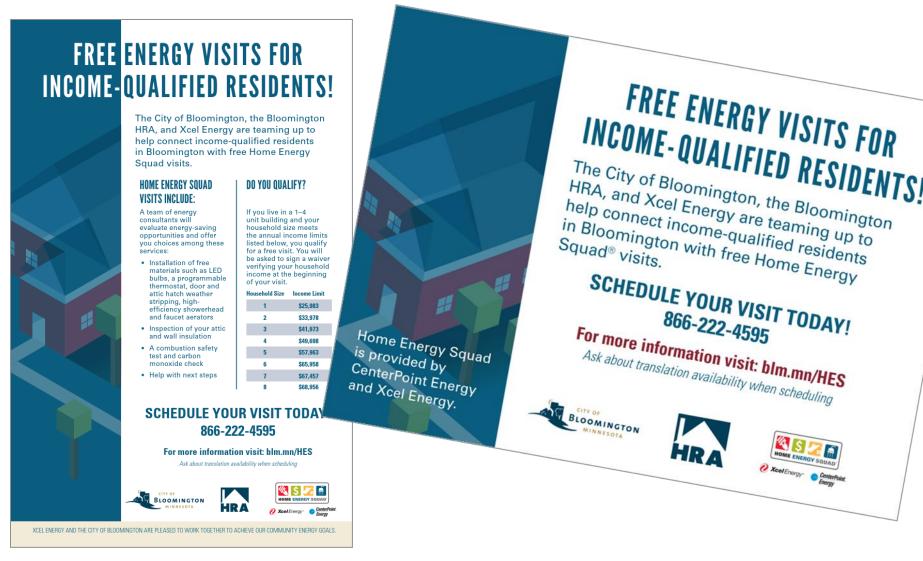




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Enter keywords A TO Z INDEX CALEND Bloomington MN City Government 🥏 September 5 · 🚱 ENVIRONME Like Page Over 1,500 of your Bloomington neighbors are already reducing their BLOOMINGTONMN.gov ARTS AND RECREATION ... carbon footprint. Subscribe to a renewable energy program today! GOVERNMENT Renters and homeowners can participate. New subscribers who sign up BUSINESS Join a renewable energy challenge before September 15 can enter to win a \$100 gift card! *Form submission required to win. Contact Information Bloomington is excited about the future of renewable Sustainability energy. The City recently completed an Energy Action Plan energy, the Lity recently completed on Energy program. You can through Xcel Energy's Partners in Energy program. You can <u>952-563-8730</u> the a part of the plan, too. The Sustainability Commission's sustainability. @BloomingtonMN. we a part of the plan, too, the sustainability commissions by challenge to you: Help reduce greenhouse gas emissions by chancinge to you. Thelp reduce Breening program. The Commission's goal is for 100 new subscribers to sign up fine commissions goal is for fournew subscribers to sign up for Xcel Energy's Windsource® in August. Residents who sign ior Acer Energy's Windsourcew III August. Residents who sig up for a subscription to help biodrining on reach is erier g goals before September 15 can enter a drawing to win a ive september is the enter a diamine of mina in the sign up and enter to win. CITY OF BLOOMINGTON MINNESOTA ubscribe to Wind Energy and Enter to Win a CONGRATULATIONS ON BEING SELECTED AS A WINNER FOR **BLOOMINGTON'S WIN WITH WIND CHALLENGE!** 5 Comments 2 Shares THANK YOU FOR HELPING THE CITY OF BLOOMINGTON REACH ITS ENERGY GOALS! Comment Share







POWER YOUR HOME WITH SOLAR ENERGY Residential Solar Checklist

BEFORE YOU BEGIN

Reduce the amount of energy your homes uses by increasing your home's energy efficiency. Signing up for a Home Energy Squad* visit is a great way to identify energy-saving improvements. During your visit you will receive free energy-saving installations such as: LED light bulbs, a programmable thermostat, door weather stripping, and more. Visits also include a blower door test to measure for air leaks, an insulation inspection, a safety check on your heating system, and help with next steps.

Visit blm.mn/HES or call 612-328-6220.

START PLANNING

 Determine your home's solar pc It's important to consider your before deciding if installing sol you. You can get a sense of you using the Minnesota Solar Suit Visit mn.gov/SolarApp.

> Talk to the City: It's the City's Building I project so you know special use permit i Contact the buildin 952-563-8930 or inspections@Bloom

Talk to your HOA: If you in that has a Homeowners A it's important to know if t to installing rooftop or gre Contact your HOA directly

Take advantage Energy Tax Credi

2019 is the final

30% Residential

Tax Credit, whic

runs out!

 Identify financing opportunities: Low-interest loans are available to help homeowners add rooftop or ground mount solar at their home.

Contact the Center for Energy and Environment at 612-335-5884 or mnlendingcenter.org.

POWER YOUR ELECTRIC VEHICLE WITH WIND ENERGY

Choose to power your electric vehicle with up to **100[%] clean electricity** with Xcel Energy's Windsource[®]!

Visit **xcelenergy.com/Windsource** to sign up. Learn more about electric vehicle charging rates and options by visiting **xcelenergy.com/EVElectricPricing**.

In addition to choosing an EV pricing plan, you can choose to get some or all of your electricity from renewable sources. Windsource is a program that allows you to pay a little extra each month to get bergy as you want to fuel your car or power your home.

Nin with Wind!

n residents who up for Windsource before 15 can enter for a chance to win a \$100 gift card!

• • •

n/Renewable to enter today!

🕗 Xcel Energy*

Windsource®

Nind Enerav

energy projects you claim a 30% credit on your federal tax return for the costs of the system. Projects must be installed by December 31, 2019 — don't miss your opportunity to take advantage of this tax credit! and the second



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XCEL ENERGY, THE BLOOMINGTON SUSTAINABILITY COMMISSION, AND THE CITY OF BLOOMINGTON ARE PLEASED TO WORK TOGETHER TO ACHIEVE OUR COMMUNITY ENERGY GOALS.

Home Energy Squad Outreach



HES cost buy-down since 2013

Continuing social media-based promotions

Dedicated website with resources

Impact:

- increased participation 44% over "historic participation"
- Over 8,000 impressions on social media campaign

Home Energy Squad Enhanced



Would you like to save money on your utility bills?

Home Energy Squad Enhanced is here to help you. The program includes a home energy visit right to your house and more. We help you understand your home's energy use so you can save money on your utility bills.

To sign up for a home energy visit, please visit the <u>CEE</u> website

[®] or call 651-328-6220.

Home Energy Squad Flyer

Xcel Energy and The City of Bloomington are pleased to work together to achieve our community energy goals:



The Housing and Redevelopment Authority in and for the City of Bloomington (HRA) does not discriminate on the basis of race, color religion, sex, national origin, age or disability in the admission or access to or treatment or employment in, its services, programs, or activities. Upon request, accommodation will be provided to allow individuals with disabilities to participate in all HRA services, programs and activities.

Contact Information

Housing and Redevelopment Authority

<u>952-563-8937</u> <u>hra@BloomingtonMN.gov</u>



Low-income Home Energy Squad



Utilizing partners and Bloomington facilities to spread the word about free Home Energy Squad visits

Impact:

- Information about free visits included on Bloomington's website
- 49 Low-income Home Energy Squad visits in in 2018 & 2019



Windsource Promotion

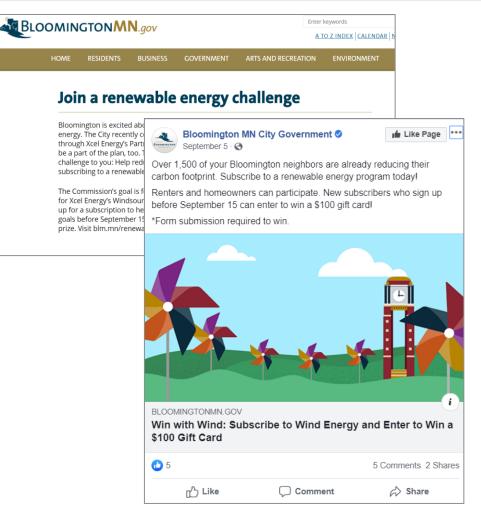


Social-media based campaign to encourage Bloomington residents to sign up for Xcel Energy's Windsource[®]

Impact

- 34 Entrants
- 17 new Windsource Signups
- 2+ testimonials collected

Question: How to use the testimonials?

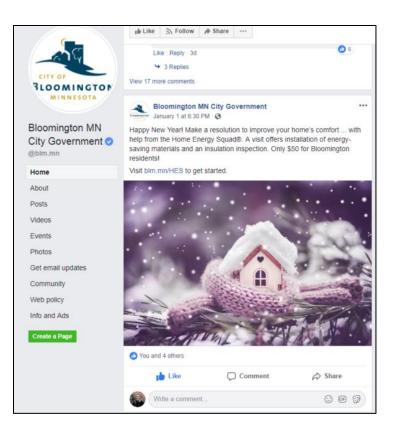




Ongoing Residential Efforts



- Multi Family Building Efficiency outreach in early 2020
- Tabling at recent and upcoming events
 - Climate Conversations Trivia
 - Bloomington Home Improvement Fair
- Continued outreach support from Home Energy Squad
- Bloomington Participation in Inter-City HES Challenge





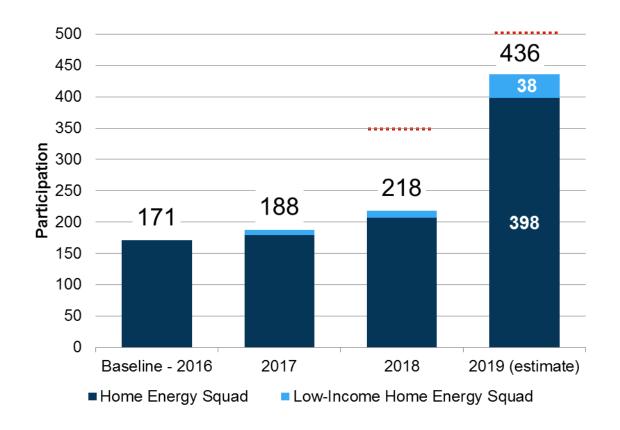


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Residential Focus Area

Home Energy Squad Participation



Bloomington MN City Government 15 hrs - 🚱

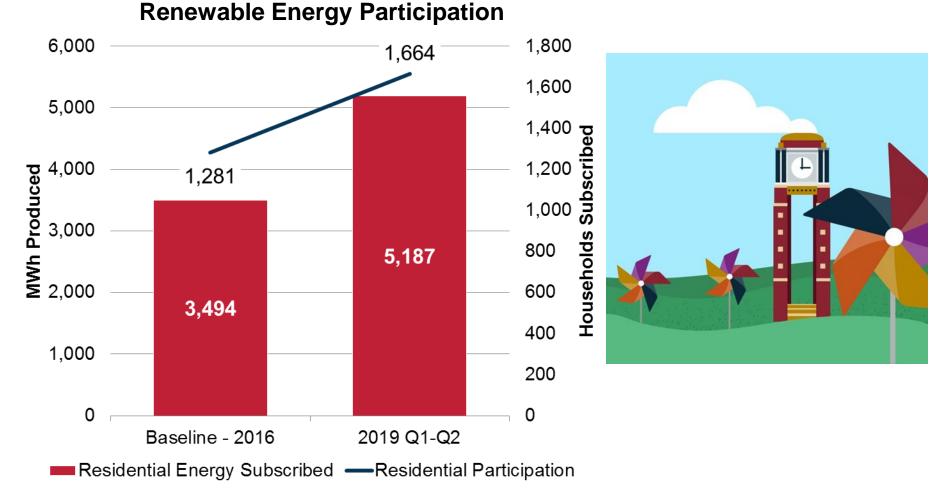
Bloomington residents: The Home Energy Squad® will visit your home for only \$50 and install energy-saving improvements like weatherstripping, a programmable thermostat, energy-efficient lights, high-efficiency shower heads, faucet aerators, and more.

Get a visit scheduled and start saving moneyl blm.mn/HES



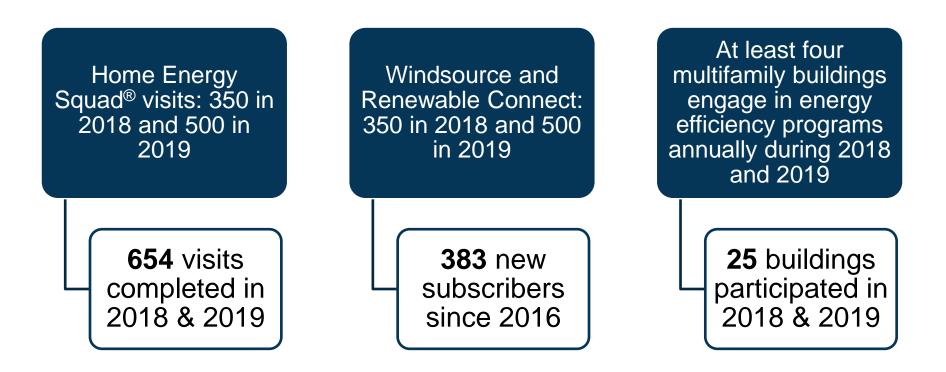


Residential Focus Area





Residential Focus Area





Electric Vehicle Focus Area





Electric Vehicle Focus Area

Aid in the acceleration of electric vehicle (EV) adoption by installing two-five EV chargers at popular municipal locations (e.g. parks) throughout the city

Progress Towards Goals



Electric Vehicle Focus Area

Aid in the acceleration of electric vehicle (EV) adoption by installing two-five EV chargers at popular municipal locations (e.g. parks) throughout the city

EV charging stations installed at Civic Plaza



Other Electric Vehicle Outreach



Supporting Electric Vehicle Ride & Drive events

Impact:

- Hosted and EV Ride &
 Drive event at the
 Bloomington Farmers'
 Market in 2018
- Supported EV Ride & Drive
 Event at Oak Grove
 Presbyterian



Oak Grove EV Expo on Sept. 14



EV Ride & Drive at Farmers Market in Minnesota Demonstrates Power of Experiential Events



Midwest EV

Midwest EVOLVE and the City of Bloomington Sustainability Commission hosted an Electric Vehicle Ride and Drive at the Bloomington Farmers Market on July 21, where market-goers had the chance to get behind the wheel of the Nissan LEAF, Mitsubishi Outlander PHEV and Volvo XC90 T8.



Community-wide Goals



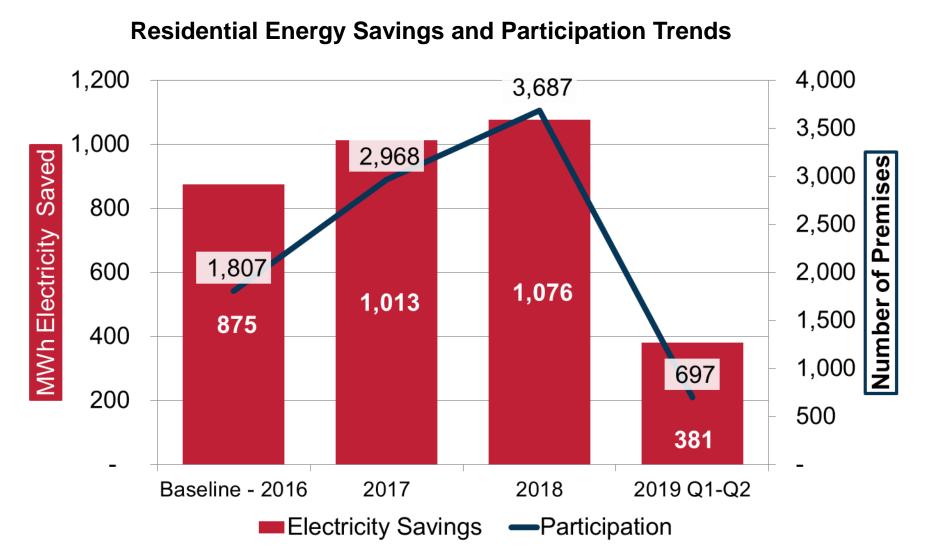


- **75% reduction** in city-wide energy-related greenhouse gas emissions by 2035
- **95% reduction** in city-wide electricity-related greenhouse gas emissions by 2035, relative to 2016 levels
- **33% reduction** in city-wide natural gas-related greenhouse gas emissions by 2035, relative to 2016 levels



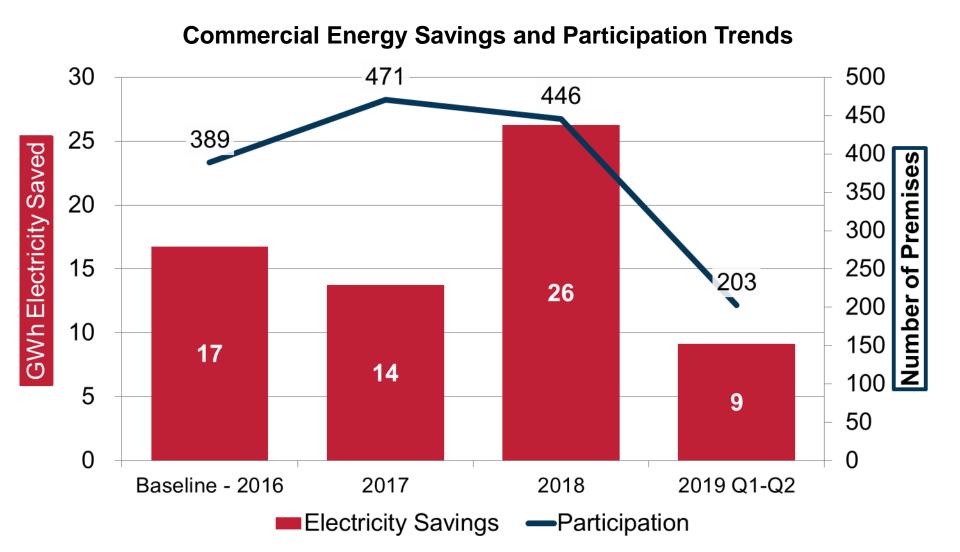
Residential Savings & Participation





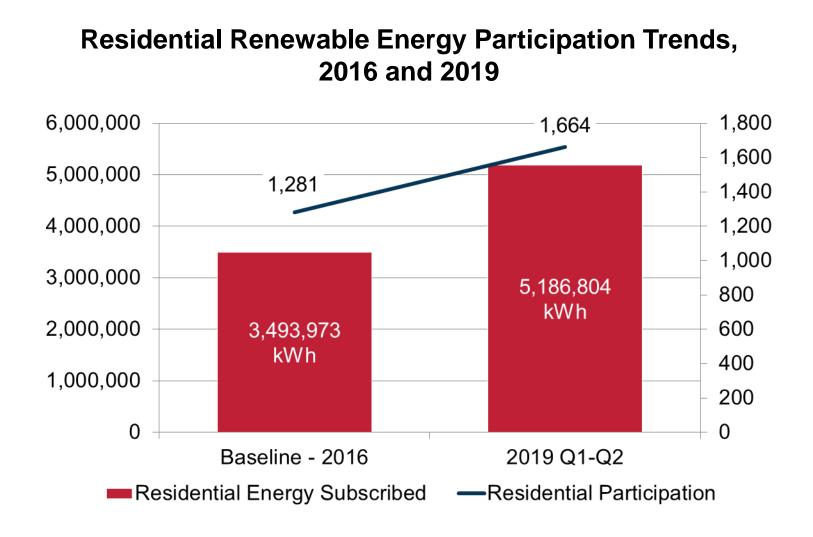
Business Savings & Participation

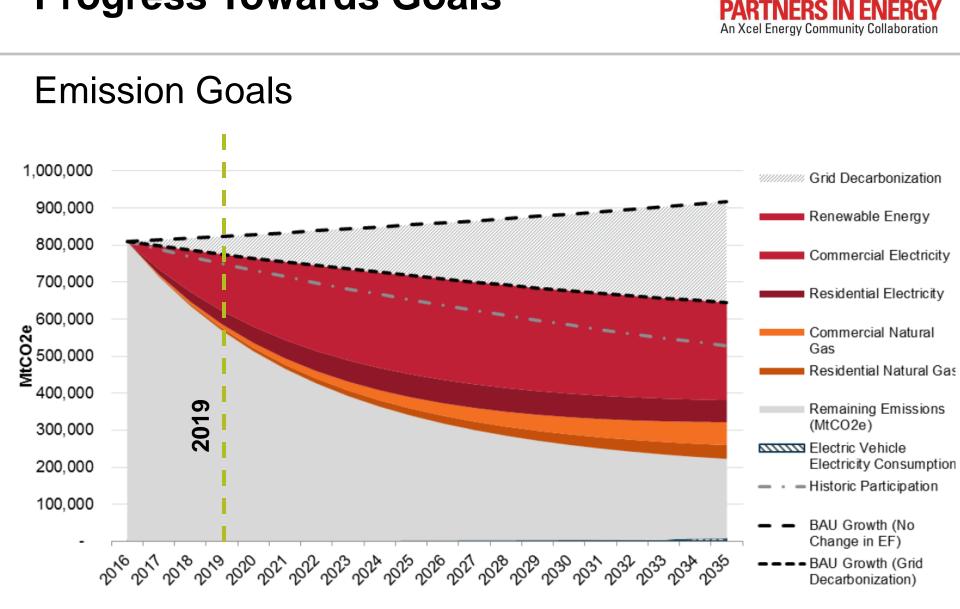






Renewable Energy Subscriptions





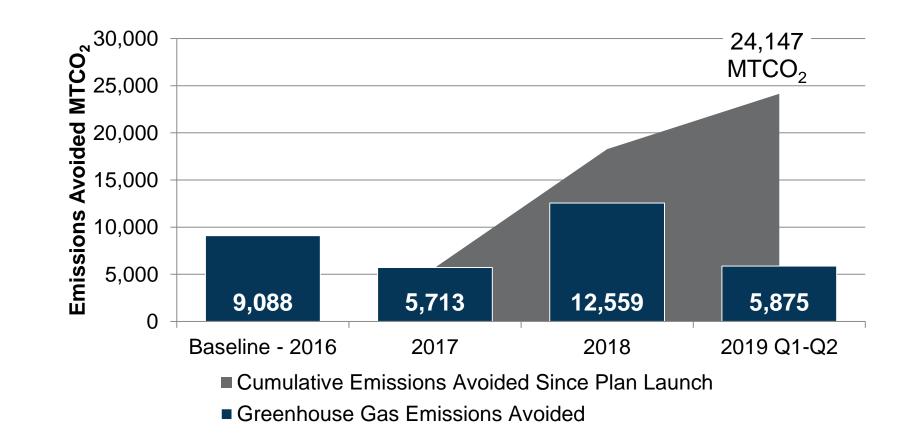
Xcel Energy®

Progress Towards Goals

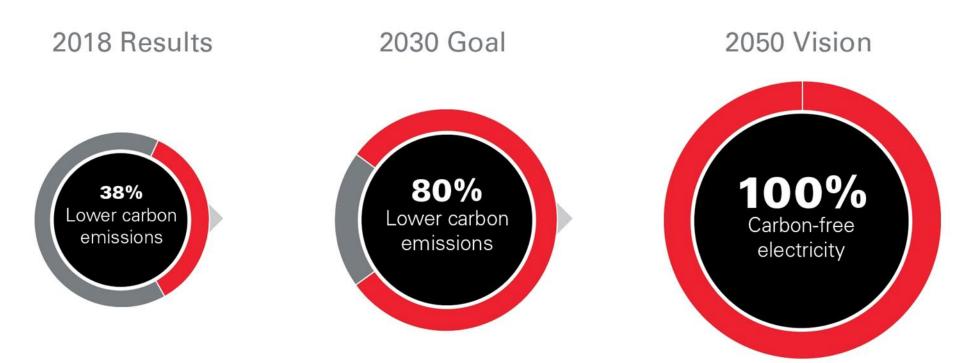




Greenhouse Gas Savings Since Plan Launch *Electricity Only*



Xcel Energy's Carbon-free Future



Company-wide emissions reductions from the electricity serving our customers, compared to 2005

Grid Electricity Carbon Reductions





Partners in Energy Experience





Next Steps for Bloomington's Energy Initiatives



Next Steps for Bloomington



- Multifamily outreach
 - Goals: reach half a dozen multifamily buildings
- Turn Key Assessments follow-up & buy-down
 - Continue outreach, create testimonials
- Continued support for Best Practice Energy Tours
 - Upcoming potential sites: Toro, Best Buy
- Electric Vehicle Support
 - Promote the City's charging stations
- Other support



Ongoing Opportunities



- Access to Partners in Energy community portal
- Monthly web-based trainings
- Bi-monthly newsletter with content to use locally
- In-person networking activities
- Data tracking and monitoring (twice yearly)



