



Renewable Energy Action Plan

Steering Committee Workshop #5
November 21, 2019

WELCOME & ORIENTATION



Agenda

WELCOME & ORIENTATION

5 min Welcome and Goals for Today

15 min Tour of the Renewable Energy Action Plan

DRAFT PLAN DISCUSSION

30 min Small Group Discussion

15 min Share out with Full Group

BREAK (10 MIN)

ENSURING SUCCESSFUL IMPLEMENTATION

20 min Plan Implementation in Other Communities

15 min Commitments Going Forward

10 min Next Steps & Wrap Up



Goals for Workshop

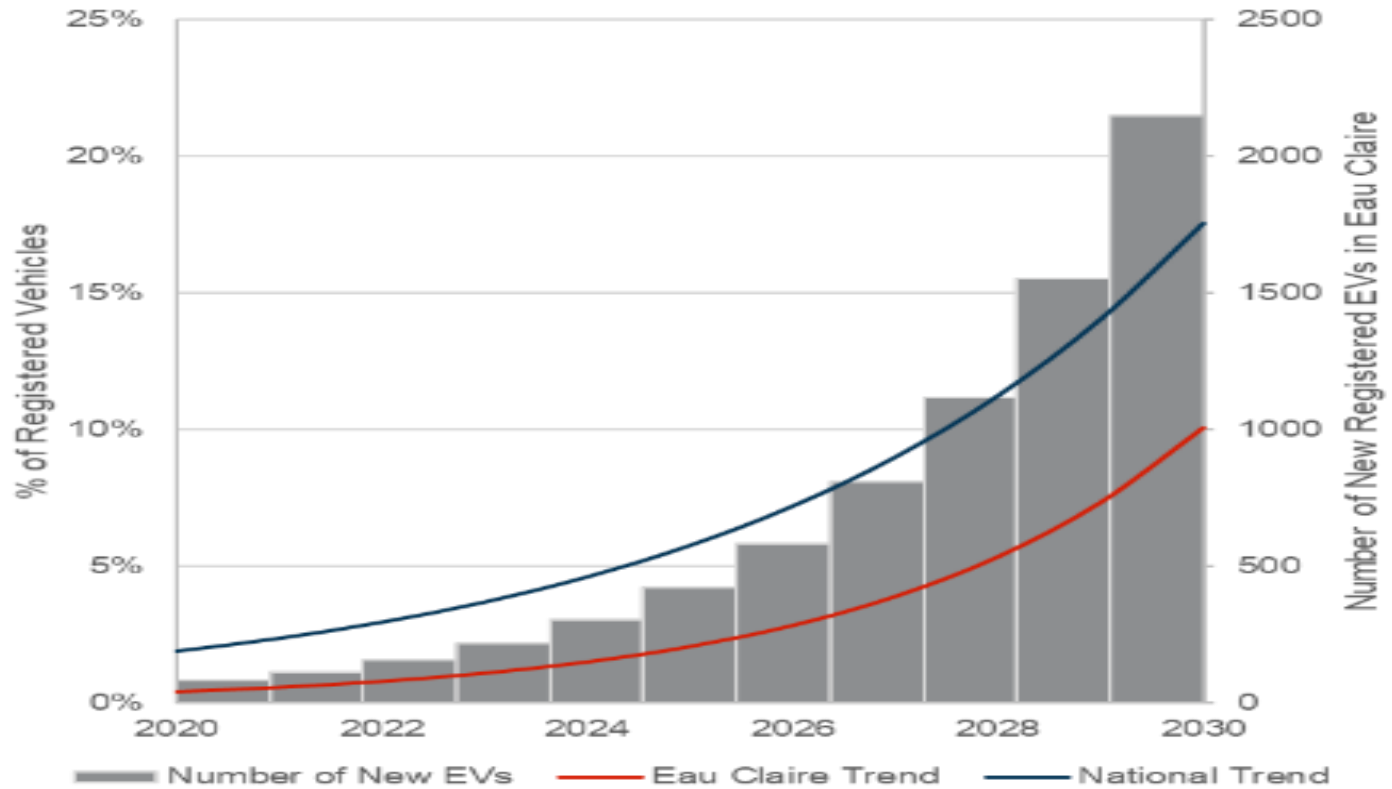
- Get committee's final input on the draft
 - Any final feedback due Monday Dec 2nd – Email to Ned Noel
- Get ideas on implementation of plan
- Advocate for the plan during approvals & after
 - Public Notices will go out for major dates



Eau Claire's EV Goal: By 2030, 10% VMT in Eau Claire will be in an EV.

- Estimated 5,000 new vehicles per year in Eau Claire
- In 2030, 40% of new vehicles will need to be EVs or 2,100

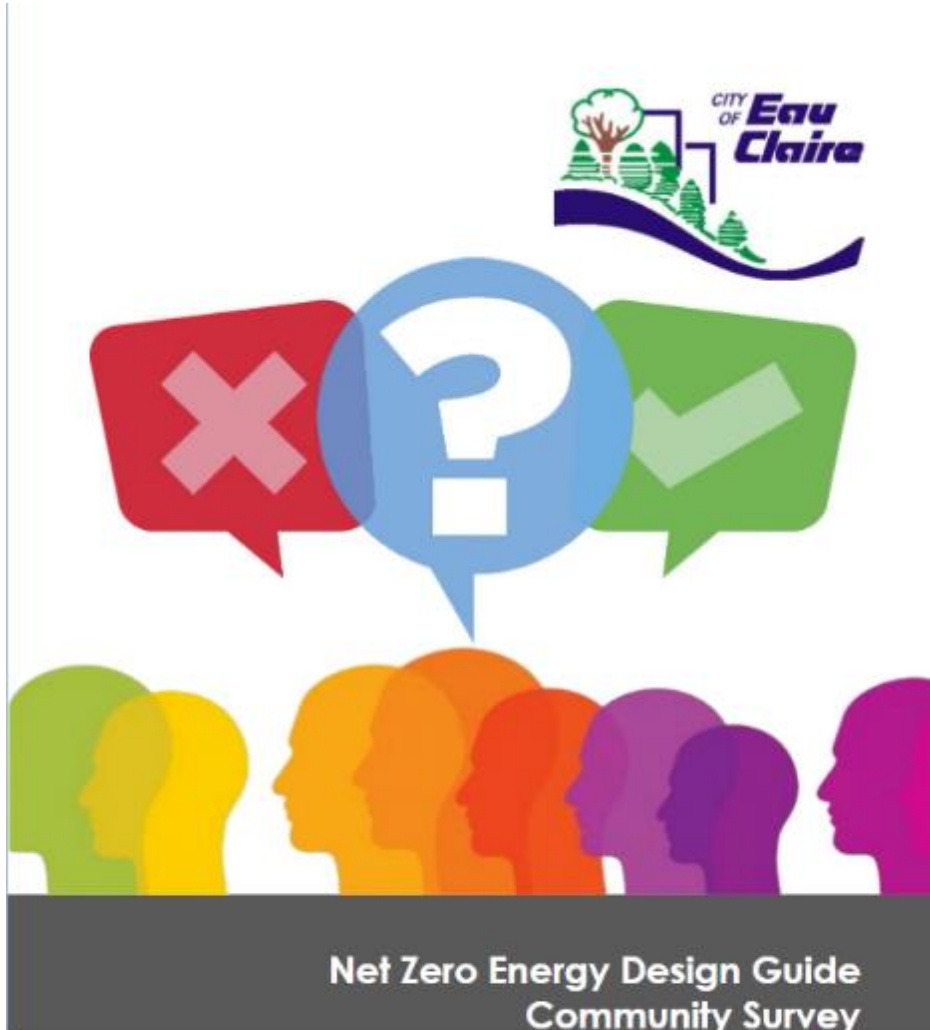
Projected EV Adoption Trend Needed to Meet the City's Goal



National trends, 2019 (EVAAdoption.com)



Net Zero Design Guide



**Net Zero Energy Design Guide
 Community Survey**

October 30 2019



Prepared by:

Response Summaries

Willingness to invest in Net Zero

How much do you believe a Net Zero Energy building would cost to buy or build compared to a "standard" building?

30 responses



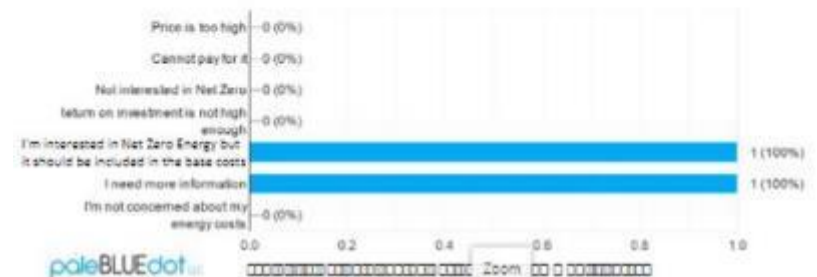
To achieve all of the benefits of Net Zero Energy at your home or business, how much more would you be willing to...w construction or renovation project?

31 responses



Energy at your building. Can you please...e some of the reasons for that choice?

1 response



Sustainable Eau Claire



TOUR OF THE RENEWABLE ENERGY ACTION PLAN



Eau Claire

Renewable Energy Action Plan (DRAFT)
 November 2019

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Community Vision

Eau Claire's Renewable Energy Action Plan will be guided by an **evidence-based, transparent, equitable, and inclusive process** to meet the goals of **100% renewable energy and carbon neutrality by 2050.**

These ongoing efforts will strengthen our leadership in sustainability and renewable energy development for generations to come.



Guiding Principles

Equity and Inclusiveness

Our work will engage and support the entire community, increasing benefits for under-resourced populations

Economic Development

We will develop and implement ideas that maximize community investment and local economic opportunity

Ecosystem Stewardship

We will preserve, protect, and enhance the natural world around us, for our benefit and for generations to come

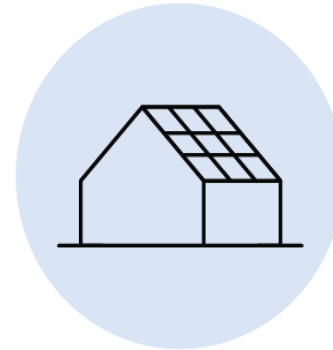


Plan Strategies

Biodiversity
12 Strategies



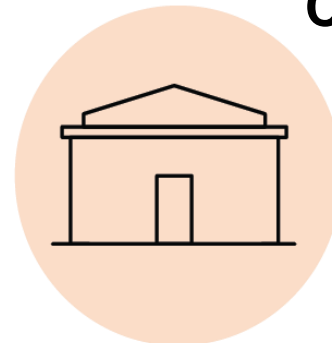
Residential Energy
11 Strategies



Waste
7 Strategies



Commercial Energy
10 Strategies



Transportation
16 Strategies

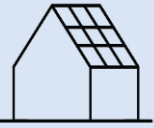




Biodiversity

- B1. Continue to implement policies, programs and projects as found in the City's official plans.**
- B2. Create a Biodiversity Index**
- B3. Reduce sprawl - loss of biomass carbon sinks**
- B4. Maintain and Increase Urban Forestation**
- B5. Retain, restore & enhance natural spaces**
- B6. Require more natural spaces for new development**
- B7. Increase use of trails as biodiversity corridors**
- B8. Ease barriers to increase alternative lawns**
- B9. Increase on-site infiltration and stormwater capture**
- B10. Increase safe utilization of grey water**
- B11. Reduce herbicides, pesticides, fertilizers.**
- B12. Support local food, local producers & urban farmers**





Residential Energy

- R1. Promote the use of the City's Net Zero Energy Building Guide.**
- R2. Support a residential net zero energy development.**
- R3. Increase prevalence of energy efficient, low emissions affordable housing development.**
- R4. Increase awareness of energy efficiency among Eau Claire residents**
- R5. Promote energy audits, energy efficiency rebates and financial incentives**
- R6. Pass a Home Energy Rating Ordinance**
- R7. Increase number of residential subscribers to renewable subscription programs**
- R8. Increase adoption of renewable-powered heating, cooling, and hot water technologies**
- R9. Develop new community-sited solar within Eau Claire and offer subscriptions to residents**
- R10. Increase solar-ready buildings in new residential construction**
- R11. Support a solar group-buy program in the Eau Claire area**





Commercial Energy

- C1. Promote the use of the City's Net Zero Energy Building Guide**
- C2. Support a business recognition program to recognize and promote businesses that have taken action in sustainability, especially relating to energy**
- C3. Offer and promote resources to reduce the costs of energy efficiency and renewable energy projects, including financing.**
- C4. Improve energy efficiency in existing buildings and infrastructure.**
- C5. Improve energy efficiency in new construction and major renovations.**
- C6. Increase the number of businesses that track energy use through energy benchmarking.**
- C7. Increase the number of on-site customer-owned solar photovoltaic installations at existing sites.**
- C8. Increase the number of solar-ready buildings in commercial, industrial, and institutional new construction.**
- C9. Increase number of commercial subscribers to utility renewable subscription programs.**
- C10. Increase adoption of renewable-powered heating, cooling, and hot water technologies, including geothermal projects.**

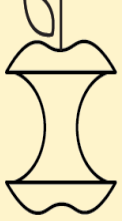




Transportation

- T1. Densify the city**
- T2. Incentivize and require more compact and mixed-use development**
- T3. Reduce required parking**
- T4. Increase the City's bike and pedestrian friendly environments**
- T5. Increase neighborhood walkability**
- T6. Launch bike and/or scooter-share programs**
- T7. Improve transit ridership and access**
- T8. Explore on-demand micro-transit**
- T9. Explore a zero-fare transit system**
- T10. Implement electric vehicle roadmap**
- T11. Conduct broad community outreach on electric and alternative fuel vehicles**
- T12. Increase local purchases of electric vehicles**
- T13. Foster EV car/ridesharing/taxi programs**
- T14. Expand electric light duty vehicle charging infrastructure**
- T15. Work with utility providers to promote charging infrastructure and competitive rates**
- T16. Require and prioritize parking for electric vehicles**





Waste

W1. Utilize 100% of wastewater treatment plant biogas

W2. Continue land application of bio-solids

W3. Establish a zero-refrigeration leak goal

W4. Transition haulers to capture compostables

W5. Increase recycling of construction and demolition materials

W6. Explore organized municipal waste collection

W7. Explore building a Materials Recovery Facility

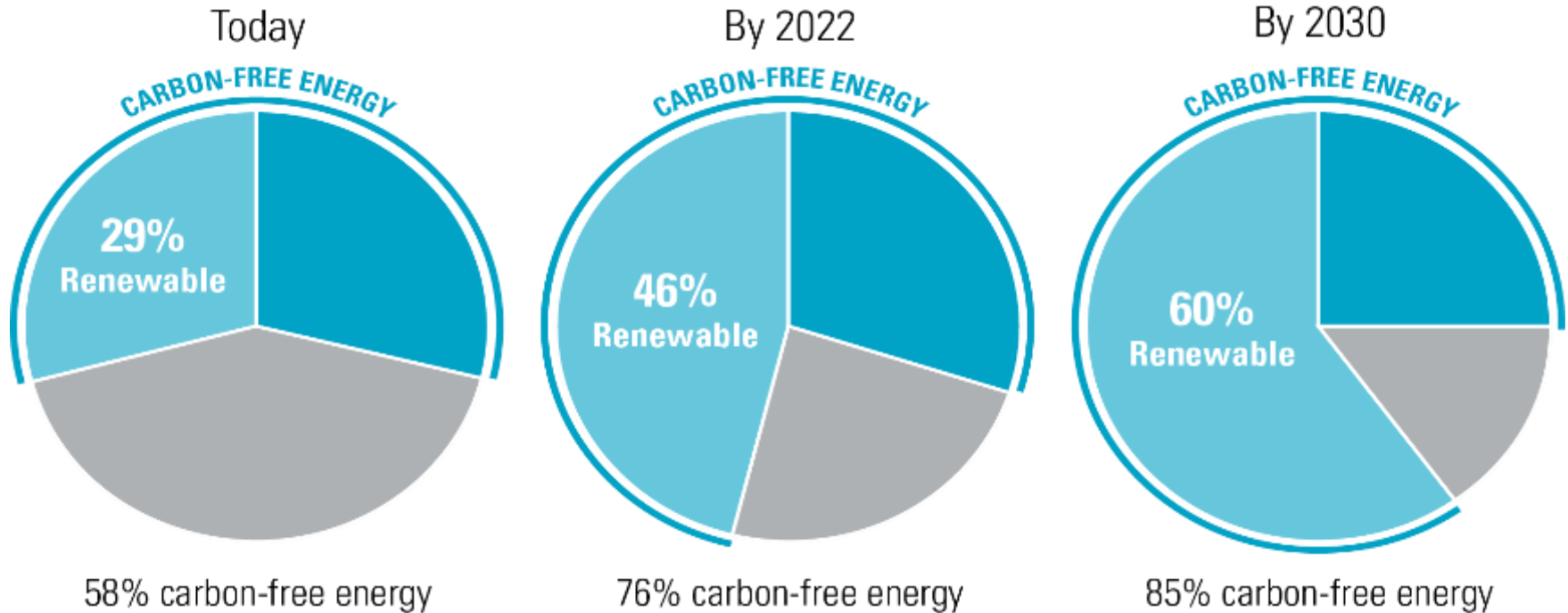


Cross Cutting Strategies

- **CC1. Continue to utilize partnerships and tools to track required data.** Quality and timely data is critical to understand progress and to evaluate the effectiveness of the strategies.
- **CC2. Hire a full time city staff to work on achieving the goals and targets of this Renewable Energy Action Plan.** Dedicate full time City staff to support the strategies and goals of this plan.
- **CC3. Work with local institutions to train the next generation of the environmental workforce.** Partner with local institutions to offer and support curriculum dedicated to training the next generation of environmental workers.



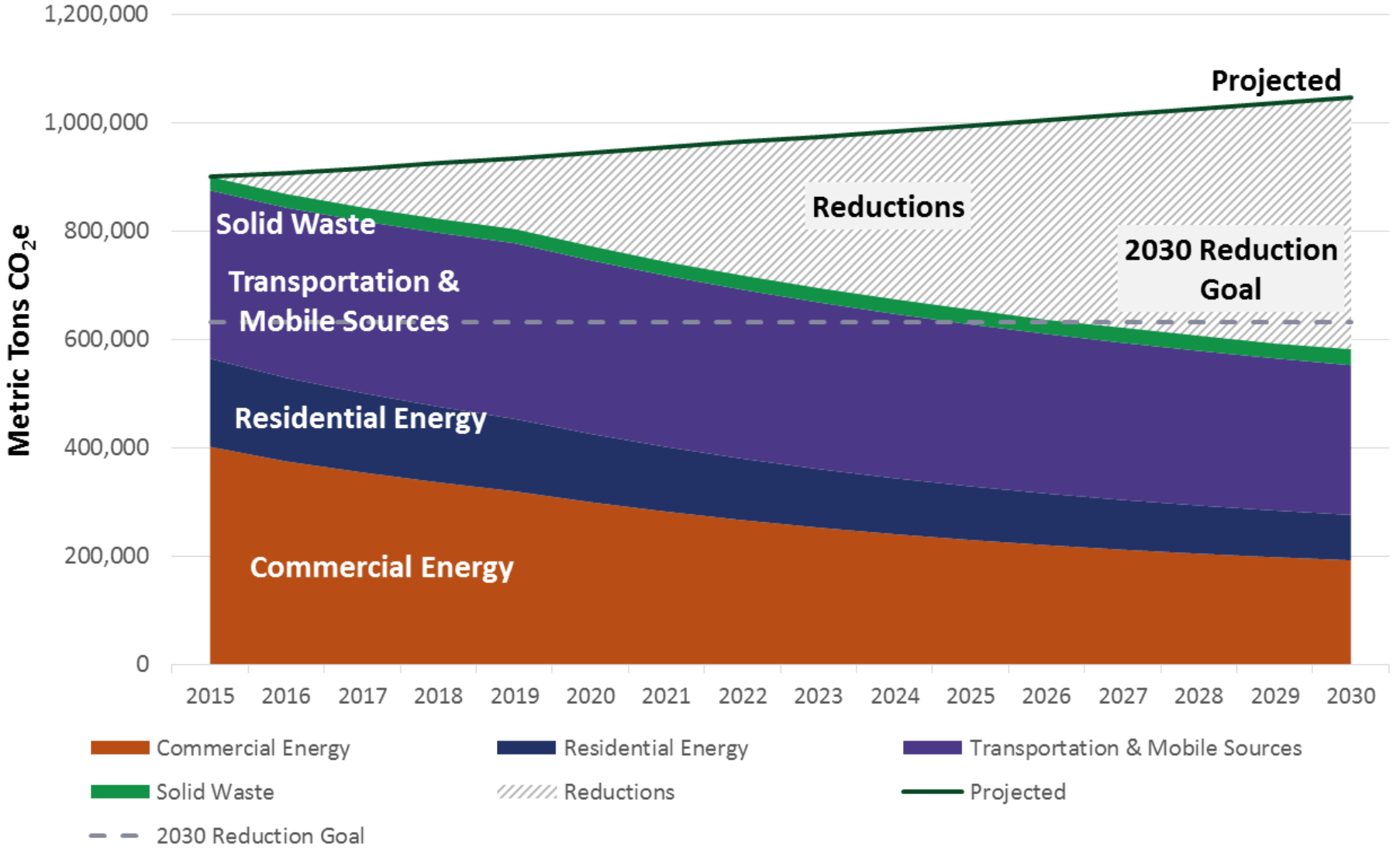
Electricity Decarbonization



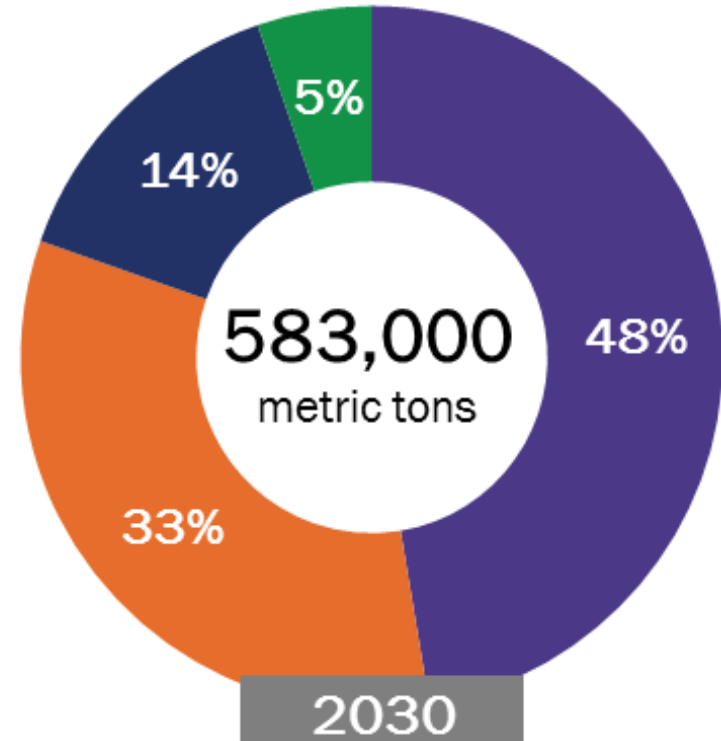
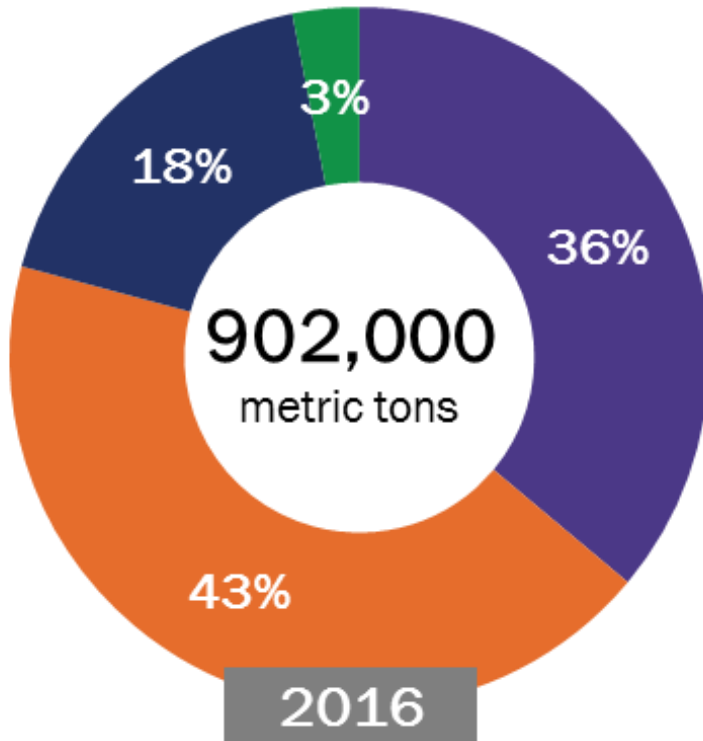
Xcel Energy Upper Midwest Fuel Mix, REAP Workshop 1



Projected Impacts



2030 Reductions



■ Transportation ■ Commercial Energy ■ Residential Energy ■ Solid Waste



Workplan Milestones

Commercial, Industrial, & Institutional Sector

| STRATEGY | MAJOR MILESTONES | PRIORITY |
|---|--|-------------|
| C1. Promote the use of the City’s Net Zero Energy Building Guide | <ul style="list-style-type: none"> • Deploy trainings and communications • Develop incentives or RFP contest • Complete one net zero project by 2022 | High |
| C2. Support a business recognition program to recognize and promote businesses that have taken action in sustainability, especially relating to energy | <ul style="list-style-type: none"> • Solicit input from businesses to determine structure and value of a recognition program • Establish guidelines for a recognition program • Identify key partners to promote program • Recruit businesses to participate | Low |
| C3. Offer and promote resources to reduce the costs of energy efficiency and renewable energy projects, including financing. | <ul style="list-style-type: none"> • Establish a city financing mechanism for business energy efficiency and renewable energy projects • Explore models to use city funding to buy down interest rates on energy efficiency and renewable energy projects | Low |

SMALL GROUP DISCUSSION



What
Works?

What
Doesn't?

What's
Confused?

What's
Missing?



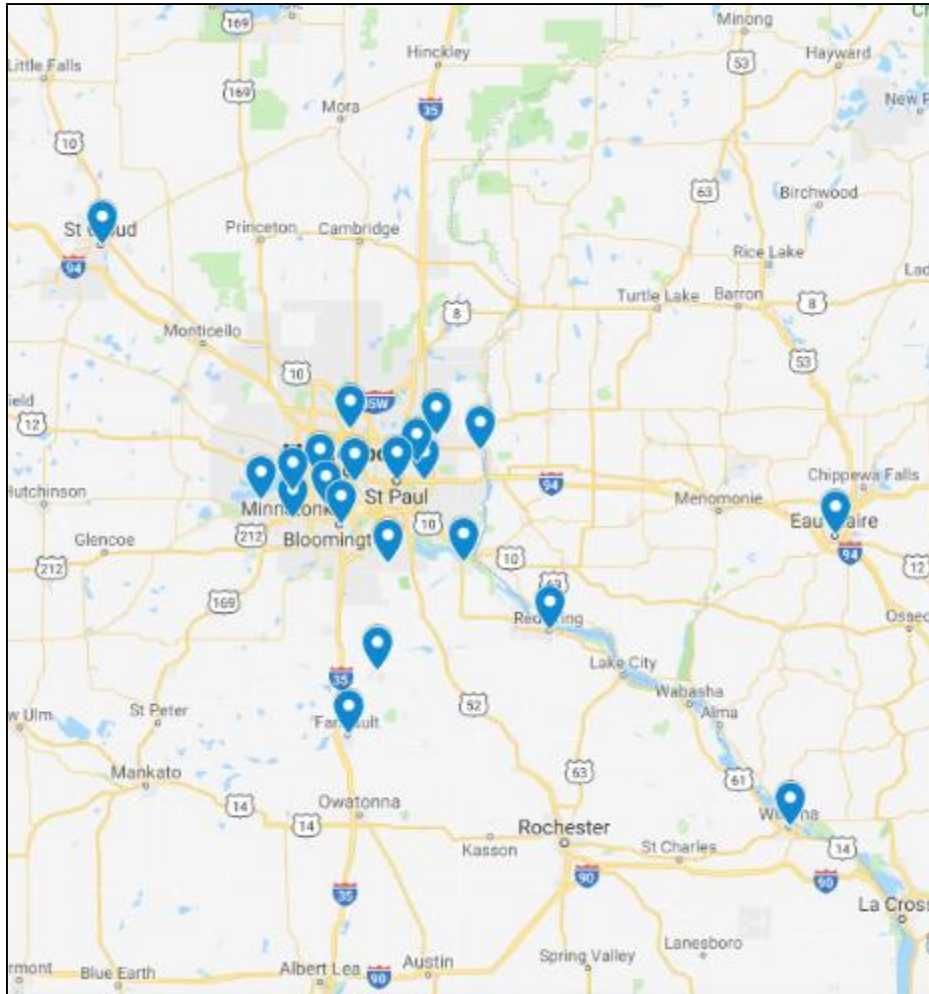
BREAK



ENSURING SUCCESSFUL IMPLEMENTATION



Partners in Energy Exchange



Map Credit: Google Maps 2019

Completed Implementation

- City of Eden Prairie
- City of Edina
- City of Mahtomedi
- City of Maplewood
- City of Oak Park Heights
- City of Red Wing
- City of St. Cloud
- City of St. Louis Park
- City of Shorewood
- City of Winona
- Lake Street Corridor in Minneapolis
- Ramsey Co. Parks and Recreation Dept.

Implementing their Plans

- City of Bloomington
- City of Faribault
- City of Fridley
- City of Hastings
- City of Northfield
- City of Rosemount
- City of Saint Paul

Developing their Plans

- City of Eau Claire, WI
- City of Minnetonka
- Saint Paul Public Schools



Campaign Brands



**Energize
Saint Paul**



Working with Local Partners



Faribault, MN and Growing up Healthy



Resident & Business Challenges



Energize Your Congregation!
Energy Challenge



SHANN FINWALL
ENVIRONMENTAL PLANNER, CITY OF MAPLEWOOD



Energize Maplewood! Energy Challenge



Form or join a team NOW, for the challenge beginning THIS FALL.

Maplewood will be kicking off a residential energy challenge this fall and you can participate!

Things to know:

- 8 month challenge sponsored by the City of Maplewood and Xcel Energy
- Form a team or join an existing team
- Through energy audits, tracking, and friendly competition participants will work to be the "legges, lover" and reduce their energy footprint and get prizes for winning!
- All Xcel Energy customers eligible

For More Information:

www.ci.maplewood.mn.us/energychallenge



XCEL ENERGY IS PLEASED TO PARTNER WITH YOUR COMMUNITY TO HELP YOU MEET YOUR ENERGY GOALS.



Direct Community Outreach



- **Impact:**




- 28% increase in program participation in 2018 over baseline
- 47% increase in program participation in 2017 over baseline
- 77 new renewable energy subscribers





Energy Leadership



St. Cloud
Business 5%
Renewable Challenge

| | | |
|---|--|--|
| <p>YOUR COMMUNITY</p>  <p>Be a leader & contribute to the use of 21 Million kWh of renewable electricity by 2026.</p> | <p>YOUR BILL</p>  <p>Get smart on how to reduce long-term bill fluctuations.</p> | <p>YOUR CHOICE</p>  <p>Choose the renewable option that is best for your business.</p> |
|---|--|--|

 The City of St. Cloud and Xcel Energy are pleased to work together to achieve our Community Energy goals.





SUSTAINING ST. CLOUD
ENERGY LEADERS
Working together to reduce energy impacts


PARTNERS IN ENERGY
An Xcel Energy Community Collaboration

The 5% CHALLENGE

Renewable Energy by St. Cloud Businesses

We are committed to helping the community achieve its renewable energy goal by being one of 40 large, St. Cloud area businesses and organizations to pledge to the 5% CHALLENGE.

As a result, we are helping the community convert 21.8 million kWh of electricity to renewable energy. We do this as community stewards, as leaders in our industry, and investors in a more stable energy future.

www.ci.stcloud.mn.us/energyaction

2018-2026
CHALLENGE Participant

ST. CLOUD AND XCEL ENERGY ARE PLEASED TO WORK TOGETHER TO ACHIEVE OUR COMMUNITY ENERGY GOALS.

Saint Cloud, MN



Youth Engagement



Ramsey County Parks and Rec Dept, MN



Local Communication Channels

Renewable Energy Challenge

As part of Eden Prairie's Energy Action Plan, the City is challenging residents to help reduce greenhouse gas emissions by subscribing to renewable energy programs. New renewable energy subscribers who sign up by October 15 can enter a drawing for a \$250 gift card.

To participate, simply sign up for the program through the contest entry form. One randomly drawn winner will be selected (valued at \$250).



Energy in Action at Citywide Open House

The City's Energy Action Plan aims to reduce energy-related greenhouse gas emissions by providing the community with information about increasing energy efficiency and opportunities for participating in renewable energy programs. Residents are encouraged to attend the Citywide Open House, 11 a.m. to 2 p.m. Saturday, Oct. 6, at City Center (8080 Mitchell Road) to learn from a variety of organizations about ways to save on energy bills, renewable energy subscription programs, electric vehicles and more.

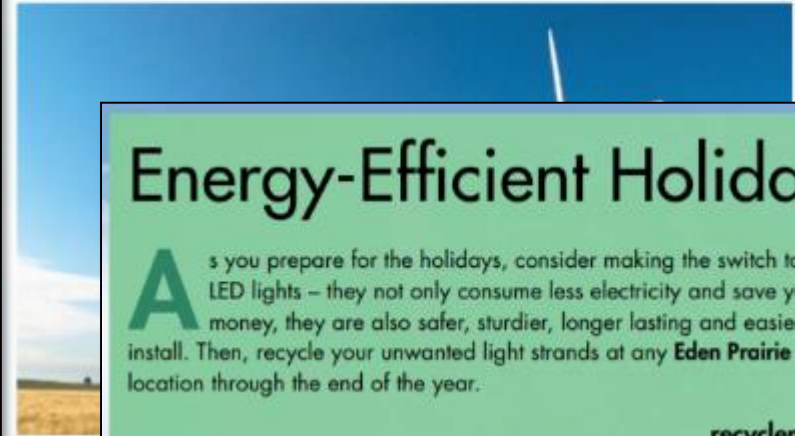
edenprairie.org/Energy



Seize Wind Power

This summer, Eden Prairie residents are taking advantage of Minnesota's windy weather by subscribing to Xcel Energy's **Windsource**®, a renewable subscription option enabling homeowners and renters to easily power their homes with wind energy. It takes less than five minutes to sign up and costs as little as a dollar per month to participate!

xcelenergy.com/Windsource



Energy-Efficient Holidays

As you prepare for the holidays, consider making the switch to LED lights – they not only consume less electricity and save you money, they are also safer, sturdier, longer lasting and easier to install. Then, recycle your unwanted light strands at any **Eden Prairie Liquor** location through the end of the year.

recyclemn.org



Existing Partners & Resources



Eau Claire Energy Cooperative

Your Touchstone Energy® Partner

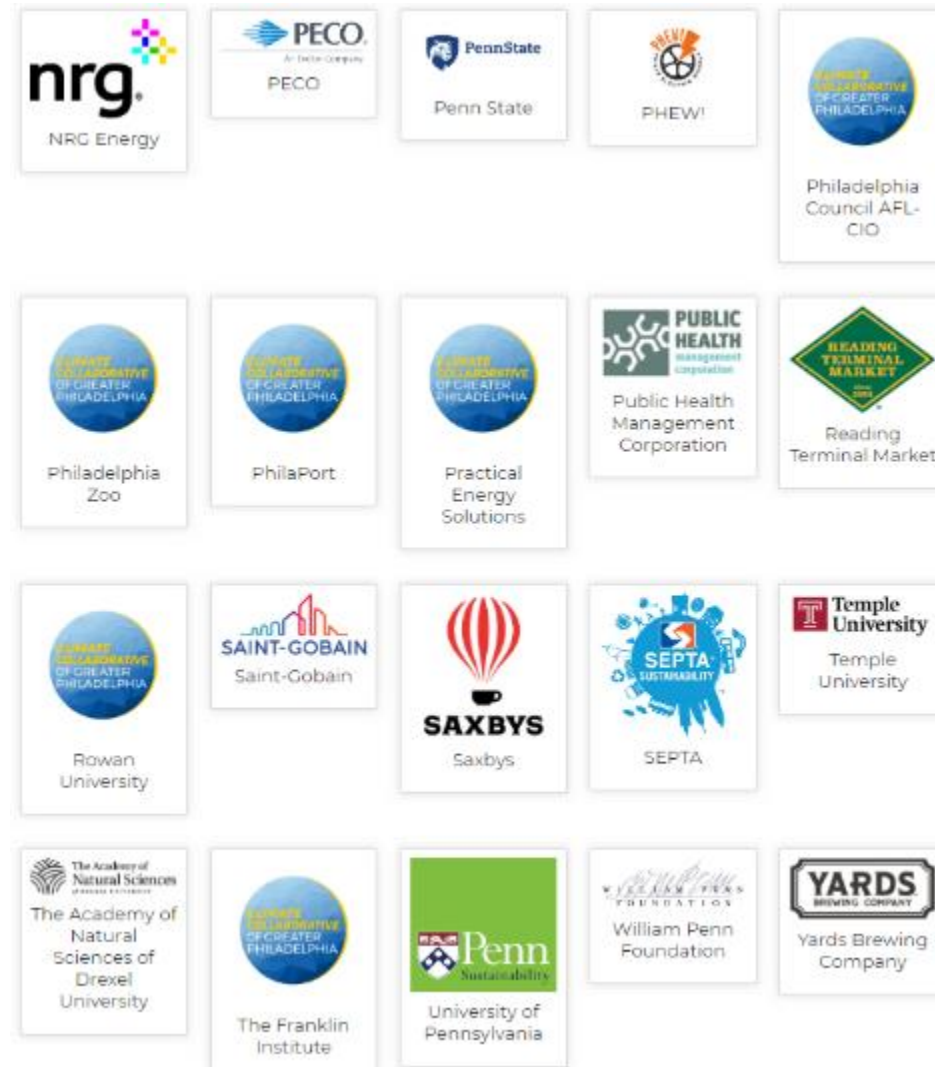
Take advantage of ways to use energy smarter.
Get your free pack or purchase a pack upgrade.



Packs have your utility account numbers available before packing your order and allow 4-6 weeks for delivery.



Collaborative Examples



- Led by City of Philadelphia
- Orgs., businesses, institutions sign-on to work together to accelerate their climate actions
- Workshops around procuring renewable energy via PPAs

Additional Resources

The Exchange

- Webinars and Office Hours
- In-person events to inform and provide networking opportunities

Partners in Energy Portal

- Xcelenergycommunities.com



What is one thing you will do personally to help this plan move forward?





WRAP UP & NEXT STEPS



Work plan development

- REAP contains overall work plan for 10 yrs. plus
- Incorporated into Sustainability Advisory Committee's (SAC) annual workplan
- Incorporated into other works plans of the City
 - Municipal departments / Green Team
 - Energy Future Collaborative with Xcel Energy



SAC's work plan beginnings

| WORK PLAN 2020 | Biodiversity | Commercial | Residential | Transportation | Waste |
|---|-------------------------------|-----------------------------------|-------------|--------------------------------------|-----------------|
| Activities | | | | | W4 Compostables |
| Project | B4. Maintain & Increase Trees | | | | |
| Policy Research 1-3 yrs | B2. Biodiversity Index | | | | |
| Campaigns | | R10/C8 Solar-Ready | | | |
| Campaigns | | R1/C1 Net Zero promotion/training | | | |
| Campaigns | | R4, R5/C4 Energy Efficiencies | | | |
| Campaigns | | R7/C9 Renewable Subscriptions | | | |
| Project 1-3 yrs | | R9/C7 Develop community solar | | | |
| Policy Research | | | | T1 Densify City Study | |
| Support Others | | | | T7/T8 Transit Development Plan (TDP) | |
| Planning, etc. | | | | T10 Implement EV Roadmap | |
| Campaigns | | | | T11 EV Community outreach TBD | |
| Bundled Campaign | | | | | |
| Energy Futures Collaborative (btw the City & Xcel) | | | | | |
| Eau Claire Carbon Collaborative | | | | | |
| Leadership Council (VIP council to tackle 2050 goals) | | | | | |

Using “High” strategies from REAP plan



Plan Development Steps



Anticipated Schedule

- **December**
 - REAP Text & Data Revisions / Executive Summary
 - EV Roadmap
 - Net Zero Energy Building Guide
 - Facility Condition Assessment for City Bldgs.
 - Municipal Work Plan
- **January – February Reviews & Approvals**
 - Sustainability Advisory Committee
 - Plan Commission
 - City Council
- **Public Hearing Notices will be emailed to committee**





PARTNERS IN ENERGY
An Xcel Energy Community Collaboration

THANK YOU!

Group Photo!

