



Minnetonka Workshop 3

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Workshop 3 Objectives



 Confirm short-term focus areas for energy action plan and begin strategy development

Focus Areas

- Recap planning process and confirm where vision, goals, focus areas, and strategies fit
- Review pre-Workshop research findings and resolve any issues

Strategy development

- Review 2018 programs,
 participation, energy savings in Minnetonka
- Brainstorm and refine strategies for Minnetonka



Workshop 3 Objectives



- Confirm focus areas for energy action plan and begin strategy development
- Discuss development and review process for Minnetonka's Energy Action Plan

- What will be in the plan?
 - Share Minnetonka's data overview and the Energy Action Plan in progress highlights
- How is it reviewed?
 - Discuss review plans.



Plan Development Steps









Agenda



Time	Agenda
10 min	Welcome and Agenda Review
5 min	Energy Action Plan Update
20 min	Review Current Xcel Energy Programs
25 min	Planning Process Recap, Research Results & Tonight's Project: Strategies
15 min	BREAK
55 min	Brainstorming Activity
15 min	Report outs
5 min	Wrap-up



Energy Action Plan Update



Energy Action Plan Update



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An Energy Action Plan for Minnetonka, Minnesota



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Appendix 2: Xcel Energy's Partners in Energy planning process

Xcel Energy is the electric and natural gas utility serving Saint Paul Public Schools. In the summer of 2014, Xcel Energy Jaunched Partners in Energy to support communities like Hastings to develop and implement energy action plans that supplement existing sustainability plans, strategies, and tools. The content of this plan is derived from a series of planning workshops held in the community with a planning team committed to representing local energy priorities and implementing plan strategies.

Partners in Energy will work with Saint Paul Public Schools to coordinate support for implementing the plan and will develop a Memorandum of Understanding (Appendix 1) that outlines specific support Xcel Energy will provide to help the District deploy its strategies and achieve its goals.



Plan Development Process

Saint Paul Public Schools staff actively recruited a diverse group of District representatives to create Saint Paul Public Schols Energy Action Plan. Please see the Acknowledgements at the beginning of this document for a complete list of participants.

The Energy Action Team met over the course of <a href="https://linear.google.go



Energy Action Plan Table of Contents



- Introduction
- Where are we now?
 - Minnetonka's initiatives, demographics, and energy use
- Where do we want to go?
 - Vision statement, goal, and focus areas
- How are we going to get there?
 - Strategies and tactics
- How do we stay on course?
 - Reporting, project management, and continuous improvement approach





Xcel Energy Program Participation



Energy Data 101



- Both Xcel Energy electric and CenterPoint Energy natural gas data included unless otherwise noted
 - Xcel Energy provides electricity to Minnetonka
 - CenterPoint energy provides utility natural gas to Minnetonka
- 15 x15 Data Privacy Rule
 - Must be greater than 15 entities
 - No single entity can account for more than 15 percent of the usage
- A "Premise" is not necessarily a "Customer"
- Caveats of data processing
 - Customer types
 - Geographic locations vs billing address
- Data are unofficial for planning purposes, and results may change slightly

Xcel Energy Program & Rebate Participation Rates



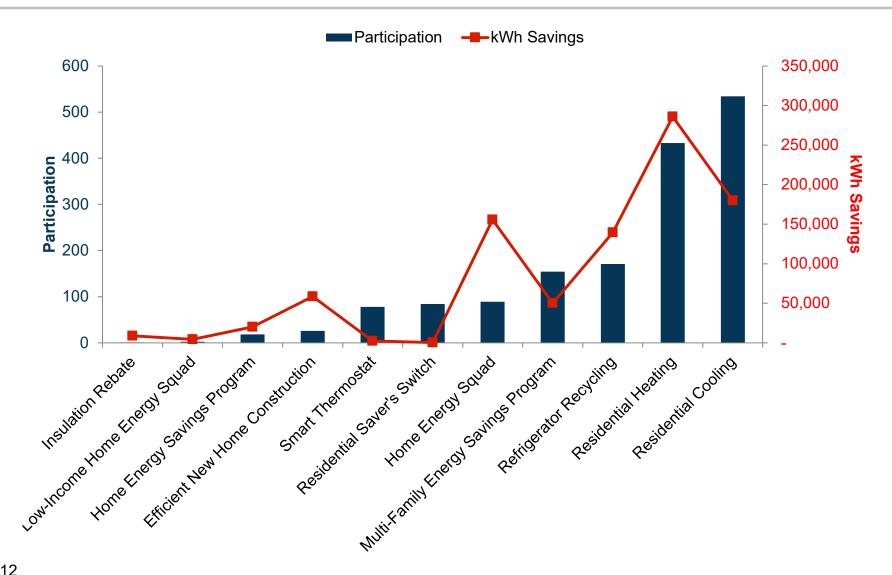
 Participation rates for residential and commercial programs in Minnetonka are under 5%

- In 2018
 - Residential programs saved 905,628 kWh
 - 336 MTCO₂e
 - Commercial / Industrial programs saved 8,328,161 kWh
 - 3,090 MTCO₂e



Minnetonka 2018 Xcel Energy Residential Programs







Heating Equipment Rebate

Electronically Commutated Motor (ECM) Rebate

\$100







Cooling Equipment Rebate

Central Air
Conditioning Rebates

\$150-450 (Depending on SEER rating)









Home Energy Squad®

Home Energy Squad (\$70):

- Professional installation of LED bulbs, door and attic hatch weather stripping, high efficiency showerheads,
- Water heater temperature assessment and adjustment
- Attic and wall insulation inspection

Home Energy Squad Enhanced (\$50):

- All the above services
- Blower door test
- Thermal image testing
- Combustion safety test
- Carbon monoxide check

Underwritten by City of Minnetonka: 1st 140 homes (normally \$100)





Second Refrigerator or Freezer Recycling

Rebate \$50

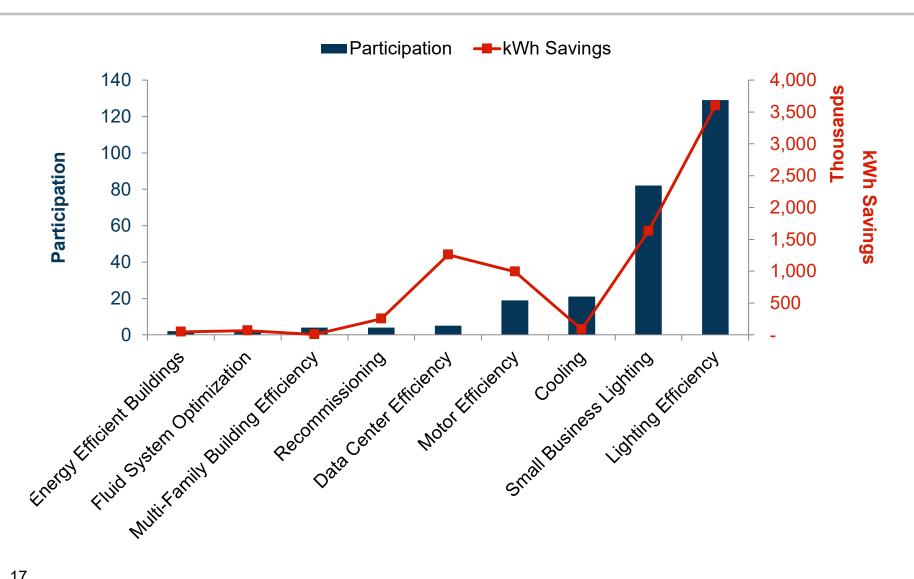






Minnetonka 2018 Xcel Energy **Commercial / Industrial Program Participation**





Commercial / Industrial Program Offerings



Lighting Efficiency Rebates					
Retrofit Rebates	Rebates for purchasing and installing energy efficiency lighting in an existing building				
New Construction Rebates	Rebates for purchasing and installing energy efficient lighting for new or significantly renovated facilities				



Commercial / Industrial Program Offerings



One-Stop Efficiency Shop

Enhanced rebates and special services for small-to mediumsized business customers.

- Free lighting or HVAC audit with cost-savings recommendations
- Start-to-finish oversight of upgrade and rebate paperwork
- Simple, one-stop service to minimize participant time



Commercial / Industrial Program Offerings



Cooling Rebates

Earn fixed rebates for purchasing qualifying energy-efficient equipment

- Chillers: air cooled, scroll or rotary screw, water-cooled centrifugal
- DX units (rooftop, split systems and condensing units)
- Heat pumps (mini split and water source)
- PTACs
- VFD retrofit for chiller (air or watercooled)

Multi-Family Building Efficiency



Multi-Family Building Efficiency

Free program offers services plus incentives for achieving energy-saving goals.

In addition to a free energy analysis and installs, participants receive incentives for achieving energy-saving goals.

30% bonus incentive on top of rebates for all eligible projects completed within two years of receiving energy analysis report.

And, qualified affordable housing multi-family buildings can earn a 60% bonus incentive.







Xcel Energy Renewable Energy Programs



Renewable*Connect (fully subscribed)

"no equipment necessary and access to a blend of wind and solar"

- Flexible Choose your subscription term
- Affordable Low cost renewable energy with more price certainty.
- Choice Select the amount of renewable energy you wish to subscribe to.
- Local Wind and solar energy are generated locally from the North Star Solar project in Chisago County and the Odell Wind Farm in southern Minnesota.

Windsource®

"allows customers to get more or all of their energy from renewable resources"

- Subscriptions are available in 100 kilowatt-hour (kWh) blocks
- Adds, on average, \$0.01/kWh to your energy cost.
- For a typical home using 900 kWh in a month, that would total just \$9/month to be 100% Windsourcepowered.
- Peace of mind from clean energy is affordable and easy with Windsource.



2018 Minnetonka Renewable Programs



Residential					
Program	Participants	Annual kWh			
Windsource	952	3,374,459			
Renewable*Connect	63	540,437			
Total	1,015	3,914,896			

Commercial / Industrial				
Program	Participants	Annual kWh		
Windsource	5	346,160		
Renewable*Connect	7	5,529,901		
Total	12	5,876,061		

2018 Minnetonka Renewable kWh

9,790,957

GHG equivalent:







CenterPoint Energy Program Participation



CenterPoint Energy Top Programs in 2018 - Minnetonka



Residential

- Home Efficiency Rebates
- Home Insulation Rebates
- Home Energy Squad
- High Efficiency Home

Commercial

- Commercial & Industrial Heating and Water Heating Rebates
- Foodservice Rebates

2018 Minnetonka CenterPoint Energy Savings

Residential: Commercial / Industrial Total

Greenhouse Gas equivalent:

157,500 Therms 106,180 Therms 263,680 Therms

1,399 MTCO₂e



Minnetonka Greenhouse Gas Savings - 2018



Source	MTCO₂e
Xcel Energy Residential	336
Xcel Energy Commercial / Industrial	3,090
CenterPoint Energy Residential	836
CenterPoint Energy Commercial / Industrial	<u>563</u>
Total	4,825

Equivalent to ...



Source: https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator





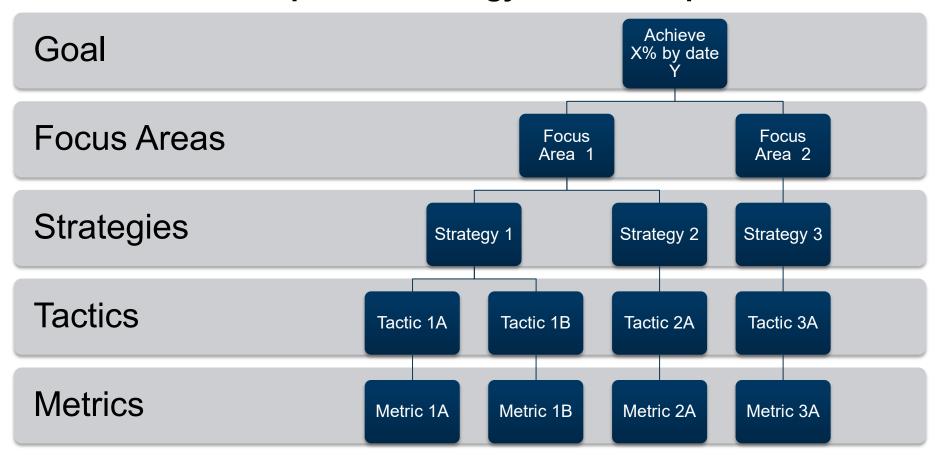
Planning Recap & Research Results



Energy Action Plan Structure



Vision: Community of Choice for Responsible Energy Stewardship







https://youtu.be/WZyRbnpGyzQ?t=952



JFK's Plan Structure

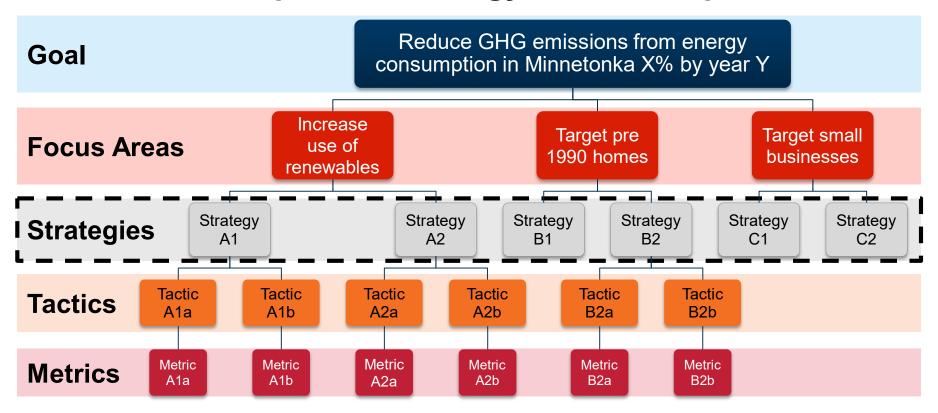


Vision: Establish long term dominance over the Soviet Union in space

For Minnetonka ...



Vision: Community of Choice for Responsible Energy Stewardship





Research Results



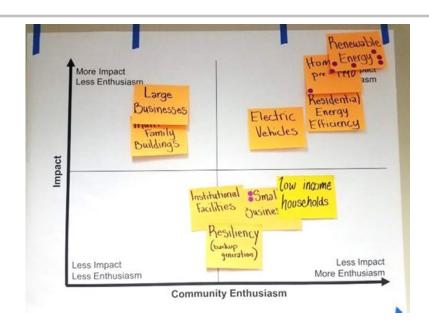
At Workshop 2 ...

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- From 10 options, the team showed preference for ...
 - Renewable energy
 - Homes built before1990
 - Small businesses
- Survey results provided added context







Pre-Workshop 3 Survey Asked 2 Questions



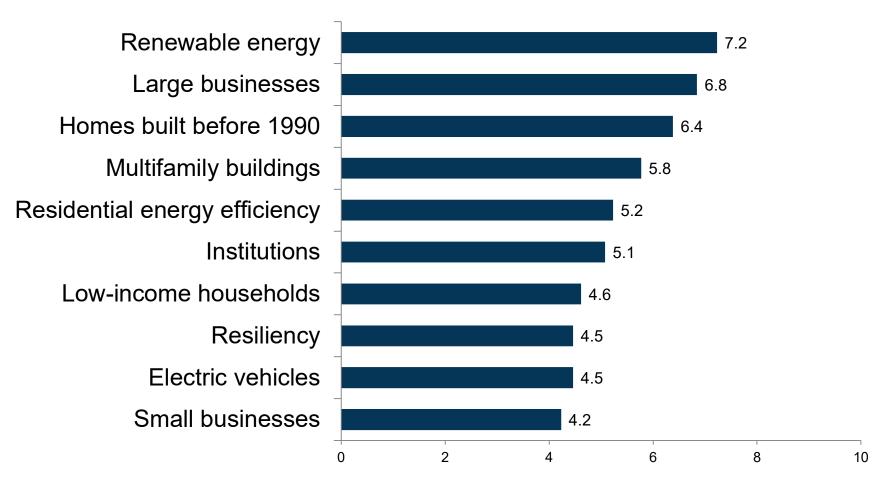
Select the ranking that you feel each one deserves. A ranking of 10 indicates that you feel the focus area is **more important than any other**. A ranking of 1 indicates that you feel that option is the least important of these options.

Which of these focus areas do you think are **short-term**, **medium**, **or long term**?



Focus Area Ranking Results





Select the ranking that you feel each one deserves. A ranking of 10 indicates that you feel the focus area is **more important than any other**. A ranking of 1 indicates that you feel that option is the least important of these options.



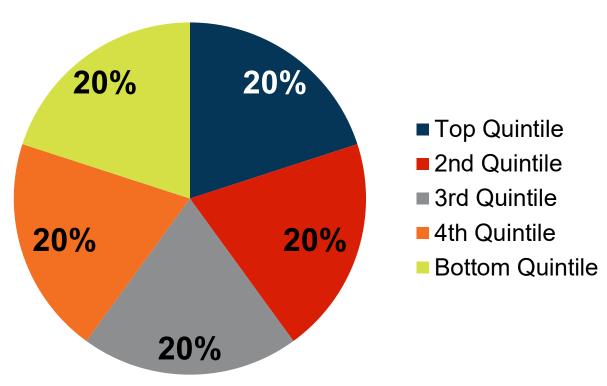
Large Businesses in Minnetonka



Commercial & Industrial Premises in Minnetonka

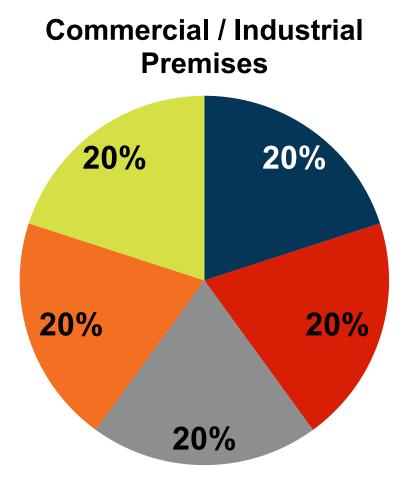


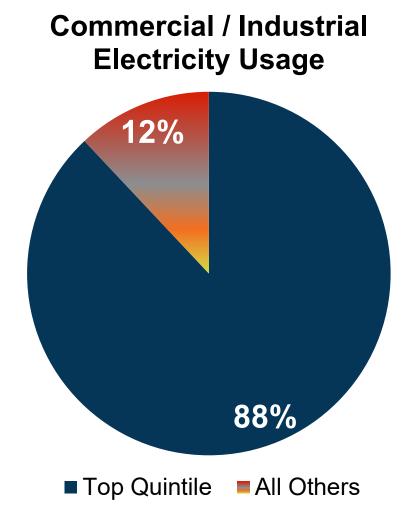
Commercial / Industrial Premises



Commercial & Industrial Premises in Minnetonka





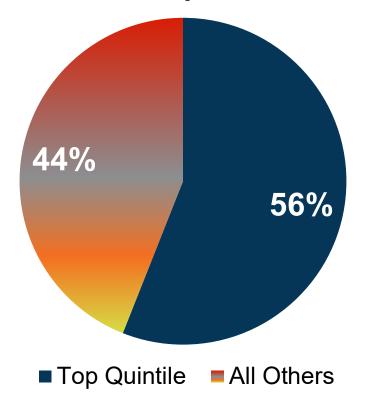


Commercial & Industrial Programs in Minnetonka



 Commercial / Industrial customers participated in programs 675 times 2016 - 18

Xcel Energy C/I Program Participation



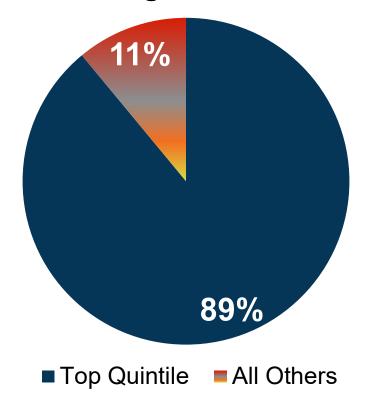


Commercial & Industrial Programs in Minnetonka



 The top quintile saved almost 34.5 million kWh in the baseline years

Commercial / Industrial Energy Savings 2016 - 18





Timeframes

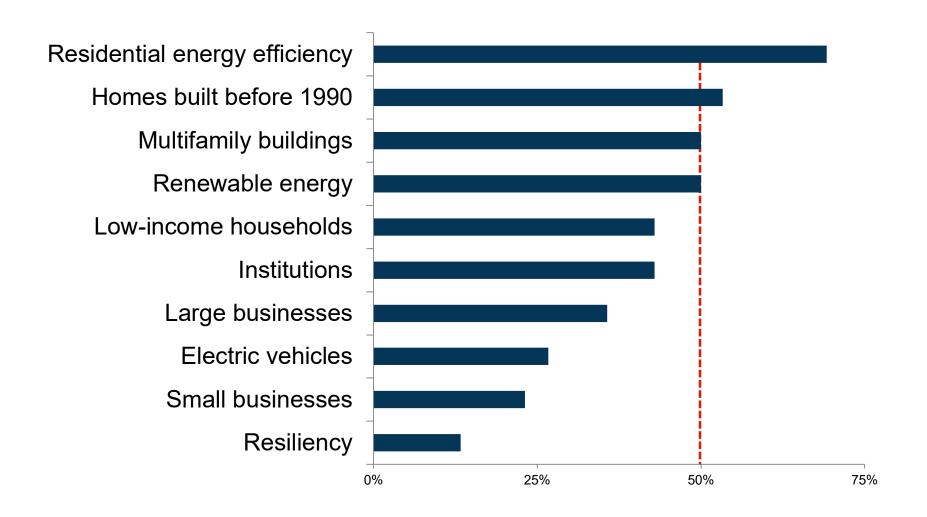


- Challenge:
 - Identify strongest focus areas for short-term accomplishments
 - Short-term implementation activities supported by Partners in Energy
 - Other focus areas can still be included, but they will need more time and focus beyond Partners in Energy timeframe



Timeframes: Short Term

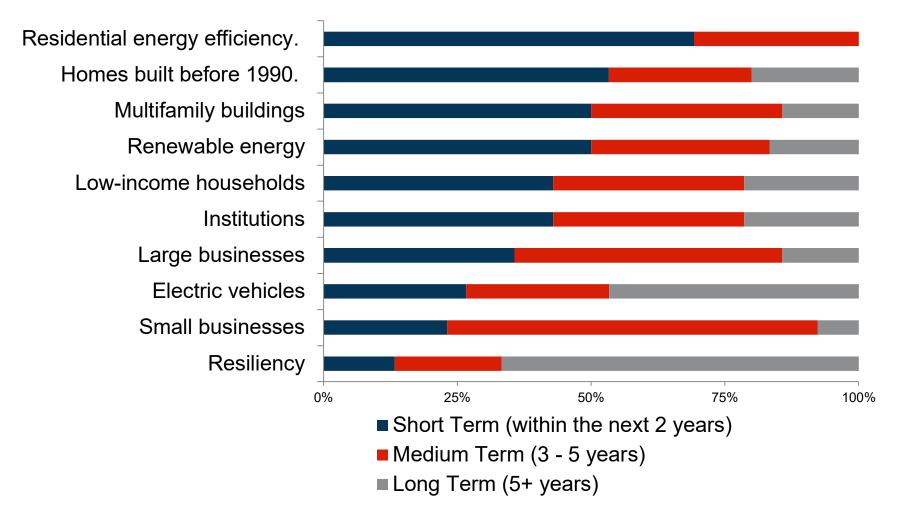




"Which of these focus areas do you think are short-term, medium, or long term? If you think a focus area should have interim goals, that's fine - just select the timeframes that you think would be right."

Timeframes

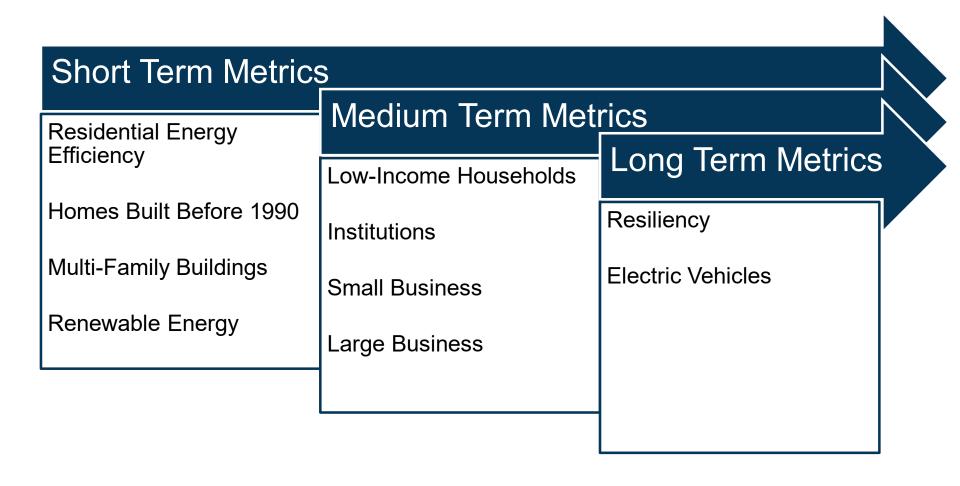




[&]quot;Which of these focus areas do you think are short-term, medium, or long term? If you think a focus area should have interim goals, that's fine - just select the timeframes that you think would be right."

Hypothetical Plan







BREAK





Developing Strategies"Where the pasta hits the wall"



Brainstorming "Rules of the Road"



- Everyone speaks Everyone listens
- Build ideas up
- As many ideas as possible
 - More is better, Silly is good, Weird is great



The assignment ... Round 1



- 2 minutes of quiet time to write ideas
- Share ideas one at a time
- Build on each idea
- After 10 minutes, all but the Captain move to other focus areas.
 - Split up so you work with as many different people as you can



Round 2



- Same process
- 2 minute Quiet Start
- Share and Build
- After 10 minutes, on to Round 3!
- After everyone has rotated to every Focus Area,
 Captains will share ideas with the whole group



1st Round Assignments



A

Ben Jacobs
Dennis Yockers
Matt Henry
Thomas Scott
Matt Henry
Emma Schoppe

C

Brian Golob

Gabi Tan

Megan Park

Drew Ingvalson

Tami Gunderzik

В

Charlie Yunker

Kathryn Linafelter Johnson

Ryan Waldriff

Loren Gordon

Yvonne Pfeifer

Dan Duffy

Kevin Neuman

Skyler Seets

Julie Wischnack

Michelle Swanson



Report Outs



Workshop Dates



- Workshop 4: Wednesday, February 19
- Workshop 5: Wednesday, March 24

Questions?
Contact Mike Holsinger or Drew Ingvalson





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