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# Lake Street Energy Challenge

## A Community Action Plan

Prepared for the Midtown Community Works Partnership



By Xcel Energy's Partners in Energy

May 2015

## **Executive Summary**



Credit: Drew Geraets via CC

The Lake Street Energy Challenge is an exciting opportunity for residents and businesses of the Lake Street-Midtown Greenway Corridor to impact the way energy is used and produced in their community. With concentrated efforts over the next 18 months, Lake Street Energy Challenge participants will directly engage in actions to support renewable energy and conservation efforts. The outreach for this Challenge will incorporate new ways to reach traditionally underserved members of the

population and create a platform to address the social inequalities that persist. The lessons learned as this plan is delivered will be documented and shared for broader application in future sustainability initiatives both in this community and beyond.

#### The Partners in Energy Planning Process

The Energy Planning Team, convened by Xcel Energy's Partners in Energy program and the Midtown Community Works Partnership, developed this energy plan during a series of four workshops held between fall 2014 through early 2015. These workshops reviewed community-wide energy use data, energy program information, and existing sustainability efforts in the community. Planning team members developed their vision for how this energy plan would best serve the community's future, and developed strategies for how to get started. With the help of baseline energy data, the group identified goals for action for the next 18 months.

The twenty-three member Energy Planning Team brought together a range of perspectives from across the community, from committed residents, neighborhood associations, local nonprofits, and the utilities. From the beginning of the planning process, the team agreed that this effort should build on the work already happening along the Corridor. The team also emphasized the importance of reaching out to households with lower incomes, renters, and those fluent in languages other than English.

#### Vision, Mission and Goals

The Energy Planning Team developed the following statements to guide the development of the Lake Street Energy Challenge. The vision outlines the ideal future of energy use along the Corridor and the mission statement clarifies what the Challenge aims to accomplish.

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#### Vision Statement

The Lake Street-Midtown Greenway Corridor will be a transformative national role model for equitable and community-driven clean energy, leading the way toward a carbon neutral Minneapolis that keeps its energy dollars local.

#### **Mission Statement**

The Lake Street Energy Challenge coordinates action among diverse neighborhood organizations, residents, employees, and businesses to accelerate energy efficiency and community-owned renewable energy accessible for everyone, while creating jobs and community wealth.

#### Focus Areas

The Lake Street Energy Challenge will focus on three areas of energy use and production: the residential sector, the small and medium business sector, and community solar development.

#### Strategy 1: Increase energy savings for small-to-mid sized businesses.

The energy conservation goal for the Lake Street Energy Challenge business strategy is to reduce annual energy usage among small businesses in the Corridor by 1.5%, a goal based on broader goals set by the City of Minneapolis and the State of Minnesota.

Implementation Goals

- Estimated Total Electricity Use: 197,670,000 kWh
- 1.5% Energy Conservation Goal: 2,965,050 kWh
- Additional Conservation Needed to Meet 1.5% Conservation Goal: 915,050 kWh
- Estimated Business Demand Side Management (DSM) Participants Needed to Meet 1.5% Conservation Goal: 50 businesses

Implementation Steps

- *Research and Data:* Perform targeted market research on community-based marketing and gather data to guide targeted outreach.
- Information Consolidation: Provide small businesses with a streamlined list of resources, targeted assistance from Xcel's Business Solutions Center, and streamlined marketing collateral.
- *Outreach:* Conduct outreach to local business associations to solicit their interest in the proposed "three tiers" of participation, develop a recognition campaign, perform

targeted marking to Somali and Hispanic business owners, and continue current energy coaching activities.

#### Strategy 2: Increase energy savings in the residential sector.

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#### Implementation Goals

- Estimated Total Electricity Use: 197,000,000 kWh
- 0.4% Energy Conservation Goal for 2016: 788,000 kWh
- Additional participation to reach goal:
  - Replace 1,000 incandescent light bulbs with high efficiency models
  - Recycle 200 old refrigerators
  - Have 750 residents participate in the Home Energy Squad<sup>®</sup> program, saving 6,750 dth
  - Achieve 100,000 kWh saved and 108 dth/building saved in 2016 through the future multi-family program provided by CenterPoint Energy and Xcel Energy

#### Implementation Steps

- Energy Neighborhood Party Kit: Each neighborhood that signs on to the Challenge will be asked to talk about energy conservation opportunities at an event. The neighborhood will receive 25 CFLs to give out at the event, materials about energy programs, and a \$100 to be spent on supplies for the party.
- *Event Tabling:* The Challenge is seeking new opportunities for tabling that have not been done in the past. This could include having an interpreter or bilingual volunteer present.
- *Home Energy Squad*<sup>®</sup>: *Low-Income Buy Down:* The Challenge will buy down the cost of Home Energy Squad<sup>®</sup> visits for low-income participants for up to 50 participants in 2015 and up to 100 in 2016 (final numbers may be determined by funding available).
- Community Conversations: Energy and Multi-family: A panel discussion(s) will be convened to talk about energy savings, renters, and landlords. Attendees may be contacted afterward about their interest in CenterPoint Energy and Xcel Energy's new multi-family energy conservation program (for 5+ units), which is anticipated to launch in fall 2015.
- Energy Outreach Interns: Several STEP-UP interns will be hired in summer of 2016 to do outreach around residential energy efficiency programs. They will work with neighborhood groups along the Corridor to do outreach at existing events or help to organize new events.

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#### Strategy 3: Promote greater use of local renewable sources through community solar gardens

#### Implementation Goals

- End of 2016 = 5 MW of Community Solar Gardens (CSG) subscribed in the Lake Street-Midtown Greenway Corridor neighborhoods
- Engage neighborhood associations to sponsor the development of community solar gardens and recruit subscribers
  - $\circ$  5 subscribers by the end of 2015 and 10 by the end of 2016
- Develop an online resource center for those interested in developing or subscribing to community solar gardens

#### Implementation Steps

- Engage interested neighborhood associations (through Aug. 2015): Perform initial outreach to identify neighborhoods interested in sponsoring a garden; identify outstanding questions.
- Support neighborhoods as they select a community solar garden developer (Aug. 2015-Dec 2015): Develop a resource center, facilitate information sharing, and evaluate the need for a trade event or panel discussion to disseminate information.
- Support neighborhood associations as they recruit subscribers (Dec 2015 Dec 2016): Provide a quarterly forum to share successes and challenges between neighborhood organizations.

#### **Local Outreach and Communication Channels**

Information about the Lake Street Energy Challenge will be shared through a number of channels, including:

- Monthly updates via email/newsletters/social media that can be shared by neighborhood organizations, city leaders, media contacts, and others;
- A Lake Street Energy Challenge Facebook page for social media updates;
- A calendar of events available online at the Lake Street Energy Challenge Facebook page, www.mcwsustainability.org, and MPLSGreen.com;
- Feature stories via MPLS Green and other local publications.

#### Monitoring and Reporting

• Xcel Energy will track Corridor and neighborhood energy usage data on a quarterly basis and conservation data by neighborhood after reaching 15 participants.

#### Future Efforts

The strategies outlined above reflect outreach tactics and tracking that are new to the Corridor. It will be necessary to understand how to effectively reach community members with lower incomes, renters, and individuals fluent in languages other than English about energy programs. There will be many lessons learned from the Lake Street Energy Challenge that can inform future outreach about energy efficiency and renewable energy in Minneapolis.

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### Introduction

The Lake Street Energy Challenge is an exciting opportunity for residents and businesses residing in the Lake Street-Midtown Greenway Corridor to shape the way energy is used and produced in their community. With concentrated efforts over the next 18 months, Challenge participants will directly engage in actions to support renewable energy and conservation efforts. While improving the health of the planet is vital for a sustainable future, it is also imperative to address the social inequalities that persist. Therefore, reaching out to traditionally underserved members of the population and documenting successes and struggles will be integrated into all conservation and renewable actions in this plan.

#### The Partners in Energy Planning Process

The Lake Street Energy Challenge Energy Planning Team participants developed this energy plan during a series of four workshops held throughout the fall of 2014 and winter of 2015. These workshops took the team through a variety of activities starting with a review of community-wide energy use information and existing sustainability efforts in the community. Planning team members developed their vision for how this energy plan would best serve the community's future. With the help of baseline energy data, the team developed goals for the next 18 months and then developed and refined strategies for how to get started.

The twenty-three member Energy Planning Team brought together a range of perspectives from across the community, from committed residents, neighborhood associations, local nonprofits, and the utilities. From the beginning, the team agreed that this effort should build on the work already happening along the Corridor. The team also emphasized the importance of reaching out to households with lower incomes, renters, and those fluent in languages other than English.

#### Future Efforts

The Energy Planning Team discussed how the Lake Street Energy Challenge should not only support current initiatives, but should also be a learning opportunity and catalyst for future action. In particular, the Lake Street Energy Challenge will target previously underserved populations within the Corridor and offer lessons learned on successful approaches. During implementation, efforts will be tracked in hopes that the lessons learned will further inform renewable and energy efficiency projects across the City of Minneapolis. Most notably, these lessons learned will be relevant to the Clean Energy Partnership, the collaboration between the City of Minneapolis and the utilities that is working to achieve city-wide energy goals.

## Who Are We? – The Lake Street-Midtown Greenway Corridor



The Lake Street-Midtown Greenway Corridor

Figure 1 .The Lake Street-Midtown Greenway Corridor

The Lake Street-Midtown Greenway Corridor includes the 17 neighborhoods that border Lake Street and/or the Midtown Greenway in South Minneapolis. These neighborhoods span approximately six miles from east to west and 1.5 miles north to south, making up twenty-four percent of Minneapolis' population with

93,989 residents. The neighborhoods along the Corridor vary in their demographic composition. Factors such as socioeconomic status, race, ethnicity, primary languages spoken, and home ownership differ significantly within small geographical boundaries. This is important to recognize when seeking community involvement and strategizing appropriate outreach techniques. The following chart captures a few of these demographic trends.

| Lake Street-Midtown<br>Greenway Corridor<br>Neighborhoods | Population | Occupied<br>Units Where<br>Residents<br>Pay Rent | Percentage of<br>Residents who<br>are a Racial<br>Minority in the<br>US | Residents that<br>Speak a<br>Language other<br>than English at<br>Home | Residents<br>with an<br>Income<br>Below<br>Poverty |
|---|------------|--|---|--|--|
| CARAG   | 5647       | 2409   | 18  | 661  | 936  |
| Cedar-Isles-Dean  | 2925       | 998  | 13  | 363  | 142  |
| Central   | 8307       | 1137   | 79  | 3817   | 2201   |
| Cooper  | 3729       | 415  | 18  | -  | 216  |
| Corcoran  | 3942       | -  | 52  | 953  | 755  |
| East Isles  | 3169       | 1207   | 11  | 312  | 221  |
| East Phillips   | 4269       | 618  | 83  | -  | 1653   |
| ECCO  | 2502       | 885  | 10  | -  | 254  |
| Longfellow  | 4895       | 940  | 38  | -  | 1049   |
| Lowry Hill East   | 6150       | 3055   | 16  | 890  | 907  |
| Lyndale   | 7419       | 2353   | 53  | 1959   | 2635   |
| Midtown Phillips  | 4782       | 783  | 77  | 1730   | 1307   |
| Phillips West   | 4727       | 1573   | 75  | 1703   | 2221   |
| Powderhorn Park   | 8655       | 1778   | 56  | 2299   | 1775   |
| Seward  | 7442       | 2488   | 43  | 2193   | 2321   |
| West Calhoun  | 1740       | 729  | 15  | 93   | 129  |
| Whittier  | 13689      | 5614   | 49  | 4955   | 3294   |

Figure 2 Summary of Neighborhood Demographics

Credit: Minnesota Compass

#### Housing



Credit: Nick Sieger via CC



Credit: Tony Webster via CC

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Credit: Scott Shaffer via CC

There are 32,790 residential housing units in the Lake Street-Midtown Greenway Corridor.<sup>1</sup> The age and type of the housing stock varies throughout the neighborhoods. For more information regarding the age of the housing stock see Figure 3.

| Neighborhood     | 2000<br>or Later | 1970-1999 | 1940-1969 | 1939 or earlier |
|------------------|------------------|-----------|-----------|-----------------|
| CARAG            | -                | 15        | 20        | 64              |
| Cedar-Isles-Dean | 12               | 33        | 16        | 38              |
| Central          | -                | 13        | 14        | 69              |
| Cooper           | 3                | 4         | 17        | 76              |
| Corcoran         | 7                | 9         | 13        | 72              |
| East Isles       | -                | 18        | 16        | 64              |
| East Phillips    | 18               | 26        | 12        | 44              |
| ECCO             | 5                | 20        | 16        | 59              |
| Longfellow       | 6                | 11        | 18        | 65              |
| Lowry Hill East  | 9                | 8         | 16        | 68              |
| Lyndale          | -                | 26        | 18        | 52              |
| Midtown Phillips | 29               | 14        | 6         | 50              |
| Phillips West    | 8                | 39        | 17        | 37              |
| Powderhorn Park  | -                | 6         | 16        | 76              |
| Seward           | -                | 37        | 24        | 38              |
| West Calhoun     | _                | 33        | 37        | 26              |
| Whittier         | 6                | 18        | 27        | 49              |

Figure 3 Percentage of Housing Built During Each Time Frame

Source: Minnesota Compass

<sup>&</sup>lt;sup>1</sup> Source: Minnesota Compass Neighborhood Profiles,

www.mncompass.org/profiles/neighborhoods/minneapolis-saint-paul#!areas

Housing structured in 1-4 unit buildings are concentrated in the central portion of the Corridor, whereas 5+ unit buildings are clustered primarily in the western neighborhoods of ECCO, Cedar-Isles-Dean, and West Calhoun, with pockets located in Whittier, Lyndale, and Seward.



Figure 4. 1-4 Residential Units along the Lake Street- Midtown Greenway Corridor



Data Courseay of the Metropolitan Council, US Census Sureau, and City and County Januaran Offices

#### Figure 5. Housing Over 5 Units along the Lake Street- Midtown Greenway Corridor

Housing with five or more units is most prevalent on the western side of the Corridor by the lakes. However these multi-family buildings are also found north of Lake Street throughout the entire Corridor.



Credit: Michael Hicks via CC

#### Commitment to Sustainability

The Lake Street-Midtown Greenway Corridor is home to many individuals and organizations with a deep commitment to sustainability. These commitments are demonstrated in a variety of ways that reflect the wide range of passions, interests, and beliefs held in the Corridor, resulting in a rich diversity of initiatives that aims to make Minneapolis a better place to live.

The majority of initiatives along the Corridor are organized through local nonprofits whether they are business associations, faith-based organizations, environmental groups,

or neighborhood organizations. There are many sustainability initiatives already happening in the Corridor such as building community gardens, promoting bicycle infrastructure, organizing around renters' rights, and increasing recycling options. These initiatives are championed by people who are passionate about their community, and many share an interest in energy efficiency and renewables. Therefore efforts to explore synergies between programs and people could increase the success of energy outreach.

## **Creating an Energy Action Plan**

#### The Midtown Community Works Partnership

The Midtown Community Works (MCW) Partnership is a public-private partnership formed in 1998 to coordinate a wide array of investments along the Midtown Greenway-Lake Street Corridor in Minneapolis. Members of the Partnership include Hennepin County, the City of

Minneapolis, the Metropolitan Council, Allina, Wells Fargo, the Midtown Greenway Coalition, and Lake Street Council.

In 2013 the MCW Partnership began a sustainability initiative in hopes of building on existing community efforts and tracking outcomes with consistent metrics. The MCW Partnership convened a Sustainability Initiative Work Group to provide recommendations for initiatives that should be implemented along the Corridor. This work group was comprised of government agency staff, local nonprofits, and businesses along Lake Street-Midtown Greenway Corridor. The timeline for the Sustainability Initiative was proposed to be between 3-5 years depending on resources available. In a memorandum dated October 4, 2013 the goals, strategies, objectives, and outcomes that emerged from the work group were outlined (See Appendix).

#### **MCW Partnership Sustainability Initiative**

The MCW Partnership Sustainability Initiative goals and strategies, outlined in a memo to the Partnership in October 2013, include:

#### Goals

- Increased energy efficiency and use of renewable energy
- Increased recycling and decreased landfill rates

#### **MCW Partnership Members**

Hennepin County Commissioners Commissioner Peter McLaughlin Commissioner Marion Greene

Mayor of Minneapolis Mayor Betsy Hodges

Minneapolis City Council Members Council Member Elizabeth Glidden Council Member Lisa Bender Council Member Alondra Cano Council Member Abdi Warsame

#### Metropolitan Council Charles Carlson, Senior Manager, BRT/Small Starts, Metro Transit

Allina Hospitals and Clinics Adam Juul, Facilities Management

Midtown Greenway Coalition Michael Nelson

Wells Fargo Bank Janet Lee Olson, Regional Property Manager

Lake Street Council Dave Burrill, Board Member

#### MCW Chairs

Commissioner Peter McLaughlin, Chair Council Member Elizabeth Glidden, Vice Chair

Counsel is provided by Smith Partners, PLLP Louis Smith, Counsel Faith Cable Kumon, Partnership Manager

- .....
- Increased water conservation
- Increased use of transportation alternatives

#### **Strategies**

- 1. Programs & Outreach: Increasing high-touch outreach tactics such as tabling at community events and door knocking.
- 2. Tracking Metrics: Analyzing energy consumption data at the neighborhood and Corridor level.
- 3. Communications: Using a variety of communication channels to share the broader story of the initiative.

In response to a request from the MCW Partnership to work together on energy conservation and renewable energy, Xcel Energy offered the opportunity to be the first Minnesota community to participate in Xcel Energy's Partners in Energy. In July 2014, Xcel Energy staff, MCW Partnership staff, and some members of the Sustainability Initiative Work Group met to discuss Partners in Energy and next steps for building a planning team. In August and September, more community members were recruited to participate in a team to contribute to developing an Energy Action Plan for the Corridor.

#### **Xcel Energy's Partners in Energy**

Xcel Energy created Partners in Energy to support communities by developing and implementing energy action plans. The content of this plan is driven heavily from the series of four planning workshops held in the community. The process is supported with information around energy use and past program participation from Xcel Energy, facilitation services, and

development of this planning document.

The intent of Partners in Energy is to work with communities to provide them with tools and support to meet their energy goal. Xcel Energy will configure the programs and services currently offered in a fashion that enables a community to pursue the strategies and priorities they identify through this planning process.



#### The Partners in Energy Planning Process

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The first workshop was held in September of 2014 and the final workshop was held in February of 2015.

- Workshop 1 (Sept 31, 2014): Kickoff and welcome, review of the MCW Sustainability Initiative, energy visioning activity, and review of baseline energy data.
- Workshop 2 (Nov 6, 2015): Further energy vision development, additional baseline energy data, focus area brainstorming, and clustering.
- Workshop 3 (Jan 7, 2015): Strategy refinement and prioritization activity in small groups.
- Workshop 4 (Feb 11, 2015): Refine goals and tactics and review additional program participation data.

There were many opportunities and challenges identified in the workshop discussions. Some highlights are included below.

#### **Opportunities**

- Community Celebrations: The Corridor has annual celebrations that provide a platform for neighbors to connect with one another. These events are a good opportunity to educate and inform, as well as recruit volunteers for challenge participation.
- Lake Street Energy Coaching: In 2014, the Lake Street Council and Metro Clean Energy Resource Team



**Energy Planning Team after Workshop 4** 



Credit: Stevesworldofphotos via CC

(CERT) received a \$50,000 grant to create an energy coaching pilot program that assists Lake Street business owners in getting energy efficiency upgrades.

- MPLSGreen.com: MPLSgreen.com aims to be an eco-friendly place where Minneapolis can share its collective wisdom about living green. The website's founder, Mikki Morrissette, is a member of the Energy Planning Team. Mikki is interested in promoting the Lake Street Energy Challenge on her website and through her newsletter.
- STEP-UP Interns: The STEP-UP Achieves Job Program is an opportunity for Minneapolis youth to connect with a variety of career experiences through paid summer internships. These interns come from a variety of cultural backgrounds which reflect the demographics of the Corridor. Their language skills and enthusiasm could be a great asset to outreach efforts. The applications for the summer of 2016 are in December of 2015.
- Minneapolis Neighborhood Organizations: Minneapolis neighborhood organizations are often a first point of contact for residents to learn about local initiatives. Partnering with these organizations would provide connections to outreach channels and volunteers who are already engaged in energy topics.
- History of Community Engagement: There are many residents along the Corridor who tend to be both knowledgeable and interested in shaping the future of their community. These "go-getters" will put enthusiasm into the Challenge and keep momentum going.

#### Challenges

- Convening Different Groups: One of the strengths of the Corridor is that many
  organizations have been involved in sustainability and energy efficiency work. The
  challenge is finding a time where all the voices can gather in the same space. Scheduling
  in person meetings can be a labor-intensive process.
- New Program Offerings: It always takes time for new programs to be launched. One of the programs included in the Lake Street Energy Challenge is the new multi-family program offered by CenterPoint Energy and Xcel Energy. This program is anticipated to roll out in fall 2015, so any delays in the launch could impact potential outreach.
- Outreach Support: One of the major challenges in driving energy efficiency and renewable program participation is having adequate resources for outreach. Volunteers and staff with program knowledge and community trust can be limited. Furthermore the majority of program outreach is conducted in English which limits the number of residents and businesses that can be reached.
- Program Participation Follow-through: Many organizations that have worked to engage residents in energy efficiency measures have identified barriers with getting residents to

follow-through with actions. For further reflections see the Appendix for a "Lessons of Community Based Social Marketing" report from Our Power community outreach efforts.

- Financial Burden of Program Participation: Many residents and business owners simply cannot afford the energy programs that are currently offered. Unless the upfront cost is decreased this will continue to be a barrier for participation.
- Data Tracking: Tracking of program participation by specific demographic groups currently does not exist. This creates a challenge in understanding what should be done to increase participation amongst various groups of people.

#### **Partners in Energy Implementation**

Partners in Energy will work with the MCW Partnership to implement the plan over an 18month implementation phase from June 2015 through December 2016. The goals and strategies outlined in this plan will be recorded in a Memorandum of Understanding between Xcel Energy and the MCW Partnership that outlines implementation expectations.

#### **ENERGY PLANNING TEAM**

Alliance for Sustainability a. Sean Gosiewski (1)

Center for Energy and Environment (Facilitators) a. Jenny Edwards (4) b. Emma Struss (4)

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**CenterPoint Energy** a. Sarah Schaffer (3)

**City of Lakes Community Trust** a. Jeff Washborn (1)

**City of Minneapolis, CM Gordon's Office** a. Robin Garwood (2)

**Cooperative Energy Futures** a. Timothy DenHerder-Thomas (3)

**Corcoran Neighborhood Association** a. Ross Joy (4)

East Isles a. Mikki Morrissette (2) b. Bill Elwood (1)

East Phillips a. Tim Springer (4) b. Lee Samelson (4)

[(#) of workshops attended]

Lake Street Council a. Matt Kazinka (2)

Longfellow Community Council a. Joe Sturm (2) b. Leslie McKenzie (3) c. Tom Julik (1)

Metro CERT a. Trevor Drake (4) b. Diana McKeown (1)

Midtown Phillips Neighborhood Association a. Jana Metge (2)

Our Power a. Lena Needham (2) b. Kirk Washington (1)

Smith Partners a. Faith Cable Kumon (4)

Whittier Alliance a. Abbie Plouff (2)

Xcel Energy a. Tami Gunderzik (4) b. Yvonne Pfeifer (4)

## Where Are We Now? – Baseline Energy Analysis

To help the planning team develop community-specific strategies and goals, Xcel Energy consolidated energy data specific to the geographical boundaries of the Lake Street-Midtown Greenway Corridor. Throughout the planning process, custom data was collected and shared based upon input from the planning team. Note that baseline use is only currently available for electricity; natural gas data is not included since it is not served by Xcel Energy in this area.

The figure below shows electricity use in the Corridor for different customer types over the 36month period from January 2011 through December 2013. It is clear that seasonal fluctuations influence electricity use for commercial and residential sectors. During the summer months, May to September, electricity use peaks, presumably due to air conditioning. In the winter months smaller peaks occur in mid-December. Possible factors leading to winter peaks might be the use of electric space heaters or increased lighting due to longer nights and/or holiday decorations.



Figure 6. Electricity Use Over Time (Source: Xcel Energy)

Not surprisingly, customer size across the Lake Street-Midtown Greenway Corridor varies based on sector. Business accounts use 59% of the electricity, but make up 11% of the total premises.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> A premise is the location of electricity or natural gas service. In most cases it is a facility location, though there can be multiple premises per building and multiple premises per individual debtor.

Residential accounts use 33% of the total electricity consumption, but fewer than 1% of the total premises.



Figure 7. Sector Energy Use and Premise Count (Source: Xcel Energy)

Business and industrial accounts in particular have a wide range in customer size from small to large. The planning group had a focused interest in data that could support ongoing outreach efforts and help small businesses find access to energy programs. For planning purposes, a group of "small-to-mid-sized" customers was defined as customers that use less than 1 GWh, but more than 1 MWh of electricity per year.<sup>3</sup> These 4,500 premises across the Corridor account for almost half of the total commercial and industrial electricity use.

**Error! Reference source not found.**below shows the average 2013 electricity use for five equal segments of small-to-mid-sized customers, from the largest 20% to the smallest 20%. Each value represents the average electricity use across the 900 premises in a segment.

<sup>&</sup>lt;sup>3</sup> This amounts to annual electricity costs between approximately \$100 and \$100,000.





Between 2012 and 2013 the majority of Xcel Energy's efficiency program uptake took place in the residential sector with 1,778 instances. This participation saved 643,274 kWh. Commercial and industrial efficiency program participation saved the most energy with a savings of 12,124,558 kWh from 367 participation instances. Solar participation was at 25 instances and contributed 500,000 kWh of renewable energy production.





#### **Baseline Tracking by Neighborhood**

The Lake Street Energy Challenge planning process looked at additional energy use data to identify how energy use is distributed across neighborhoods. Tracking Corridor energy use by neighborhood is an important part of supporting the Challenge's goals. Baseline electricity

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usage values were pulled for 2013, and efficiency program participation was pulled for the baseline years 2012 and 2013. Tracking is divided by domestic customers and commercial and industrial customers. This information was used during the planning process to help inform the variation and possibilities by neighborhood across the Corridor. It will also form the basis for ongoing data tracking during action plan implementation.

| Lake Street-     |                 |                   | Number of     |                  |
|------------------|-----------------|-------------------|---------------|------------------|
| Midtown          | Number of       | Total Residential | Unique        | Participation    |
| Greenway         | Domestic        | Energy Use        | Residential   | Percent of Total |
| Corridor         | Premises (2013) | (kWh in 2013)     | Participants  | Premises         |
| Neighborhoods    |                 |                   | (2012 + 2013) |                  |
| CARAG            | 2493            | 8,919,091         | 76            | 3%               |
| Cedar-Isles-Dean | 1376            | 10,331,037        | 118           | 9%               |
| Central          | 1997            | 13,088,270        | 180           | 9%               |
| Cooper           | 1541            | 9,310,866         | 210           | 14%              |
| Corcoran         | 1382            | 7,918,149         | 131           | 9%               |
| East Isles       | 1446            | 7,525,930         | 56            | 4%               |
| East Phillips    | 1036            | 6,083,229         | 82            | 8%               |
| ECCO             | 1000            | 5,459,681         | 44            | 4%               |
| Longfellow       | 2009            | 10,286,921        | 222           | 11%              |
| Lowry Hill East  | 2642            | 8,794,750         | 57            | 2%               |
| Lyndale          | 2305            | 9,599,277         | 101           | 4%               |
| Midtown Phillips | 1259            | 7,590,505         | 84            | 7%               |
| Phillips West    | 1291            | 5,645,766         | 44            | 3%               |
| Powderhorn Park  | 2787            | 14,359,404        | 189           | 7%               |
| Seward           | 2362            | 11,051,322        | 236           | 10%              |
| West Calhoun     | 969             | 3,567,929         | 18            | 2%               |
| Whittier         | 5084            | 18,602,407        | 112           | 2%               |

Figure 10. Baseline Residential Data

#### LAKE STREET ENERGY CHALLENGE

| Lake Street-<br>Midtown<br>Greenway<br>Corridor<br>Neighborhoods | Number of C&I<br>Premises (2013) | Total C&I Energy<br>Use<br>(kWh in 2013)⁴ | Number of<br>Unique C&I<br>Participants<br>(2012 + 2013) | Participation<br>Percent of Total |
|--|----------------------------------|---|--|-----------------------------------|
| CARAG  | 360                              | 11,171,727                                | 18   | 5%                                |
| Cedar-Isles-Dean   | 120                              |   | 8  | 7%                                |
| Central  | 248                              | 8,382,963                                 | 8  | 3%                                |
| Cooper   | 84                               |   | 11   | 13%                               |
| Corcoran   | 93                               |   | 5  | 5%                                |
| East Isles   | 277                              | 16,505,009                                | 22   | 8%                                |
| East Phillips  | 158                              |   | 13   | 8%                                |
| ECCO   | 129                              | 6,252,045                                 | 9  | 7%                                |
| Longfellow   | 340                              | 35,136,508                                | 51   | 15%                               |
| Lowry Hill East  | 516                              | 27,913,956                                | 43   | 8%                                |
| Lyndale  | 330                              | 14,349,078                                | 15   | 5%                                |
| Midtown Phillips   | 147                              |   | 14   | 10%                               |
| Phillips West  | 253                              | 47,611,777                                | 26   | 10%                               |
| Powderhorn Park  | 321                              | 9,369,361                                 | 16   | 5%                                |
| Seward   | 351                              | 49,182,776                                | 74   | 21%                               |
| West Calhoun   | 87                               |   | 15   | 17%                               |
| Whittier   | 894                              | 56,493,302                                | 63   | 7%                                |

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Figure 11. Baseline C+I Data

<sup>&</sup>lt;sup>4</sup> Certain neighborhoods removed for data privacy screening.

## Where Do We Want To Go? – The Lake Street Energy Challenge's Vision and Mission Statements



Vision and mission statements are tools that can assist in fostering group cohesion by identifying commonalties between team members' values and beliefs. Understanding these shared beliefs can help newly convened groups create focus and direction in future tasks. The planning team for the Lake Street Energy Challenge set aside

time during their first two workshops to develop the statements below.

#### **Our Energy Vision**

Working on energy-related issues is nothing new to many of the individuals who served on the planning team for the Lake Street Energy Challenge. Although most planning team members had previously worked together in various capacities, this was the first time they convened to specifically discuss an energy plan for the Lake Street-Midtown Greenway Corridor. To help guide them through the planning process, the team developed a shared energy vision to create clarity and direction.

#### Vision Statement

The Lake Street-Midtown Greenway Corridor will be a transformative national role model for equitable and community-driven clean energy, leading the way toward a carbon neutral Minneapolis that keeps its energy dollars local.

The energy vision for the Corridor reflects what is possible for the way energy is produced and used in the 17 neighborhoods involved in this initiative. Most existing energy practices are deemed unsustainable as they contribute to inequality and environmental degradation. The planning team envisions a future where energy production and consumption looks vastly different; where energy is produced both sustainably and locally and consumed responsibly and efficiently.

The planning team hopes the efforts carried out along the Corridor will be captured and shared with other communities working towards carbon neutrality. One way the planning team aims to share their lessons learned is with the Minneapolis Clean Energy Partnership.

#### **Our Mission Statement**

The Lake Street Energy Challenge values grassroots, community-driven change. As demonstrated in the mission statement, a priority of the Lake Street Energy Challenge is to insure that everyone has access to energy efficiency and renewable programs. This means the Lake Street Energy Challenge will focus on targeting community members who may have experienced language, cultural, or financial barriers to participating in energy programs in the past.

**Mission Statement** 

The Lake Street Energy Challenge coordinates action among diverse neighborhood organizations, residents, employees, and businesses to accelerate energy efficiency and community-owned renewable energy accessible for everyone, while creating jobs and community wealth.

Recognizing that the tools and resources to bridge this gap are not already in place, the Lake Street Energy Challenge will be implemented in a way that allows time for residents, neighborhood organizations, employees, and businesses to be able to convene and discuss the effects of proposed initiatives before they are adopted.



## **How Are We Going To Get There? – Strategies**

#### Strategy 1: Increase energy savings for small-to-mid sized businesses.

#### Overview

Small-to-mid-sized businesses are a vital part of the community along the Lake Street-Midtown Greenway Corridor; many of them independently owned and serving diverse populations. The small business strategy will build on and support existing work being conducted by Metro CERT and Lake Street Council to conduct outreach and tracking on energy efficiency and other programs. The strategy will do this by providing additional tools and resources that allow for more targeted outreach, conducting wider engagement to other business associations across the Corridor, and coordinating with resources from individual programs.

The definition of a "small business" can be challenging to define, but for the purpose of this plan small businesses will be defined as the businesses using between 1,000 kilowatt hours (kWh) and 1 million kWh per year. Including a minimum kWh per year better reflects the businesses that consume enough energy to have a greater chance of using equipment that can benefit from energy conservation and is targeted by the Energy Coaching program.<sup>5</sup>

<sup>&</sup>lt;sup>5</sup> A total of 357 premises using below 1,000 kWh per year were removed from these summary data.

#### SMALL TO MID-SIZED BUSINESS ENERGY USE (2013)

Definition: All businesses between 1,000 and 1 million kWh (1 GWH) annual use in 2013

Number of Premises: 4,524

Total 2013 Electricity Use: 220,548,000 kWh

Percent of Commercial and Industrial Use in the Corridor: 47%

Average Use Per Premise: 50,000 kWh<sup>6</sup> (approximately \$4,000/yr in energy costs)

2012+2013 DSM Savings: 5,564,000 kWh from 202 instances over the two years. This value is equivalent to 1.3% of annual use (using 2013 data). 28,000 kWh average savings

Note that the average savings per DSM instance is approximately 27,500 kWh, which is more than 50% of the average annual use. This is partially due to a handful of large DSM projects that impact the average savings. It does not necessarily reflect a skewed distribution of the size of participating businesses, as shown in the two figures below. These figures show 2012 and 2013 program participation binned by annual electricity use. Figure 12 shows the total number of participants and Figure 13 shows results as a percent of total premises in that category.<sup>7</sup>



Figure 12. Participation in DSM Programs by Business Size (Total Number)

<sup>&</sup>lt;sup>6</sup> The average use per premise only accounts for the premises that had a full year billing data in 2013, and therefore is slightly higher than the total use divided by total premises.

<sup>&</sup>lt;sup>7</sup> The largest users are grouped into a range of use from 400,001 kWh to 1,000,000 kWh for data privacy reasons.



Figure 13. Participation in DSM Programs by Business Size (Percent of Premises in Each Category)

Within this small business market there are three utility (Xcel Energy) funded conservation programs that have driven a majority of the electricity conservation: 1) lighting (primarily, but not only, through CEE's One-Stop Efficiency Shop®), 2) motors and adjustable speed drives, and 3) cooling efficiency. These reflect the most common end-uses in small businesses. Lighting is common to almost all businesses and frequently provides the greatest opportunity for cost-effective energy savings while improving the business' aesthetics. The One-Stop Efficiency Shop® program has strong appeal in this market because it is designed to assist small businesses through the process of identifying their opportunity, calculating the cost, savings and payback, managing the installation, and applying for the rebate.

Additionally CenterPoint Energy provides a Natural Gas Energy Analysis (NGEA) program that provides small-to-mid-sized businesses with an in-depth analysis and recommendations for energy-saving improvements.

There are also conservation programs for local businesses that provide indirect support such as Xcel Energy's Turn Key Services and the Minnesota Chamber of Commerce's Energy Smart program. These programs offer a "front door" for a range of efficiency opportunities. Current small business coaching efforts have successfully worked with the Energy Smart program to provide customized technical assistance paired with local outreach.

Below is a table showing the average savings per project for leading programs, a projected mix of participation that could be driven through energy coaching, and the number of projects necessary to result in 500,000 kWh of conservation annually or to reach 1.5% energy reduction annually. Note that participation in the program below may also be the result of indirect referrals.

| <br> | <br> |
|------|------|

|                        |             | VIPARICIPAI | 1011 (2012 & 201 | 5)          |                    |
|------------------------|-------------|-------------|------------------|-------------|--------------------|
| Program                | Avg.        | Projected   | Avg. Annual      | # of        | Annual Participant |
|                        | Savings per | Program     | Projects in      | Projects in | Goal to Reach      |
|                        | Project     | Mix         | 2012 & 2013      | 500,000     | 1.5%               |
|                        | (kWh)       |             |                  | kWh         |                    |
| Lighting (One<br>Stop) | 25,000      | 75%         | 74               | 18          | 107                |
| Motors &<br>Drives     | 9,500       | 20%         | 20               | 5           | 28                 |
| Cooling                | 4,500       | 5%          | 5                | 1           | 7                  |
| Total                  | 20,875      | 100%        | 98               | 24          | 142                |

#### ENERGY EFFICIENCY PROGRAM PARTICIPATION (2012 & 2013)

#### **Implementation Goals**

The energy conservation goal for the Lake Street Energy Challenge business strategy is to reduce energy usage among small businesses in the Corridor by 1.5% annually. We based our goal on broader goals set by the City of Minneapolis and the State of Minnesota. Xcel Energy has a statewide mandate to achieve 1.5% reduction in energy use annually, as set in the Next Generation Energy Act legislation passed by the Minnesota Legislature in 2007. The 1.5% mandate was set to ensure that the state meets its ambitious goals of reducing greenhouse gas emissions by 15% below 2005 base levels by 2015, 30% by 2025, and 80% by 2050.

The City's Climate Action Plan, published in 2013, set out specific targets for greenhouse gas emissions by sector. The City intends to achieve nearly half of its total planned emissions cuts by 2025 through commercial and industrial energy efficiency. By 2025, they plan to cut emissions from commercial and industrial buildings by 20% compared to a 2006 baseline. These aggressive targets inform this plan.

The 2012 and 2013 data reflect that electricity use in small businesses along the Lake Street-Midtown Greenway Corridor was reduced by approximately 1.3% annually through conservation programs, with 202 unique small- and mid-sized businesses having participated in an Xcel Energy electric conservation program. We assume that the 1.3% conservation rates seen in 2012 and 2013 will continue as a baseline for future years. We anticipate that the current outreach from the Energy Coaching program will lift the 2015 participation another 0.2%, for a total of 1.5% energy conservation savings annually, equating to 25 additional businesses that participate in energy savings programs. The work group set a 2016 goal to continue this elevated level of participation, with the availability of resources such as targeted marketing from Xcel Energy and continued collaboration with the Energy Smart program. Depending on the availability of funding for outreach activities, this could stretch to a 1.7% savings goal, reaching a total of 50 businesses in 2016.

These goals are ambitious, especially because they focus on participation from minority-owned small businesses, a traditionally hard to reach segment. However, we are using the opportunity of developing this energy action plan through Partners in Energy to set community goals that mirror the aggressive goals at the city and state level and ensure that our community does our part to address climate change. Achieving these goals will depend on the continuation of current funding support that is set to expire in the fall of 2015.

#### PROJECTIONS FOR 2016 REDUCTIONS: SMALL TO MID-SIZED BUSINESSES

Estimated Total Electricity Use - 220,548,000 kWh

1.5% Electricity Conservation Goal – 3,308,220 kWh

Estimated Baseline of Total Annual Electric DSM Program Savings – 2,782,000 kWh

Additional Conservation Needed to Meet 1.5% Electric Conservation Goal – 526,220 kWh

Estimated Business DSM Participants Needed to Meet 1.5% Conservation Goal: 25 businesses

#### **Implementation Steps**

Research and Data (3-6 months)

- Complete targeted market research, working with community-based social marketing experts and asking local businesses what types of community based motivations would be most effective, with attention to minority business communities.
- Provide data and tracking to help guide targeted outreach such as size, type of business, and location of current program activity.
- Engage business associations to identify challenges and needs around small business energy efficiency outreach.
- Convene an advisory committee to provide input to this effort (1-2 meetings).

- Review opportunities to learn from larger building energy efficiency and building benchmarking.

#### Information Consolidation (1 month)

- Provide a streamlined list of resources and "wayfinding" assistance for small businesses and, if valuable, develop custom resources like a dedicated 1-800 number for Corridor businesses from the Xcel Energy's Business Solutions Center.
- Develop a list of business associations across the Corridor for use in facilitating better coordination between business associations and energy programs.
- Develop and print marketing collateral that reflects opportunities and best practices identified through prior research.

#### Outreach (18 months)

- Facilitate better coordination between energy programs and business associations based on findings during the "research and data" phase. Potentially offer three tiers of participation, categorized as:
  - $\circ$   $\;$  Tier 1: They are informed of the activities and outreach in communities.
  - Tier 2: They can help make/broker introductions and/or give leads on groups in their area.
  - Tier 3: They can more actively support outreach by initiating contacts and following up on participation.
- Manage development and materials for recognition campaign based on findings from community-based social marketing research.
- Develop targeted marketing to Somali and Hispanic business owners through a panel discussion, video, case study, or other expanded outreach activity.
- Continue current energy coaching activities.

#### Next Steps

- Identify potential funders and begin securing funding for this effort (April-Dec 2015).
- Schedule next steps for market research of small business motivation:
  - Schedule meetings with community based social marketing experts (May 2015).
  - Convene an advisory committee to provide input, including from providers of non-utility energy programs that serve Lake Street (May/June 2015).
  - $\circ$  Schedule meetings with business associations that serve Lake Street (June 2015).
  - Conduct outreach and interview select businesses along the Corridor on motivations. (July-Aug 2015).

- Review existing CERT field guide and create simplified "wayfinding" directions for small business efficiency programs (September 2015).
- Design data tracking tool and delivery mechanism for outreach (Sep-Oct 2015).
- Monitor and assist, where possible, in identifying long-term funding for energy coaching along the Lake Street-Midtown Greenway Corridor.
- Establish process for monthly check-ins.

| PROJECT TASKS AND LEADS                        |                        |                                     |
|--|------------------------|-------------------------------------|
| Task   | Estimated Date         | Lead                                |
| Fundraising                                    | April-December<br>2015 | LSC,MC                              |
| Schedule meetings with CBSM Expert(s)          | May 2015               | MC                                  |
| Convene Advisory Committee                     | May/June 2015          | MC                                  |
| Schedule meetings with energy programs         | June 2015              | Xcel Energy / CenterPoint<br>Energy |
| Schedule meetings with business associations   | June 2015              | LSC, Xcel Energy                    |
| Conduct business interviews                    | July-August 2015       | LSC, Xcel Energy                    |
| Revamp CERTs Field Guide (based on interviews) |                        | MC                                  |

#### Metrics

The following metrics will be tracked by Lake Street Council and Metro CERT:

- Number of businesses contacted during research / outreach phase
- Number of businesses that convert to investing in energy efficiency upgrades
- Number of leads from additional data tracking information that lead to efficiency conversations
- Number of minority businesses in above categories

The following metrics will be tracked by Xcel Energy:

- Conservation number of business participants
- Conservation percentage of business participants

- Conservation kWh of business participants
- Renewable number of business participants
- Renewable percentage of business participants
- Renewable kWh of business participants

Public reporting will be in compliance with Minnesota data privacy guidelines.

#### **PIE Small Business Work Group Members**

- Matt Kazinka, Lake Street Council
- Trevor Drake, CERTS
- Joe Sturm, Longfellow Neighborhood
- Robin Garwood, Community Member & aide to Councilmember Cam Gordon

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#### **Additional Partners**

- Business Associations serving the Lake Street Corridor
- Energy Smart
- Xcel Energy and CenterPoint Energy

#### Strategy 2: Increase energy savings in the residential sector.

#### Overview

The Lake Street Energy Challenge will promote energy efficiency programs through the 17 neighborhoods along the Lake Street – Midtown Greenway Corridor. Energy conservation will target different types of residences and ownership models along the Lake Street – Midtown Greenway Corridor. Housing stock varies from single-family homes to duplexes, four-plexes and larger multi-family buildings. Approximately half of the housing stock is rental, with significant variation in size and concentration between neighborhoods.

The residential conservation strategy will focus on working with neighborhood organizations to do outreach and track efforts around energy conservation programs. A primary focus of the outreach efforts will be identifying and implementing new ways of reaching the traditionally underserved market segments including residents who live in non-owner occupied households, residents who primarily speak a language other than English, and residents with a lower income. These are segments that historically are less likely to participate in energy conservation programs.

#### **RESIDENTIAL ENERGY USE (2013)**

Definition: All sites having a Xcel Energy account for electricity associated with a residential rate where electricity use is over 100 kWh per year. Residential statistics do not include multi-site residence served through a master electric meter.

Number of Premises: 39,150

Total Electricity Use: 197,000,000 kWh

Percent of Total Use in the Corridor: 31%

Average Annual Use Per Premise: 5,150 kWh<sup>8</sup> (\$500/yr on energy)

2012+2013 DSM Savings: 616,000 kWh (0.3% of 2013 use) – 1,700 instances over two years.

Average Savings per Instance: 362 kWh or 7% of the average use per residential premise.

The figures below show how residential accounts of varying sizes have participated in DSM (Demand Side Management) programs. Figure 14 shows the number of DSM instances categorized according to the annual electricity use of the residential property (in 2013). A large

<sup>&</sup>lt;sup>8</sup> Average annual use calculated only from premises with a full year of billing data.

majority of participation comes from premises that use less than 10,000 kWh per year.<sup>9</sup> Figure 15 shows how participation translates to the percent of total premises. (In this case, if a given premise participated in multiple programs, their participation would only count once.)



Figure 14. Participation in DSM Programs Categorized by Residential Electricity Use (Total Number)



Figure 15. Participation in DSM Programs Categorized by Residential Energy Use (Percent of Premises in Each Bin)

<sup>&</sup>lt;sup>9</sup> The equivalent of approximately \$1,000 per year, or \$83 per month in energy costs (not including other flat costs).

Historically there have been three programs that have driven electric energy savings in the Lake Street-Midtown Greenway Corridor residential market:

- 1. Home Energy Squad<sup>®</sup> A holistic approach to home energy savings. CenterPoint Energy and Xcel Energy have partnered to deliver this program which includes low-cost direct install measures of things like compact fluorescents, weather stripping and flow restriction devices, as well as a home energy evaluation and recommendations on additional energy saving opportunities. There is a \$70 charge for this service. Although the cost is subsidized by the utility conservation programs this is still a barrier to participation, especially for income restricted households or low energy users where this represents a large investment in proportion to their energy bills.
- Refrigerator Recycling A program that provides electricity conservation by providing an incentive to remove second refrigerators that are still in good operating condition. This is a seasonal offering and has the greatest participation in single family homes where there is greater opportunity to maintain a second operating refrigerator.
- 3. Residential Home Lighting Allows Xcel Energy customers to purchase compact fluorescents and LED lamps at discounted prices. This offering requires a low initial investment and has application regardless of whether you own or rent your home.

The table below summarizes the average savings associated with these programs and a potential participation mix to reach 500,000 kWh of electric conservation as well as the .4% (866,000 kWh) goal discussed below.

**ENERGY EFFICIENCY PROGRAM PARTICIPATION (2012 & 2013)** 

| Program                   | Avg.    | Avg.    | Avg.        | Projected   | Annual      | Annual           |
|---------------------------|---------|---------|-------------|-------------|-------------|------------------|
|                           | Savings | Savings | Annual      | Program Mix | Participant | Participant Goal |
|                           | per     | per     | Projects in |             | Goal to     | to Reach         |
|                           | Project | project | 2012 &      |             | Reach       | 866,000kWh       |
|                           | (kWh)   | (dth)   | 2013        |             | 500,000     | 0.4%             |
|                           |         |         |             |             | kWh         |                  |
| Home Energy<br>Squad®     | 434     | 9.0     | 181         | 45%         | 752         | 1,302            |
| Refrigerator<br>Recycling | 1131    |         | 79          | 5%          | 84          | 145              |
| Home<br>Lighting          | 95      |         | n/a         | 50%         | 835         | 1,446            |
| Total                     | 299     |         | n/a         | 100%        | 1,670       | 2,893            |
#### Implementation Goals

Between June 2015 and December 2016, neighborhoods participating in the Lake Street Energy Challenge will reach an incremental annual electric savings of 530,000 kWh along the Corridor, which is equivalent to a reduction of 365 metric tons of greenhouse gas. This will result in annual conservation savings increasing from 0.15% to 0.40%.

The chart above identifies a scenario for how this could be achieved: replacing 835 incandescent lightbulbs with high efficiency models through local retailers, having 84 residents recycle an old operating refrigerator, and having approximately 750 residents participate in the Home Energy Squad<sup>®</sup> program. Given the broader benefits of participating in Home Energy Squad<sup>®</sup>, it is a priority for this implementation plan.

An additional 100,000 kWh will be saved in 2016 through the multi-family program that is anticipated to be launched in the fall of 2015. It is anticipated that these savings will be seen across both the rental units where they are individually metered on the residential rate and on commercial meters for common space end-uses and where rentals are master metered.

#### **PROJECTIONS FOR 2015-2016 REDUCTIONS: RESIDENTIAL**

Estimated Total Electricity Use - 197,000,000 kWh

0.4% Electricity Conservation Goal – 788,000 kWh

Estimated Baseline of Total Annual Electric DSM Program Savings - 321,500 kWh

Additional Conservation Needed to Meet 0.4% Electric Conservation Goal – 466,500 kWh

Est. Incremental Residential DSM Participants to Meet 0.4% Conservation Goal: 1,560 residents

#### **Implementation Strategies**

Challenge organizers will work with neighborhoods on energy efficiency program outreach for Home Energy Squad<sup>®</sup>, second refrigerator recycling, and a future multi-family program. Outreach tactics will include energy information at existing events, working with faith-based groups and other nonprofits, and planning additional events.

#### Neighborhood Data Tracking (2015-2016)

The Challenge will track residential energy use by neighborhood on a quarterly basis. The Challenge will track energy savings from energy conservation programs at a Corridor level initially. Once each neighborhood has 15 participants in energy conservation programs, their data will be split out separately. The faster a neighborhood reaches 15 energy conservation

program participants, the sooner they will see their own conservation data broken out separately.

#### Energy Neighborhood Party Kit (Summer-Fall 2015)

Each neighborhood that signs on to the Challenge will be asked to talk about energy conservation opportunities at an event. This could be a neighborhood party with many people, a smaller house party gathering, or something in between. It could also be an additional focus on general energy related issues at an existing event or a new event with a focused discussion about renewables or personal actions to reduce energy use. Participating neighborhoods will receive 25 CFLs to give out at the event, materials about energy programs, and \$100 to be spent on supplies for the party to cover the cost of food, printing any additional materials not supplied, or a conservation-related door prize at the event. Each event will be added to the Challenge event calendar. Hosting organizations will be asked to submit a list of attendees and addresses back to the Partners in Energy team so the participation and energy savings can be tracked to the neighborhood.

#### Event Tabling (2015-2016)

Although Home Energy Squad<sup>®</sup> and Xcel Energy table at some existing neighborhood events, the Challenge is seeking new opportunities for tabling that have not been done in the past. This could include having materials translated into other languages and having an interpreter present.

#### Home Energy Squad<sup>®</sup>: Low-Income Buy-Down (2015-2016)

To reach a broader audience of participants who may not be able to afford the \$70 cost of a Home Energy Squad<sup>®</sup> visit, the Challenge will buy down the cost of Home Energy Squad<sup>®</sup> visits for low-income participants for up to 50 participants in 2015 and up to 100 in 2016 (final numbers may be determined by funding available). The definition of low-income is proposed to be up to 80% of area median income, adjusted for family size.

#### Community Conversations: Energy and Multi-family (Fall 2015)

A panel discussion or discussions will be convened to talk about energy savings, renters, and landlords. This could be a two part series with the first discussion focused on renters rights, energy bills, and what renters can do to minimize their energy use both when they sign a lease and also while renting. The second discussion could focus on landlord issues around cost-effective ways to save energy and how good management can help attract good tenants. Attendees may be contacted afterward about their interest in the new multi-family energy conservation program (for 5+ units) anticipated to launch in fall 2015.

If there is interest, additional community conversations could be planned in 2016. Other topics could include community solar finance, low-income outreach, or lessons learned from efficiency improvements.

#### Energy Outreach Interns (Summer 2016)

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Several STEP-UP interns will be hired in summer of 2016 to do outreach around residential energy efficiency programs. They will work with interested neighborhood groups along the Corridor to do outreach at existing events or help to organize new events. If feasible, the interns may work out of neighborhood organization offices, potentially either on a part-time or rotating basis to be able to reach community members better. Interns that speak more than one language will be encouraged to apply. Interns will help to build a list of residents interested in energy programs (in both 1-4 units and multi-family buildings).

#### Other Additions

During the implementation phase of the Challenge, if better strategies are identified that present themselves as a more compelling way to accomplish the stated vision and mission, this list of implementation strategies can be modified as needed.

#### Lessons Learned

The Lake Street Energy Challenge will document outreach tactics, barriers, and successes in reaching these targeted audiences so that lessons can be learned for future energy programs.

| PROJECT TASKS AND LEADS  |                    |               |
|--|--------------------|---------------|
| Task   | Estimated Date     | Lead          |
| Neighborhood Data Tracking                                       | 2015-2016          | Xcel          |
| Energy Neighborhood Party Kit Development                        | May 2015-June 2015 | Xcel          |
| Energy Neighborhood Parties                                      | June 2015-Oct 2015 | NA            |
| Coordinate Event Tabling   | 2015-2016          | NA, Xcel      |
| Identifying Funds for Home Energy Squad <sup>®</sup> LI Buy Down | 2015-2016          | MCW, Xcel     |
| Community Conversations: Energy & Multi-family                   | Fall 2015          | MCW, NA       |
| Energy Outreach Interns  | Summer 2016        | MCW, Xcel, NA |

MCW = Midtown Community Works Partnership

Xcel = Xcel Energy team (Xcel staff & CEE contract staff)

NA = Neighborhood Associations

CP = CenterPoint Energy

#### Levels of Participation

Various levels of neighborhood organization participation are okay; there are different options that can work with existing structures, such as:

- Sharing information: Challenge organizers will provide regular email updates about events and low-income buy-down offers for Home Energy Squad<sup>®</sup> visits that neighborhood organizations can share with existing email lists.
- Limited Volunteer Time: Challenge organizers will also work with volunteers or staff on a neighborhood energy party or tabling at an event.
- Dedicated Staff Time: Challenge organizers will also work with a neighborhood organization on utilizing an energy outreach intern to conduct outreach in your neighborhood.

#### **Next Steps**

- Outreach to neighborhood organizations to share information about the Lake Street Energy Challenge and a draft resolution that neighborhood organizations can approve (April –June 2015).
- Identify sources of funding for Home Energy Squad<sup>®</sup> buy-downs in 2015 and 2016 (April-June 2015).
- Establish monthly implementation work group meeting date and time (May 2015)
- Kick-off Lake Street Energy Challenge at the official launch in June at the Lyndale Open Streets Event on June 7th (June 2015).
- Share first neighborhood data tracking results and publish online (July 2015).
- Host neighborhood Energy Parties (July-Sept 2015).
- Begin community conversations around energy and Multi-family housing (Sept-Oct 2015).

#### Metrics

The following will be tracked by Xcel Energy's Partners in Energy staff to the degree possible with help from neighborhood organizations and energy outreach interns:

- Number of residents contacted during outreach
- Number of landlords that are contacted during the outreach stage
- Number of renters that participate an energy efficiency program
- Number of low-income residents that participate an energy efficiency program

The following metrics will be tracked by Xcel Energy:

- Number of participants in an energy efficiency program
- Number of landlords that participate in the multi-family program provided by CenterPoint Energy and Xcel Energy
- Conservation number of residential participants
- Conservation percentage of residential participants

#### LAKE STREET ENERGY CHALLENGE

- .....
  - Conservation kWh of residential participants
  - Renewable number of residential participants
  - Renewable percentage of residential participants
  - Renewable kWh of residential participants

#### Partners in Energy Residential Work Group Members

- Faith Cable Kumon, Midtown Community Works Partnership
- Kirk Washington, Our Power
- Mikki Morrissette, East Isles
- Jana Metge, Midtown Phillips Neighborhood Association
- Ross Joy, Corcoran Neighborhood Association
- Tim Springer, Resident
- Lee Samelson, Resident

#### **Additional Partners**

- Neighborhood organizations
- Landlords
- Faith-based organizations
- Xcel Energy and CenterPoint Energy

# Strategy 3: Promote greater use of local renewable sources through community solar gardens through:

- Informing neighborhood associations about solar gardens, how they work or can work, and why now is the best time to identify a developer to work with their residents, inspiring them to see what is possible within their community, and motivating them to take immediate action to develop solar gardens in their neighborhoods by the end of 2016.
- 2. Supporting knowledge sharing and planning tools with faith-based organizations along the Lake Street Midtown Greenway Corridor to enable them to select and promote a community solar garden where they and their members can subscribe.
- 3. Engaging and leveraging community-based initiatives to support successful selection and development of community solar gardens.

#### Overview

The vision statement for the Lake Street Energy Challenge references the desire to drive the community, and Minneapolis, to carbon neutrality in their energy use. This requires that in addition to using energy as efficiently as possible, a carbon-free source needs to be identified for the remaining power purchased and used by the community. Community solar gardens provide a vehicle to achieve this goal and have the potential to have a source of clean energy local to the community.

Community solar gardens are rapidly gaining popularity as a way to invest in renewable energy without installing panels on your property. However, there are still many common questions as to how this model will operate both for the entity developing the community solar garden and the subscriber who invests in it. This component of the Lake Street Energy Challenge will focus on providing the educational resources and venues for information sharing to give the involved parties enough information to feel comfortable with their choice of how the want to move forward.

There is a great deal of information to sort through on this topic. The Clean Energy Resource Teams have developed a suite of comprehensive tools that provide third party neutral guidance in making decisions about community solar gardens and they are working with the City of Minneapolis in trying to do outreach to neighborhoods throughout the City. Their work will be leveraged where possible.

In addition to trying to establish potential gardens through neighborhood associations, efforts are underway to reach community members through other avenues. Faith-based organizations are sponsoring gardens that will provide green energy for their site and give their members an opportunity to invest in a garden for their homes and businesses. Other community-based initiatives are being developed to engage community members beyond the neighborhood organization and faith-based channels. It is important to support these diverse sponsorships because no single avenue will successfully reach and engage all members of the community.

#### **Implementation Goals**

Community solar gardens are emerging as a means to invest in renewable energy from the sun for customers who are unable to install their own solar panels. A number of business models for investing in these gardens are available from different developers and sponsors in the market. A preferred choice has not emerged.

The goals for the Lake Street Energy Challenge focus around successfully promoting entities to sponsors community solar gardens. This supports accessibility and the growth of community-owned renewable energy. Activity to achieve our goals is loosely defined with the intent being that the Lake Street Energy Challenge will work to identify resource gaps as the market develops and it becomes more clear what other third party entities will have available to support the growth of community solar gardens.

The potential market for this strategy is more challenging to define than for the previous goals for the residential and small business markets. Subscribers to gardens that originate in the Lake Street – Midtown Greenway Corridor may come from outside the local neighborhoods and businesses and residents within the neighborhood may subscribe to gardens outside those being tracked through Lake Street Energy Challenge.

The goals for this strategy align with the process of successful deployment of community solar gardens: 1) inform 2) engage 3) subscribe.

- Develop a resource center for those interested in developing or subscribing to community solar gardens in the Lake Street – Midtown Greenway Corridor. This will reside online and will incorporate informational resources from other parties, vendor information, and potentially serve as a forum for sharing local experiences and other tools and information as it becomes available.
- 2. Engage neighborhood associations to promote community solar gardens in a manner that best fits their organizations' capacity. A neighborhood association could chose to be an educator, sharing information about nearby solar gardens, or a coordinator, actively helping link residents with a solar garden project, or a sponsor of a solar garden, recruiting subscribers in exchange for financial compensation. Neighborhood associations may also chose to be a community solar garden subscriber or host site if they own a building.
  - a. 5 Neighborhoods promoting community solar gardens by the end of 2015.
  - b. 10 Neighborhoods promoting community solar gardens by the end of May 2016.
- 3. Drive 5 megawatts of community solar gardens subscribed in Corridor neighborhoods by the end of 2016. Categories for this achievement will include both local subscriptions and subscriptions from outside the area tracked to gardens sponsored locally. Tracking of the latter will be dependent on the sponsors willingness to share subscription data.

|                           | # of subscribers/shares | Capacity |
|---------------------------|-------------------------|----------|
| Neighborhood Associations | 500                     | 2 MW     |
| Community Based Outreach  | 250                     | 1 MW     |
| Faith Based               | 250                     | 1 MW     |
| Businesses                |                         | 1 MW     |

Assumptions: 1 MW Garden = 250 shares (smaller shares than on the Notes page-more realistic for needs of these neighborhoods)

#### **Implementation Strategies**

Engage interested neighborhood associations (Jun. 2015 – Aug. 2015)

- Develop a contact list with a point person for each neighborhood association.
- Perform initial outreach to identify neighborhoods interested in sponsoring a garden.
- Identify outstanding questions or areas where more information is needed to move forward.

Support neighborhoods as they chose how to promote community solar gardens (Aug. 2015 – Dec 2015)

- Develop a resource center to gather information and share local experiences (MplsGreen.com) and incorporate resources from third parties (CERTS), identify community solar gardens and sponsors from the Lake Street Energy Challenge territory, and provide a bulletin board environment for sharing experiences.
- Facilitate information sharing of the selection resources available from other third party sources.
- Evaluate the need for a trade event or panel discussion to disseminate information on the various business models for sponsorship and subscriptions.

# Support neighborhood associations as they share information or recruit subscribers (Dec 2015 – Dec 2016)

- Provide a quarterly forum to share successes and frustrations for neighborhood associations who are sponsoring a solar garden and recruiting subscribers and potentially invite subject matter experts to present.
- Populate the resource center with samples of recruitment materials from different neighborhoods and share information on challenges and successes in filling garden subscriptions.

#### PROJECT TASKS AND LEADS

| Task  | Estimated Date     | Lead           |
|---|--------------------|----------------|
| Neighborhood Data Tracking                          | 2015-2016          | Xcel           |
| Identify necessary collateral to support initiative | June 2015-Dec 2015 | NA             |
| Develop online resource site                        | June 2015-Aug 2015 | RWG            |
| Develop online resource content                     | 2015-2016          | RWG, NA, Xcel, |
| Ongoing identification of information gaps for NA's | Summer 2016        | MCW, RWG, NA   |
| MCW = Midtown Community Works Partnership           |                    |                |

Xcel = Xcel Energy

NA = Neighborhood Associations

RWG = Members of the Renewable Work Group willing to support implementation

#### **Next Steps**

- Incorporate information on Metro CERT meeting for neighborhood in the announcement and explanation of the Lake Street Energy Challenge. Build on content from Metro CERT April 30<sup>th</sup> meeting with Minneapolis neighborhood leaders to introduce community solar gardens.
- Develop collateral on the importance of neighborhoods getting involved in community solar gardens. Include benefits and identify potential risks.
- Establish an online resource center on MplsGreen.com.
- Determine how to best address the low-income component of the market.

#### Metrics

Number of neighborhood associations interested in pursuing sponsorship of a community solar garden will be tracked at various stages:

- 1. Interested
- 2. Offering active referrals to nearby projects
- 3. Committed to a developer
- 4. Accepting subscriber applications

The following metrics will be tracked by Xcel Energy and shared as allowed under current data privacy practices:

- Number of commercial/residential subscribers
- If possible, associated energy purchased by the utility from these subscribers

#### Partners in Energy Renewables Work Group Members

- Sean Gosiewski, Alliance for Sustainability
- Leslie McKenzie, Longfellow Community Council
- Timothy DenHerder-Thomas, Cooperative Energy Futures
- Mikki Morrissette, East Isles
- Bill Elwood, East Isles

#### **Additional Partners**

- Alliance for Sustainability
- Metro CERT
- Cooperative Energy Futures
- Xcel Energy

#### Local Outreach and Communication Channels

Engaging the community is critical to reaching the City of Minneapolis energy goals. Below are some of the major ways that residents and businesses currently receive city updates. The Lake Street Energy Challenge can use these communication channels to help deliver resources and information, as well as promote the implementation of the Lake Street Energy Challenge Action Plan. Neighborhood organizations are local outreach experts and are trusted sources of information in the community. Partnering with these organizations would be a great way to insure the Challenge updates reach members of the community.

#### **Monthly Updates**

- **Event Flyers:** Partners in Energy facilitators will create event flyers and posters for any Lake Street Energy Challenge events as requested. Printed copies can be made available.
- **Calendar of Events**: Partners in Energy facilitators will assemble a calendar of events, which will be posted online at MPLSGreen.com.
- Emails / Newsletters/ Social Media: Partners in Energy facilitators will assemble content on a monthly basis that can be shared via email, neighborhood and/or Council Member newsletters, and social media. This may include an event list, updates on metrics tracking, and feature stories. Partners in Energy facilitators will also assemble a list of monthly deadlines for newsletters.

#### Media Channels

Press Releases, flyers, and other information for Lake Street Energy Challenge kick-off and other key events will be shared with news media, including:

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#### Print

#### Online

- Longfellow Nokomis Messenger
- Hill & Lake Press
- SouthSide Pride
- Southwest Journal

• The Alley Newspaper

- Jiiiie
  - TC Daily Planet
  - MinnPost
  - MPR
  - streets.mn
  - MN Women's Press

Star Tribune

#### Online

The Lake Street Energy Challenge will have information available at the MCW Sustainability website at www.mcwsustainability.org and will also share ongoing updates at MPLSGreen.com.

#### Social Media

The Lake Street Energy Challenge will share regular social media updates on Facebook and Twitter via its own page and via MpIsGreen. Xcel Energy may also share some updates. Neighborhood organizations are encouraged to share any social media that they feel is useful.

#### Feature Stories – With MPLS Green (Sample List)

- Lake Street Council: Getting Results with Energy Coaching
- Conserving Energy at a Fourplex: An Interview with Tim Springer
- Renters' Stories: Energy Costs

#### Branding

Lake Street Energy Challenge organizers are developing a logo and brand colors to help build an identity. This information can be added to flyers, emails, and other communication.

# Lake Street 🏠 🛄 📻 Energy Challenge

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| Neighborhoods     | Blog | E-Newsletter<br>or Email<br>Subscriptions | Facebook<br>Page | Online<br>Calendar | Print<br>Newspaper<br>or<br>Newsletter | Twitter | Website |
|-------------------|------|---|------------------|--------------------|--|---------|---------|
| CARAG             |      | Х   | Х                | Х                  |  | Х       | Х       |
| Cedar Isles Dean  |      | Х   |                  | Х                  |  |         | Х       |
| Central           | Х    | Х   |                  | Х                  |  |         | Х       |
| Cooper/Longfellow |      | Х   | Х                | Х                  |  | Х       | Х       |
| Corcoran          |      | Х   | Х                | Х                  | Х                                      | Х       | Х       |
| East Isles        |      | Х   | Х                | Х                  |  |         | Х       |
| East Philips      |      |   |                  | Х                  |  |         | Х       |
| ECCO              |      |   | Х                | Х                  |  |         | Х       |
| Lowry Hill East   |      | Х   | Х                |                    |  |         | Х       |
| Lyndale           |      | Х   | Х                | Х                  |  |         | Х       |
| Midtown Phillips  |      | Х   | Х                |                    |  |         | Х       |
| Phillips West     |      | Х   | Х                |                    |  | Х       | Х       |
| Powderhorn Park   |      |   | Х                |                    | Х                                      |         | Х       |
| Seward            |      |   | Х                | Х                  | Х                                      | х       | Х       |
| West Calhoun      |      | Х   |                  | Х                  |  |         | Х       |
| Whittier          |      | Х   |                  | Х                  |  |         | Х       |

Figure 16. Outreach Channels for Neighborhood Organizations

# Lake Street Energy Challenge DRAFT Program Budget

The following is a draft budget for the Lake Street Energy Challenge as of April 2015.

| Item  | Cost              | Timing  |
|---|-------------------|---------|
| Kick-off of Lake Street Energy Challenge  | \$500             | 2015    |
| Neighborhood Energy Parties (17 @ \$200<br>each)                                  | \$3,400           | 2015    |
| Home Energy Squad <sup>®</sup> : Low-income buy<br>downs (50 @ \$70 each)*        | \$3,500           | 2015    |
| Small Business Market Research (25 hours)   | \$3 <i>,</i> 500  | 2015    |
| Small Business Recognition & Outreach<br>Support                                  | \$5,500           | 2015-16 |
| Ongoing Project Management Support (10-<br>15 hr/mo x 18 mo)                      | \$2,400           | 2015-16 |
| Outreach events, food, printing, misc.<br>(residential, sm. business, renewables) | \$4,500           | 2015-16 |
| Home Energy Squad®: Low-income buy<br>downs (100 @ \$70 each)*                    | \$7,000           | 2016    |
| Step Up Interns (3 @ \$10/hr for 12 weeks)  | \$15 <i>,</i> 000 | 2016    |
| LSEC Recognition for Neighborhoods  | \$2,000           | 2016    |
|   | \$43,800          |         |

\*Source still undetermined; cost of low-income buy downs cannot come from existing approved Home Energy Squad<sup>®</sup> program.

This draft budget is being finalized and represents costs identified outside the internal expenses of both Midtown Community Works Partnership and Xcel Energy. It is anticipated that Xcel Energy will provide funding for a majority of these costs (\$30,600) in the form of implementation support for Partners in Energy. Xcel Energy will be responsible for identifying the source of funding within their organization for these dollars. Costs will be assigned to programs in the Conservation Improvement Plan (CIP) only when it is anticipated that the investment will result in incremental participation in an existing energy efficiency program. In return, the MCW Partnership will commit to actively implementing the Lake Street Energy Challenge goals, strategies, and tactics along with other organizations serving the Corridor.

Funds still need to be identified for low-income buy-downs. Neither Xcel Energy nor CenterPoint Energy will fund the Home Energy Squad<sup>®</sup> low-income buy-down cost through the existing CIP program as this would be a change to the conservation program parameters that were previously approved by the Public Utilities Commission. During the Partners in Energy planning workshops there was agreement that the \$70 Home Energy Squad® fee is cost prohibitive for low-income residents even though they may be most in need of basic energy improvements. The best way to see higher participation among low-income participants is to buy down the cost, at least by half and preferably to zero. Although Neighborhood Revitalization Program (NRP) funds were used by neighborhood organizations to buy down the cost of Home Energy Squad® visits in the past, most neighborhoods no longer have NRP funds and cannot use Community Participate Program funds for this purpose. Given the importance of addressing equity issues in energy program participation, Xcel Energy and the MCW Partnership will continue to work towards identifying funds for Home Energy Squad® low-income buy-downs as part of the Lake Street Energy Challenge.

# How Are We Going To Stay On Course? – Monitoring and Reporting

The Lake Street Energy Challenge recognizes consistent communication, tracking, and accountability is essential for success. This section outlines the monitoring and reporting structure that will assist in reaching the energy savings and renewable goals outlined in this document.

#### **Tracking Metrics & Reporting**

As part of Partners in Energy, for the first time Xcel Energy will be able to track electricity use and conservation program participation at the Corridor and neighborhood level. Overall



energy use will be tracked along the Corridor and at the neighborhood level. Once a neighborhood has 15 participants in energy conservation programs, its energy savings can be tracked separately.

Neighborhood organizations or other community members participating in any Lake Street Energy Challenge outreach activities will be asked to track the number of people reached and share that information with Xcel Energy and Partners in Energy facilitation staff. A Google Drive folder is in place to assist with the internal sharing of documents and communication tracking and will be shared with organizations participating the Lake Street Energy Challenge. Partners in Energy facilitation staff will compile outreach data into a summarized report that will be shared with the MCW Partnership. At the end of 2016, a report will be prepared for the MCW Partnership by Partners in Energy facilitation staff and Xcel Energy on the Lake Street Energy Challenge process, outcomes, and lessons learned.

#### **Beyond the Plan Horizon**

The scope of this plan is centered around an 18 month implementation period, but the lessons learned will span far beyond a year and a half. The strategies outlined above reflect outreach tactics and tracking that are new to the Corridor. Knowing how to effectively reach community members with lower incomes, renters, and individuals fluent in non-English languages is vital when working towards a more sustainable world. Even if energy goals fall short, having documentation regarding why strategies weren't successful will assist in driving the successes of future efforts.

The Lake Street Energy Challenge comes at an opportune time for the City of Minneapolis due to the Clean Energy Partnership that began in late 2014. Whereas the Challenge is a targeted campaign within select neighborhoods, many of the lessons learned can be universally applied to the city as a whole. These lessons can provide guidance to those serving on the Clean Energy Partnership to help produce the best decisions for the City of Minneapolis.

#### **Appendix: Glossary of Terms**

**Center for Energy and Environment** (CEE): an organization that provides practical, innovative, energy solutions for homeowners, businesses, nonprofits, and government.

**Community data mapping:** a baseline analysis of energy data in a geospatial (map) format across the community.

**Demand Side Management (DSM):** modification of consumer demand for energy through various methods, including education and financial incentives. DSM aims to encourage consumers to decrease energy consumption, especially during peak hours or to shift time of energy use to off-peak periods, such as nighttime and weekend.

**Energy Action Plan:** a written plan that includes an integrated approach to all aspects of energy management and efficiency. This includes both short- and long-term goals, strategies, and metrics to track performance.

**Goals:** the results toward which efforts and actions are directed. There can be a number of objectives and goals outlined in order to successfully implement a plan.

kWh (kilowatt-hour): a unit of electricity consumption

**Home Energy Squad**<sup>®</sup> **(HES):** a partnership between Xcel Energy and CenterPoint Energy to help customers reduce energy use.

**Metro CERT:** A Twin Cities based organization that empowers communities and their members to adopt energy efficiency and renewable energy technologies and practices for their homes, businesses, and local institutions.

**One-Stop Efficiency Shop (One-Stop):** a full-service lighting rebate program available to small businesses in Xcel Energy's Minnesota service territory with an electric demand of 400 KW or less.

**Premise:** a unique identifier for the location of electricity or natural gas service. In most cases it is a facility location. There can be multiple premises per building and multiple premises per individual debtor.

**Recommissioning:** An energy efficiency service focused on identifying ways that existing building systems can be tuned-up to run as efficiently as possible.

Therm: a unit of natural gas consumption.

#### Past and Present Energy Initiatives Along the Corridor

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A focus on energy efficiency and renewables is nothing new to the Lake Street-Midtown Greenway Corridor. Below are the organizations that work specifically on energy issues in the area. Summaries of energy plans that were developed prior to the Lake Street Energy Challenge are located in the Appendix.

#### **Center for Energy and Environment**

- Offers remodeling Advisor Visits.
- Offers 2.99% Home Energy Loan.
- Offers Home Energy Loan Program.
- Offers Home Improvement Loan Program.

#### **Cooperative Energy Futures**

- Assists residents in hosting weatherization work parties where discounted materials are provided.
- Helps secure discounted insulation by coordinating interested residents in group buydowns.
- Provides solar leasing opportunities to residents who receive state rebates.
- Assists communities in developing community solar opportunities.

#### **Community Action of Suburban Hennepin**

• Carries out CenterPoint's Low-Income Weatherization Program for interested residents who meet income eligibility guidelines.

#### Metro Clean Energy Resource Team

• Pilots a small business energy efficiency program along Lake Street where community energy coaches are trained to start conversations with small business owners about their energy consumption, assist in scheduling energy assessments, and encourage follow-through with improvements.

#### **Our Power**

• Grassroots community organizing around energy behavior change

#### **Transition Longfellow**

• Creates opportunities for people to learn about and take action on the key areas of transition: lessening the use of fossil fuels, increasing energy efficiency and conservation, re-localizing our economy, building a more resilient and healthy food supply, reducing consumption and reducing waste.

#### Appendix

# **Xcel Energy Partners in Energy**

Midtown Community Works Partnership

**Memorandum-Existing Energy Plans & Affiliated Organizations** 

7-30-14

Prepared by Emma Struss and Jenny Edwards



Along the Midtown Corridor energy plans are already in place. Below are a summary of these plans.

#### Lake Street Council Energy Plan

The Lake Street Council "engages, serves, and advocates for the Lake Street business community in Minneapolis to ensure the vitality and prosperity of the commercial Corridor."

#### Summary of Energy Goals

Lake Street Council's work over the past several years has demonstrated that promoting the diversity and environmentally sustainable efforts of Midtown's commercial Corridor will elicit the responses of businesses looking for a recognizable brand that brings more customers and more revenue.

- We can expand the energy & water savings & recycling programs we began in 2009.
- We will also inventory and promote Lake Street businesses' projects like solar, rain gardens, composting and more.
- Encourage property and business owners to improve their energy efficiency and recycling
- Identify opportunities and expand the use of cooperative advertising with energy and bike orgs

#### Midtown Community Works Sustainability Initiative- Energy Goals and Objectives

In 2013 the public-private partnership, Midtown Community Works, began a sustainability initiative involving the 17 neighborhoods that touch the Midtown Greenway and Lake Street in Minneapolis. The initiative outlined specific goals, objectives, and outcomes related to energy efficiency in the Midtown Corridor.

#### **Summary of Energy Goals**

Goal: Increased energy efficiency and use of renewable energy

#### High Priority Objectives:

Increase door to door outreach and outreach at community events; increase and measure use of energy conservation programs, including:

- Residential: Home Energy Squad<sup>®</sup> Participation & other residential program participation
- Commercial: One-Stop Efficiency Shop and other projects focused on commercial energy savings
- Multi-family: New multi-family energy efficiency program

Increase and measure solar and other distributed renewable energy installations and generation

Encourage building energy benchmarking options for small businesses

#### Minneapolis Climate Action Plan

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In 2013 a steering group in Minneapolis produced a Climate Action Plan to help reduce citywide greenhouse gas emissions.

#### Summary of Energy Goals

- Achieve 15 percent energy efficiency in residential buildings from the growth baseline by 2025.
- Achieve 20 percent energy efficiency in commercial/industrial buildings from the growth baseline by 2025.
- Increase electricity from local and directly purchased renewables to 10 percent of the total consumed by 2025.
- Achieve a 1.5 percent annual reduction in greenhouse gas emissions from City facilities.
- Help 75 percent of Minneapolis homeowners participate in whole-house efficiency retrofit programs by 2025, ensuring the distribution reflects the current percentage of low and moderate income home ownership in the city.
- Help 75 percent of Minneapolis renters and rental property owners participate in efficiency retrofit programs by 2025, with a distribution that reflects the current percentage of low and moderate income rental housing in the city.

#### South Minneapolis Community Energy Plan

In 2011 a South Minneapolis community energy coalition, Our Power, started developing a community energy plan for seven Minneapolis neighborhoods. Focusing on the Phillips West, Midtown Phillips, East Phillips, Ventura Village, Central, Powderhorn Park and Corcoran neighborhoods, Our Power sought to find solutions to problems their coalition identified within the current energy system. Through community dialog and engagement they developed a community energy plan for South Minneapolis.

#### **Plan Summary**

#### **Neighborhood History**

The area of South Minneapolis targeted for the community energy plan is very diverse, acting as an arrival site for many immigrant communities. The neighborhoods are comprised of 1,000 businesses and 15,000 households. Out of those households 60% are renters and the majority of residents are low-income.

#### **Guiding Principles and Values**

The South Minneapolis Community Energy Plan seeks an energy future that is:

- Affordable: Everyone can afford to meet their needs for heat, lighting, transportation and power.
- Stable: We have reliable access to energy without blackouts, power surges, energy shortages or vulnerability to energy price shocks.
- Healthy: Our energy supports the health and quality of life of our neighbors and those in all communities where our energy is produced.
- Job Creating: We invest the dollars we spend on energy and energy sources that create jobs in our community and allow people in our neighborhood to build wealth equitably through the local economy.
- Environmentally Sustainable: Our energy choices sustain the environment that supports our community, others across the planet and future generations.

#### Goals and Objectives of South Minneapolis Community Energy Plan

Engage the community-

- Community is engaged and participating
- Community occupies majority of seats at table for all energy planning & decisions
- Established process for incorporating new ideas & people
- Over half of residents aware of and implementing energy plan
- Open exchange in community
- Conditions are culturally relevant

Pass supportive policy-

- Policy to support fair share rate payment
- Utility bills reflect energy savings
- Energy use greatly reduced; energy locally sourced
- Policy supports and provides resources for plan
- Signatures of support from 80% of City Council

Create access to social & financial capital-

- Funding for residents to make efficiency & production investments
- ID & train energy activists & advocates to work with residents

Create green jobs & economic opportunities-

- Green jobs produce local, sustainable energy for residents and businesses
- Each home or business has a solar system, farm

Sustain planning efforts-

- More partnerships between residents & businesses
- Organization continues to meet; developed plan & expansion opportunities
- Opportunities for residents for energy efficiency careers
- Energy plan part of new residents & business welcome packets

Track & evaluate results-

- Benchmarks are set & reached
- Community plan with strategies for implementation
- Replicable
- Public display of completed projects

#### Assessment of Local Energy Use

To create a baseline for the proposed energy plan, Our Power estimated the current energy usage in targeted neighborhoods. Their methodology included using the square footage of various building types in conjunction with state, regional, and national estimates of energy usage per square foot. Our Power estimated the total cost of energy usage in the neighborhoods to be \$63.58 million.

#### **Plan of Action**

Our Power wishes to reinvest \$63.58 million into their community to help build "true economic, social and ecological resiliency". To achieve this goal their planning process seeks to empower and engage the entire community by harnessing the skills, creativity, and resources of its many diverse members. Our Power also aims to coordinate access to existing energy efficiency programs, leverage financial resources, create economies of scale, advance larger clean, community-supporting energy solutions, safeguard local energy control to insure community benefit, and share successes.

#### Whittier Alliance Strategic Plan 2012-2017

The Whittier neighborhood is located in the middle of the Midtown Corridor. The neighborhood has approximately 15,000 residents and 90% are renters. Their current strategic plan includes a small portion regarding energy conservation.

#### **Summary of Energy Goals**

Comprehensive Vision: Become a model of a mixed-income neighborhood committed to an urban, green lifestyle.

Environmental Sustainability Goal: The Whittier neighborhood is committed to environmental sustainability. Through innovation, education, and engagement of all stakeholders, the Whittier neighborhood will increase neighborhood self-sufficiency and significantly reduce its carbon footprint by 2016.

1. Residences and businesses in the neighborhood will conserve more energy and generate more energy locally by 2016.

#### Themes of Energy Plans Written by Midtown Community Members

- Investments benefiting the local community
- Outreach materials accessible to a diverse audience
- Program facilitation for DYI energy improvements
- Local leaders driving the development of energy action plans
- Affordable and educational programs
- Community building opportunities are valued- energy plans aren't just about energy savings, they are also about building community. e.g. weather stripping parties provide opportunities for individuals to meet their neighbors and build relationships

#### Energy Affiliated Organizations in Midtown

**Cooperative Energy Futures (CEF)**- Founded in 2008, Cooperative Energy Futures envisions a future where teams of people in every community work to produce, manage, and wisely use the energy that they need to thrive. The organization has been doing outreach in Midtown neighborhoods since 2010. Currently CEF is working on a variety of projects including community weatherization workshops.

**Grand Aspirations-** Grand Aspirations was founded in 2008 to build youth leadership in the green economy. Grand Aspirations developed a summer program where participants assist on projects including Our Power, the Minneapolis Energy Options Campaign, and Corporative Energy Futures in the Midtown neighborhoods.

**Lake Street Council**- Lake Street Council engages, serves, and advocates for the Lake Street business community in Minneapolis to ensure the vitality and prosperity of the commercial Corridor.

**Latino Economic Development Center (LEDC)-** LEDC is a Minnesota membership-based nonprofit whose mission is to "transform our community by creating economic opportunity for Latinos". LEDC has been an active member of the MCW Sustainability Initiative.

**Metro Clean Energy Resource Teams (CERT)**- Metro CERT is a part of a statewide partnership with a shared mission to connect individuals and their communities to the resources they need to identify and implement community-based clean energy projects.

**Midtown Community Works (MCW) Partnership**- The Midtown Community Works Partnership is a public-private partnership formed to guide the redevelopment of the Midtown Greenway-Lake Street Corridor in south Minneapolis. The partnership was founded in 1998 with a sustainability initiative formally beginning in 2013.

**Our Power-** Our Power is a community energy coalition for South Minneapolis which engages local residents and businesses to make energy efficiency improvements and use collective purchasing power to implement renewable energy projects. Our Power developed the South Minneapolis Community Energy Plan in 2012.



The Lake Street Energy Challenge is an opportunity for residents and businesses in the Lake Street – Midtown Greenway Corridor to lower energy use and create more renewable energy. Working through neighborhood and business associations, the Challenge will offer ways to broaden the reach of energy efficiency programs and promote solar gardens.

#### **RESIDENTIAL ENERGY EFFICIENCY**

The Challenge is working with neighborhood organizations to host neighborhood energy parties, table at new events to reach nontraditional participants in energy programs, buy down the cost of Home Energy Squad<sup>®</sup> visits for low-income residents, host a community conversation around energy and multi-family buildings, and create a program for energy outreach interns in the summer of 2016 in conjunction with the Step Up program.

#### **COMMUNITY SOLAR**

The Challenge is helping Corridor neighborhood associations figure out how each organization can best support community solar gardens, either as an educator, coordinator, or a garden sponsor for a specific solar garden developer.



The Lake Street-Midtown Greenway Corridor Neighborhoods

#### **SMALL BUSINESS**

The Challenge is expanding upon the Lake Street Energy Coaching program by Lake Street Council and Metro CERT by developing targeted market research, a streamlined list of resources for small businesses including assistance from Xcel's Business Solutions Center, CenterPoint Energy, and expanding outreach to local business associations.

#### How was the Challenge developed?

An Energy Planning Team made up of residents, businesses, neighborhood organizations and local nonprofits, was convened by Xcel's Partners in Energy program and the Midtown Community Works Partnership in late 2014 to create this Challenge.

#### How do I get involved?

There is a working group meeting monthly to implement these activities. To join, contact Emma Struss, Community Energy Program Coordinator, estruss@mncee.org, 612.244.2455. More Information: www.mcwsustainability.org or https://www.facebook.com/pages/Lake-Street-Energy-Challenge

#### RESOLUTION

#### In support of the Lake Street Energy Challenge

WHEREAS, the City of Minneapolis has adopted its Climate Action Plan with goals around improving energy efficiency and renewable energy and the Midtown Community Works Partnership and Xcel Energy's Partners in Energy program developed the Lake Street Energy Challenge achieve the City's goals for energy efficiency and renewable energy along the Lake Street – Midtown Greenway Corridor;

**WHEREAS**, the Lake Street Energy Challenge envisions the neighborhoods along the Midtown Greenway - Lake Street Corridor being a transformative national role model for equitable and community-driven clean energy, leading the way toward a carbon neutral Minneapolis that keeps its energy dollars local;

WHEREAS, the mission of the Challenge is to coordinate among diverse neighborhood organizations, residents, employees, and businesses to accelerate energy efficiency and community-owned renewable energy accessible for everyone, while creating jobs and community wealth and;

**WHEREAS**, <u>[Insert Neighborhood name]</u> is along the Lake Street – Midtown Greenway Corridor and has the opportunity to participate in the Lake Street Energy Challenge which will organize events and other activities to promote residential energy efficiency, multi-family energy efficiency and community solar gardens;

**WHEREAS**, [Insert Neighborhood Organization's name] is the official neighborhood organization and understands the best ways to do community outreach and engagements participation efforts in [Insert Neighborhood name].

**WHEREAS**, participation in this Challenge would work towards environmental, social, and economic sustainability as well as [insert other neighborhood goals here];

**NOW THEREFORE BE IT RESOLVED**, that [Insert Neighborhood Organization's name] will work on the Lake Street Energy Challenge efforts in 2015 and 2016.

#### The Lake Street Energy Challenge – Neighborhood Organization Checklist

#### **Residential Energy Efficiency**

- Energy Neighborhood Party (Summer 2015): Host a party and talk about energy! Each neighborhood that signs on to the Challenge will be asked to talk about energy conservation opportunities at an event. That neighborhood will receive 25 CFLs to give out materials about energy programs, and a \$100 to be spent on supplies for the party. Challenge organizers will ask neighborhoods to share event details, either a new event or addition to an existing event, in the Challenge event list.
- Event Tabling (Fall 2015-Winter 2016): Have a new idea for event tabling? The Challenge is seeking new opportunities for tabling that have not been done in the past. This could include having an interpreter or bilingual volunteer present. In particular, tabling opportunities that can reach renters, residents whose first language is not English or other groups that have not traditionally participated in energy efficiency programs would be welcome.
- Community Conversations: Energy and Multi-family (Fall 2015): Interesting in shaping a discussion around energy issues and multi-family? Have multi-family buildings in your neighborhood that would benefit from energy improvements? Help plan a panel discussion (or series of discussions) in fall 2015 to talk about energy savings, renter concerns and landlord issues. Attendees may be contacted afterward about their interest in the new multi-family energy conservation program (for 5+ units) anticipated to launch in fall 2015.
- □ *Energy Outreach Interns (Summer 2016)*: Would you like an intern help your neighborhood with energy outreach in summer 2016? Several Step-Up interns will do outreach around residential energy efficiency programs. Depending on level of interest, interns may be shared across neighborhoods and can do outreach at existing events or helping to organize new events. Some planning work will be needed in 2015 to help shape the structure of the intern program.

#### **Community Solar**

□ Community Solar Garden Support System: Considering ways to support solar gardens but not sure what your role should be? Neighborhood organizations can play the role of educator, coordinator or a garden sponsor for a specific solar garden developer. The Challenge will create a resource center, facilitate information sharing between neighborhoods on the best approaches, and evaluate the need for a trade event or panel discussion to share information.

#### **Small Business**

□ Local Business Association Outreach: Have a local business association? The Lake Street Energy Coaching program by Lake Street Council and Metro CERT would like to share their outreach strategies with other business associations with different levels of participation depending on interest. This could include targeted marketing to Somali and Hispanic business owners and a recognition campaign.

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## MEMORANDUM

TO: MCW Partnership

FROM: Faith Cable Kumon

DATE: October 4, 2013

RE: MCW Sustainability Initiative Strategy & Recommendations

#### **Introduction & Summary**

This memo outlines a strategy and recommendations for the MCW Partnership Sustainability Initiative that is focused on the Midtown Greenway-Lake Street Corridor. The Sustainability Initiative Work Group is providing guidance to this initiative and will ultimately help with its implementation. There is a clear sense of goals, objectives and outcomes as well as recommended strategies for the Partnership to consider.

The goals of the initiative are straightforward:

- Increased energy efficiency and use of renewable energy
- Increased recycling and decreased landfill rates
- Increased water conservation
- Increased use of transportation alternatives

The greatest potential for implementation lies in the energy and waste/recycling realms. Water conservation can be implemented as part of energy conservation programs. Transportation options will be tracked and promoted, however the implementation of projects and programs is already occurring through other organizations. The following three strategies emerged from Work Group meetings:

Programs & Outreach: The best way to increase program use, whether it be for energy
conservation, renewables or recycling, is through regular participation at community events and
targeted door to door outreach that can guide residents or business owners through an audit and
project contracting. Relationships get projects done, however the resources are very limited for
targeted outreach that builds strong relationships and provides in-depth support system. This
Initiative is proposing to fill that gap to help people navigate all the existing program resources and
select a project that best fits their needs.

• **Tracking Metrics:** This Initiative is poised to begin at a unique moment in time, just as the PUC is planning to issue new guidance regarding how energy data is shared and utilities are planning upgrades to their data systems in response. This Initiative could provide the first opportunity to pilot an analysis of energy consumption data at the neighborhood and corridor level. The University of Minnesota Center for Sustainable Building Research (CSBR) analyzed data for the EIC and they are excited to improve upon that effort for this Initiative. Ultimately, the metrics analysis should determine progress made by this corridor toward achieving the City's Climate Action Plan.

• **Communications:** The Partnership should tell the broader story of this Initiative through a website, social media, newsletters or other venues to communicate how a variety of public, private and nonprofit partners can work together to make a corridor more sustainable.

Ultimately, these three strategies will require additional resources to be successful. The Partnership should consider the best opportunities to seek resources that can increase the ability of the Midtown Greenway Lake-Street Corridor to demonstrate a corridor model of environmental sustainability.

This memo is divided into the following sections:

- Background
- The Vision
- Goals, Objectives & Outcomes
- The Strategy
- Draft Action Plan
- Energy Metrics Options
- Proposed Budget

# Background

#### **Corridor Focus**

The focus area includes the 17 neighborhoods that touch the Midtown Greenway and Lake Street in the City of Minneapolis.

#### Timeline

The timeline for this Initiative is proposed to be three years, with the option to extend for two additional years if additional resources are secured.



#### Sustainability Initiative Work Group

The Sustainability Initiative Work Group has met six times on a monthly basis between March and September 2013. The Work Group is made up of staff from the government agencies, locally- and sustainability-focused nonprofits, and businesses.

Work Group attendees to date include:

- Anna Jursik, Jenny Edwards, Center for Energy & Environment
- Ben Knudson, Andre Xiong, Hennepin County
- Brendon Slotterback, City of Minneapolis
- Christopher Bineham, Neighborhood Energy Connection
- Dan Totall, Wells Fargo
- Dave Burrill, Ryan Companies
- Diana McKeown, Metro CERTs
- JoAnn Musumeci, Tim Lovett, Whittier Alliance
- John Carmody, Daniel Handeen, University of Minnesota
- John Marshall, Xcel Energy
- Joyce Wisdom, Lake Street Council
- Matt Kazinka, Mari Ojeda, Latino Economic Development Center
- Michael Mechtenberg, Metro Transit
- Sarah Schaffer, CenterPoint Energy
- Soren Jensen, Midtown Greenway Coalition
- Timothy DenHerder-Thomas, Our Power/Cooperative Energy Futures

## THE VISION

For the MCW Sustainability Initiative, victory is occurs when the Midtown Greenway-Lake Street Corridor demonstrates the implementation of the City's Climate Action Plan, meeting the goals of this plan faster than every other place. It means that residents and businesses alike are assessing their buildings for energy efficiency and working on projects that reduce their energy consumption – to the point where the

corridor is on track to reduce energy by 17% by 2025 or about 1.5% per year. It means that we've figured out how to address the split incentive problem between renters and businesses. It means that 10% of the corridor's energy will come from local, renewable sources. Transit ridership will double, the bicycle mode share will increase to 15%, and VMT will decrease.

# **GOALS, OBJECTIVES & OUTCOMES**

### Energy

**Goal:** Increased energy efficiency and use of renewable energy

#### **High Priority Objectives**

- Increase door to door outreach and outreach at community events
- Increase and measure use of energy conservation programs, including:
  - Home Energy Squad Participation & other residential program participation
  - One-Stop Efficiency Shop and other projects focused on commercial energy savings
  - New multi-family energy efficiency program
- Increase and measure solar and other distributed renewable energy installations and generation
- Encourage building energy benchmarking options for small businesses

#### **Potential Outcomes:**

- Energy conservation program participation in the corridor will reach 5% of eligible homeowners and 2% of eligible rental buildings
- Renewable energy will increase by 1% annually through a 1% annual increase in Windsource and 5% annual increase in installed solar capacity
- Total neighborhood energy use will decrease by 1% annually

## Recycling

Goal: Increased recycling and decreased landfill rates

#### **High Priority Objectives**

- Increase door to door outreach and outreach at community events
- Increase recycling rates by small businesses and explore a group contract that incentivizes recycling

#### **Potential Outcomes:**

- Single-family residential recycling will increase by 5% annually and organics recycling will increase by 1.25% annually and multi-family residential recycling will increase by 5% annually
- Small businesses will increase their recycling by 5% annually.
- Total estimated corridor waste by ton will be reduced by 1% annually

#### Transportation

Goal: Increased use of transportation alternatives

#### Medium Priority Objectives

- Support and Measure ongoing programs and projects, including:
  - Car-sharing use & expansion (HourCar, ZipCar, Car2Go)
  - Bike facility expansion & upgrades (i.e. Minnehaha Avenue Cycle Tracks)
  - Pedestrian facility expansion & upgrades
- Compile current transportation data, including:
  - o Bike Walk Twin Cities bike/walk counts and other bicyclist & pedestrian counts
  - Zap monitors that count bicyclists and pedestrians
  - o Transit use
  - o Vehicle miles traveled

#### **Potential Outcomes:**

- Use of car-sharing will increase 20% in 2014 and 5% per year afterward
- Complete 30 miles of protected bike lanes over 5 years
- Bicycle counts will increase 5% annually
- Pedestrian facilities will be improved by through three new pilot projects over 5 years
- Pedestrian counts will increase 5% annually
- Transit use will increase by 2.5% annually
- VMT will decrease by 2.5% annually

#### Water

Goal: Increased water conservation

#### Medium Priority Objectives

- Support and Measure ongoing programs and projects implemented through energy conservation programs, including:
  - Installation of low-flow devices
  - o Installation of rainbarrels and other water saving efforts

#### **Potential Outcomes:**

- Low-flow device installations will increase by 2.5% annually
- Total corridor water use will be reduced by 2.5% annually

#### Outreach

#### **High Priority Objectives**

- Measure number of residential and business doors knocked
- Develop a database of small businesses
- Create a website page for broader communication

The Potential Outcomes should be reviewed to ensure that levels are stretch goals above existing program activity after baseline data for all program activity is established.

# THE STRATEGY

The MCW Sustainability Initiative will focus on three main areas:

- 1. Programs & Outreach
- 2. Tracking Metrics
- 3. Strategic Communications

For each of these areas, this document outlines 'The Baseline' effort that is already occurring today and 'The Reach' that this Initiative should pursue.

#### **Programs & Outreach**

#### The Baseline

The heart of the sustainability initiative is really getting projects done – projects that reduce energy consumption, add renewable energy, decrease water use, and that make it easier to take transit, walk or bike. This Initiative will focus the most on energy and waste issues, where it can have the greatest impact, and to a lesser extent on water and transportation projects. A summary of existing programs and community outreach is included below, however more detailed program information can be found in the MCW Sustainability Initiative Action Plan.

#### Existing Programs

There are many programs available for commercial and residential property owners who are interested in energy conservation. A wide variety of programs are offered by Center for Energy & Environment, CenterPoint Energy, Cooperative Energy Futures, Energy Smart, Hennepin County, CERTs, RETAP, Xcel Energy and others, some of which are focused on residential and others that are focused on commercial. A new program focused on multi-family residential natural gas use is currently being developed.

Water conservation does not have its own funding source like energy conservation programs, many of which are funded as a result of PUC requirements. Most water conservation efforts occur through a focus on reducing energy use through hot water conservation.

Waste is very different between residential and commercial. Residential customers, including multi-family up to four units, are served by the City of Minneapolis and its subcontractors. The conversion to single-sort recycling increased rates and organics recycling will be explored by the City. Commercial businesses and multi-family building owners with 5+ units contract with private haulers. They typically have 1-3 year contracts, which often include cardboard recycling but not other types of recyclables. Lake Street Council and LEDC are the only organizations attempting to help businesses recycle more.

There are many ongoing transportation related projects focused on transit, bicycling and improving pedestrian space. This Initiative will monitor these projects and track related metrics; however fewer resources will be put toward changing transportation efforts.

#### Community Outreach

There are many energy program providers and there are many neighborhood and businesses organizations, however strengthening the connection between these two groups is key. The three organizations with the greatest overlap are Lake Street Council and Latino Economic Development Center, which are focused on the commercial businesses, and Cooperative Energy Futures and Our Power are focused on residential customers.

#### The Reach

#### More Outreach = More Participation

The best way to get people started on energy conservation efforts is through both door to door outreach and community events. Many of the efforts conducted to date have been done on an ad hoc basis. The biggest gap is connecting people to all the programs, financing and rebates, especially in the energy sector.

For energy, there is a multitude of program options available and it can be difficult to sort through which one is the best fit, how to go about obtaining financing, and the rebate application process. LEDC will have a new Green Corps staff person from September 2013 to 2014 who will focus directly on connecting Latino businesses to energy program options. This represents the largest increase in outreach capacity the corridor has seen to date, yet one person will not be able to reach every business in a year. The largest gap in program participation is connecting people to programs and walking them through each step. It is best achieved by people who have strong relationships in the business or neighborhood communities and also in the energy community.

For commercial waste, businesses don't have access to programs that provide consultation on how to increase recycling. Waste Wise is a program that provides that service, but it only operates in Ramsey and Washington Counties. The Hennepin County commercial grant program provides grants that are focused on containers and physical infrastructure but it's not clear if it will cover contract modification help.

#### **Tracking Metrics**

#### The Baseline

Will the Midtown Greenway – Lake Street Corridor meet the City's Climate Action Plan goals? Will our current programs and projects help us reach our goals? How do we know if don't measure? Currently, some information is tracked for the entire city, but there is not an easy way to track energy, water, waste or transportation level data at a corridor or neighborhood level.

#### The EIC Example

The Energy Innovation Corridor analyzed the reduction of carbon emissions based on energy conservation data generated through program and rebate use. The data analysis was completed by the Center for Sustainable Building Research (CSBR) at the University of Minnesota and funded by Xcel. The EIC is best example in the region to date that tracks metrics at a corridor level.

#### The Reach

Tracking Corridor-Wide Metrics

LAKE STREET ENERGY CHALLENGE

The MCW Sustainability Initiative should complete the best data analysis possible to understand the impact of program use and general trends that will impact the ability for the corridor to reach its goals on energy, water, waste and transportation.

- *Energy:* There is strong interest in measuring both energy consumption data in addition to energy conservation data. Energy conservation data is generated through the energy savings program data and is easier to measure than energy consumption which is generated through general customer accounts. Xcel anticipants that it will change how it shares consumption data based on future PUC guidance, which would allow for more detailed analysis of this data.
- *Water:* The City can provide data on water consumption. This could also be translated into energy savings because the City's water treatment plant is the greatest source of energy use.
- Waste: The City tracks residential recycling and waste data, so accurate information will be available to analyze. For multi-family buildings with 5+ units and commercial buildings, accurate waste data is not collected. Hennepin County uses estimates for commercial waste and recycling which it shares with the City. It seems likely that only conservation / program based data can be used for commercial.
- Transportation: Transportation analysis will focus on broader trends, including transit use, Nice Ride, ZAP monitors, bike/walk counts, and VMT data. There is easily available data for transit use, for bicycling from zap monitors and Nice Ride, and for bicycling and walking from bike/walk counts. Electric vehicle use also produces easily available data. Transportation projects, such as new cycle tracks on Minehaha Avenue, are easy to track. What the Work Group noted is that the quality of facilities, particularly pedestrian facilities, that is more difficult to track.

The MCW Partnership will need to seek resources to fund corridor data analysis. For the EIC, the University of Minnesota Center for Sustainable Building Research analyzed the metrics. Xcel funded this analysis quarterly at a cost of \$5,000 or \$20,000 a year. After the EIC experience, EIC partners recommended only analyzing metrics twice a year. CSBR is very interested in conducting the data analysis and would like to discuss options for moving forward on the data analysis. The Partnership should continue discussions with CSBR to develop a proposed scope of work.

To improve the analysis of metrics and outreach along the Lake Street, the Partnership may also want to explore how to create database of small businesses. Currently both Lake Street Council and Latino Economic Development Center have partial lists of the businesses in the greater Lake Street corridor but they have yet to develop them into a single, comprehensive database.

#### Individualized Data: The Green Button

New technology solutions can transform energy use data. The Green Button program provides you access to your energy use data in a common format that you could then choose to use in a growing number of applications. Energy usage information would tell you: how much electricity or energy you used every 15 minutes, every day, or every month depending on what your utility is able to make available. Green Button is also consistent with the best practices of privacy and security, since customers have to first authenticate themselves on a utility portal with a login and password before they see and download their own information. The Green Button has yet to reach Minnesota, however this Initiative will strongly encourage its adoption and promote its implementation in the Midtown Corridor first. (www.greenbuttondata.org)

#### Individualized Data: Energy Star Portfolio Manager

Energy Star Portfolio Manager could be a useful tool for small business in the future. Energy Star Portfolio Manager is used frequently by large businesses and will now be required by the City for energy reporting. Portfolio Manager requires manual energy data entry, which is often too time-consuming for small business owners. The US Department of Energy working on a tool to streamline the data transfer process. If the Portfolio Manager data entry is streamlined, it could become a valuable tool for small businesses in the future.

#### **Strategic Communications**

#### The Baseline

#### Neighborhoods & Business Associations

Working through existing networks within neighborhood organizations and business associations is the best distribution of information.

#### Website & Social Media: Basic

This Initiative should create a website dedicated to sharing information and a social media presence. This will include an overview of the initiative, action plan and other relevant information updated quarterly.

#### The Reach

#### Website, Social Media, Newsletter: Detailed Information

A website with more content could expand on a basic web presence to provide case studies, personal stories and more regular updates that could also be shared via social media. An email newsletter could also be created to share information.
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## MCW Sustainability Initiative

## DRAFT Action Plan

Center for Energy and Environment (CEE)

- Complete 60 Home Energy Squad visits along the corridor
- Complete 10 One-Stop Efficiency Shop projects along the corridor
- Complete 3 Energy Intelligence pilot participants for industrial customers
- Provide a menu of funding resources for MCW industrial, commercial, nonprofit, multi family, and residential customers to finance their energy efficiency upgrades
- Encourage neighborhoods to invest NRP funds in projects to support the initiative
- Support Building Energy Benchmarking for small businesses; use benchmarking results to promote energy programs
- Provide recycling referrals as part of existing program visits, and develop materials to use curbside recycling to promote energy programs
- With outreach and introductions, CEE could aim for 200 visits in 2014.

CenterPoint Energy

- Support Home Energy Squad visits along the corridor (CEE is CNP's designated service provider for the Home Energy Squad).
- Report study findings of CenterPoint Energy and CEE's completed collaborative Multi-family Direct Install pilot and recommendations for development of a new, ongoing program that could serve businesses along the corridor (potential implementation during 2014).
- Promote and deliver natural gas energy savings within the corridor through approved and implemented CIP portfolio:
  - Residential and commercial energy audits to identify and drive energy-saving improvements.
  - Residential and Commercial/Industrial rebate programs for implemented measures.
  - o Residential Low Income Weatherization (delivered through CAP network).
  - Other Residential and Commercial/Industrial energy-saving programs and services, including water saving devices for residential and commercial properties.
- Promote Low Income Multi-family Building Rebate, providing 25% higher (bonus) prescriptive rebates for qualifying properties with a majority of low income tenants, and continue ongoing collaborative research on needs and opportunities for this market.
- Review opportunities for CNG fueling stations in the corridor
- Support Committee's strategy for Building Energy Benchmarking for small businesses.
- Support data analysis of energy savings along the corridor, as possible pending MN PUC decision on current privacy docket.

City of Minneapolis

- Loans given out through the Trillion Btu and City loan programs.
- Building energy benchmarking reporting
- Meet natural gas and electric conservation goals for City owned buildings (reduce GHG by 1.5% annually)
- Explore LED lighting in City buildings, for street lighting and in parking ramps
- Develop prototype for multi-family energy efficiency pilot program? (long-term)

### LAKE STREET ENERGY CHALLENGE

- Complete 30 miles of protected bike lanes on City streets by 2020
- Identify 3 new pilot projects for pedestrian facilities on City streets (Verify with PAC)
- Track data: VMT, car sharing, ZAP monitors, ped/bike counts
- Explore organics recycling for single-family residences

Cooperative Energy Futures

- Complete 75 residential insulation projects in 2014
- Complete 40 residential solar electric projects in 2014
- Complete 3 community solar projects (owned by many community members on a central community building) in 2014

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- Coordinate 20 neighborhood weatherization work parties (block parties for neighbors to support each other in DIY air sealing activities) in 2014
- Outreach to encourage participation in Commercial Quick Fix & One-Stop Efficiency Shop Project and Home Energy Squad visits
- Outreach on prototype for multi-family energy efficiency pilot program

Potential Role for Our Power (pending resources)

- Educate and engage stakeholders on waste reduction practices, including how to reuse, recycle, compost, and reduce reliance on disposable materials.
- Outreach on multi-family recycling program pilot
- Encourage use of car sharing, Nice Ride and transit

Hennepin County

- Track commercial recycling grants in the corridor.
- Track case by case multi-family outreach in the corridor
- Review current multi-family outreach efforts with City regulatory services.
- Consider future recycling outreach efforts similar to Waste Wise outreach (in Washington and Ramsey Counties)
- Track implementation of pedestrian facilities and bicycle facilities on County streets.

Lake Street Council

- Outreach to encourage participation in One-Stop Efficiency Shop, RETAP, MNTAP, Energy Smart, and other non-profit energy planning service programs along the corridor
- Encourage use of CEE energy bank, Trillion BTU, City loans & other financing sources
- Encourage commercial adaptation of solar and solar thermal installations
- Encourage development of Building Energy Benchmarking system for small businesses
- Encourage increased commercial recycling rates through individual consulting and exploration of group recycling initiatives
- Encourage use of car sharing, Nice Ride and transit

Latino Economic Development Center

- Outreach to encourage participation in One-Stop Efficiency Shop, RETAP, MNTAP, Energy Smart, and other non-profit energy planning service programs along the corridor
- Encourage use of CEE energy bank, Trillion BTU, City loans & other financing sources
- Encourage commercial adaptation of solar and solar thermal installations
- Encourage development of Building Energy Benchmarking system for small businesses
- Encourage increased commercial recycling rates through individual consulting and exploration of group recycling initiatives
- Encourage use of car sharing, Nice Ride and transit

### Metro CERTS

- Support energy efficiency and renewable energy projects in the corridor
- Connect neighborhood organizations, homeowners and businesses in the corridor to resources to reduce their energy use or employ renewable energy such as solar energy.
- Promote the efforts of the MCW sustainability initiatives via CERTs and Minnesota Energy Stories

#### Metro Transit

• Encourage and track transit usage along the corridor

### Neighborhood Energy Connection (NEC)

- Rollout Hourcar expansion along the Midtown Corridor
- Track Hourcar reservation and usage data

#### **Xcel Energy**

- Support Home Energy Squad visits along the corridor (& other programs RETAP, CAP, etc.)
- Support One-Stop Efficiency Shop Project along the corridor
- Implemented and approved electricity savings
- Encourage Building Energy Benchmarking
- Encourage LED lighting retrofits in buildings and parking ramps
- Encourage prototype for multi-family energy efficiency pilot program?
- Solar installations and generation in the corridor
- Track Windsource use in the corridor
- Load management on 1/2 of the EV charging stations installed in the Midtown Corridor?
- Track water saving devices integrated into energy-related programs, including low-flow commercial sprayers and low-flow showerheads
- Building energy benchmarking city existing program?

#### Neighborhoods

Whittier Alliance

- Outreach to encourage participation in Commercial Quick Fix & One-Stop Efficiency Shop Project and Home Energy Squad visits
- Outreach on neighborhood insulation
- Outreach on solar and solar thermal installations
- Encourage use of car sharing, Nice Ride and transit
- Educate and engage stakeholders on waste reduction practices, including how to reuse, recycle, compost, and reduce reliance on disposable materials.
- Outreach on prototype for multi-family energy efficiency pilot program?
- Outreach on multi-family recycling program pilot?

#### Large Businesses

Allina/ANW Hospital

• Building Energy Benchmarking

Midtown Exchange

• Building Energy Benchmarking

Wells Fargo

Building Energy Benchmarking

## **ENERGY DATA OPTIONS**

There is common interest among MCW Sustainability Initiative Work Group members in understanding energy consumption data and the relative impact of energy conservation programs. There are a number of ways that energy data could be analyzed within the limitations of the current privacy protocols and existing data availability. Energy conservation data is the easiest data to analyze since it is collected at the time of services performed through the rebate process. Energy consumption data is more difficult to analyze due to privacy issues and existing data formats. The first option for energy data would be more accurate although it would be more difficult to complete than the second option at this point in time.

- Option 1: Neighborhood-level consumption and conservation data for residential, commercial and industrial. In order to follow the current privacy protocol, the "15/15 rule", it may be necessary to combine commercial and industrial data into 2 or 3 segments and/or seek waivers from large commercial properties. This requires geocoded data be provided by utilities.
- Option 2: Zip code-level consumption and conservation data for residential, commercial and industrial. All data is currently most easily searchable by zip code, however since zip code boundaries are much larger than neighborhood boundaries (see map below), the data would have to be prorated by how much land area is located within the neighborhood.



### What have other areas done?

Open and accessible data appears to becoming more common. Los Angeles and Chicago have taken different routes to share energy data with the public. These may or may not make sense to replicate in this corridor but they provide context for what peer regions are doing.

### Los Angeles

A new energy map of Los Angeles developed at UCLA lets residents find how much electricity the average customer in their neighborhood uses, see how a neighborhood's energy use relates to its average income level and track energy use over time.

Read about it at: http://phys.org/news/2013-03-ucla-center-interactive-electricity-use-los.html Or look at the map at: http://sustainablecommunities.environment.ucla.edu/maproom/index.html

### LAKE STREET ENERGY CHALLENGE

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### Chicago

The City of Chicago released energy consumption data from ComEd and People's Gas that uses paired census track data. http://www.smartchicagocollaborative.org/category/city-of-chicago/page/2/ This data is available to open-source programmers who can use the data sets to share information on energy usage. The data can be viewed at: https://data.cityofchicago.org/Environment-Sustainable-Development/Energy-Usage-2010/8yq3-m6wp

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| Energy Usage 2010<br>Displays several units of energy consum<br>Accenture. Electrical and gas usage dats<br>percent of all gas consumption in Chica<br>selected variables describina selected cl | ption for households, businesses, a<br>comprises 88 percent of Chicago's<br>go for 2010. Census blocks with le<br>naracteristics of the Census block po | nd industries in the City of<br>buildings in 2010. The elect<br>ss than 4 accounts is den<br>pulation, physical housing. | Chicago during 2010. Electric The data<br>ricity data comprises 68 percent of ovo<br>played at the Community Area withou<br>and occupancy. | was aggregated from ComEd and Peoples<br>rail electrical usage in the cRy while gas da<br>t further geographic identifiers. This datas | Natural Gas by A<br>ta comprises 81<br>et also contains | নি বিএ<br>\$ Manager <mark>ি</mark> ঠিট Mone Views 🕎 🕅 | Filer 🔛 Visualize 😱 Expert | Find in this Dataset |
| COMMUNITY AREA NAME  | CENSUS BLOCK  | BUILDING TYPE  | BUILDING_SUBTYPE   | KWH JANUARY 2010   | KWH FEBRUARY 2010                                       | KWH MARCH 2010   | KWH APRIL 2010             | KWH MAY 2010         |
| Albany Park  |   |  |  | 2,220,671  | 2,109,977   | 2,078,785  | 2,080,695                  | 2,582,21             |
| Albany Park  | 170311401001001   | Residential  | Multi 7+   | 11,921   | 12,145  | 9,759  | 11,542                     | 14,34                |
| Albany Park  | 170311401001001   | Residential  | Multi < 7  | 1,233  | 1,645   | 994  | 1,055                      | 1,28                 |
| Albany Park  | 170311401001001   | Residential  | Single Family  | 4,141  | 3,798   | 2,939  | 4,727                      | 5,32                 |
| Albany Park  | 170311401001002   | Residential  | Multi 7+   | 1,230  | 1,333   | 1,260  | 1,405                      | 1,69                 |
| Albany Park  | 170311401001002   | Residential  | Multi < 7  | 12,977   | 14,639  | 12,718   | 14,973                     | 16,38                |
| Albany Park  | 170311401001003   | Commercial   | Multi < 7  | 2,878  | 3,755   | 4,571  | 2,984                      | 3,11                 |
| Albany Park  | 170311401001003   | Residential  | Multi 7+   | 1,478  | 1,890   | 1,364  | 1,271                      | 1,46                 |
| Albany Park  | 170311401001003   | Residential  | Multi < 7  | 4,985  | 2,636   | 2,353  | 4,761                      | 4,39                 |
| Albany Park  | 170311401001003   | Residential  | Single Family  | 4,926  | 6,413   | 5,586  | 5,606                      | 6,27                 |
| Albany Park  | 170311401001004   | Commercial   | Multi 7+   | 16,639   | 23,502  | 19,587   | 23,327                     | 26,53                |
| Albany Park  | 170311401001004   | Residential  | Multi 7+   | 2,425  | 4,718   | 3,826  | 3,250                      | 4,65                 |
| Albany Park  | 170311401001005   | Residential  | Multi 7+   | 4,778  | 11,744  | 8,875  | 5,422                      | 5,80                 |
| Albany Park  | 170311401001005   | Residential  | Single Family  | 0  | 0   | 0  | 0                          |                      |
| Albany Park  | 170311401001006   | Commercial   | Commercial   | 9,355  | 8,102   | 7,627  | 7,664                      | 9,17                 |
| Albany Park  | 170311401001007   | Commercial   | Commercial   | 1,058  | 1,381   | 1,252  | 1,502                      | 1,82                 |
| Albany Park  | 170311401001007   | Residential  | Multi < 7  | 7,085  | 8,150   | 6,709  | 7,593                      | 8,65                 |
| Albany Park  | 170311401001007   | Residential  | Single Family  | 3,384  | 3,201   | 2,644  | 3,236                      | 3,79                 |
| Albany Park  | 170311401001008   | Residential  | Multi < 7  | 12,399   | 11,624  | 9,809  | 11,652                     | 13,12                |
| Albany Park  | 170311401001009   | Residential  | Multi < 7  | 3,490  | 3,117   | 3,050  | 3,049                      | 3,61                 |
| Albany Park  | 170311401001009   | Residential  | Single Family  | 7,269  | 7,804   | 7,456  | 6,688                      | 7,47                 |
| Albany Park  | 170311401002000   | Commercial   | Multi < 7  | 672  | 1,046   | 839  | 862                        | 1,03                 |
| Albany Park  | 170311401002000   | Residential  | Multi < 7  | 12,482   | 8,606   | 9,383  | 13,721                     | 13,63                |
| Albany Park  | 170311401002000   | Residential  | Single Family  | 6,848  | 6,800   | 6,901  | 7,587                      | 8,81                 |
| Albany Park  | 170311401002001   | Commercial   | Multi < 7  | 1,539  | 1,896   | 1,616  | 1,656                      | 1,96                 |
| Albany Park  | 170311401002001   | Residential  | Multi < 7  | 8,206  | 13,971  | 14,970   | 15,276                     | 15,44                |
| Albany Park  | 170311401002001   | Residential  | Single Family  | 267  | 1,111   | 1,662  | 1,417                      | 1,35                 |
| E Albany Park  | 170311401002002   | Commercial   | Multi < 7  | 3,041  | 2,295   | 1,799  | 1,988                      | 2,38                 |
| E Albany Park  | 170311401002002   | Residential  | Multi < 7  | 10.149   | 9,086   | 6.269  | 7,229                      | 9,21                 |

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## Proposed Initiative Budget

## Outreach

The outreach efforts are described below as a progression of alternatives, starting with planned grant applications to the Hennepin County Green Partners program for general outreach and expand beyond that to targeted outreach efforts that could be funded by larger grant programs. This work is proposed as a three year initiative that could be extended for an additional two years.

- 1. Residential General Outreach: Community Based Outreach, Workshops & Weatherization Block Parties
  - Cooperative Energy Futures/Our Power plans to apply for a Hennepin County Green Partners grant in fall 2013.
  - Grant Activities: multi-faceted, geographically-focused outreach, education and information workshops, and Weatherization Block Parties.
  - Potential Source: Hennepin County Green Partners Grant (\$15,000 2014)

2. Business General Outreach: Workshops & Educational Campaign

- Latino Economic Development Center and Lake Street Council plan to apply for a Hennepin County Green Partners grant in fall 2013.
- Grant Activities: an educational campaign and workshops for small business owners will share information about increasing energy efficiency, lowering water consumption, and increasing recycling.
- Potential Source: Hennepin County Green Partners Grant (\$15,000 2014)
- 3. Residential Targeted Outreach: Home Energy Assessments, Group Contracting & Solar Participation
  - Cooperative Energy Futures/Our Power is interested in seeking additional funding as part of the MCW Sustainability Initiative.
  - Grant Activities: Home Energy Assessments (owners and renters with landlord support/permission), Insulation and Air Sealing Group Contracting (owners and landlords, future financing may open to renters with landlord permission), Residential Solar Bulk Buying (owners), Community Solar Participation (owners and renters), and Neighborhood Energy Planning (all community stakeholders).
  - Potential Sources: McKnight Foundation, U.S. Department of Energy, Clinton Climate Foundation, Minneapolis Foundation, Bremer Foundation (\$45,000/year for 3 years)
- 4. Business Targeted Outreach: Door to Door Energy, Water & Waste Campaign
  - Latino Economic Development Center and Lake Street Council are interested in seeking additional funding as part of the MCW Sustainability Initiative.
  - Grant Activities: door to door outreach to local businesses to provide in depth support for energy audits; contracting guidance to complete energy and water conservation projects; review and support for renegotiation of waste contracts to promote recycling.
  - Potential Sources: MPCA, Phillips Foundation, U.S. Department of Energy, Clinton Climate Foundation, Minneapolis Foundation, Bremer Foundation, (\$45,000/year for 3 years)

## **Metrics**

The Center for Sustainable Building Research prepared a description and cost for their involvement of the Center in the MCW Sustainability Initiative. The scope includes:

- Aid in the determination and development of metrics to be tracked in the MCW Sustainability Initiative.
- Engage project partners in collection and reporting of relevant data.
- Assist in data collection from MCW Sustainability Initiative project partners.
- Explore means and methods of communicating the metrics in meaningful ways to the broader public.
- Preliminary estimate: \$12,000 for 2014 and each year annually.
- Potential Sources: City of Minneapolis, Hennepin County, Xcel Energy, CenterPoint Energy

## Communications

Enhanced communications will tie this Initiative together to tell the story of how a variety of public, private and nonprofit partners can come together to have an impact on environmental sustainability at a corridor scale. The scope includes:

- Provide a platform for communicating the metrics and outreach in meaningful ways to the broader public, including a website, e-newsletter and social media.
- Monthly in-depth stories on outreach efforts and results of metrics analysis.
- Preliminary estimate: \$10,000 per year.
- Potential Sources: City of Minneapolis, Hennepin County, Xcel Energy, CenterPoint Energy (Note: some of these efforts may be able to be provided in-kind.)

## Partner Management

Overall partner management of this Initiative would be completed as part of the existing MCW Partnership budget.

- Preliminary estimate: \$30,000 per year.
- Sources: MCW Partnership existing budget (City of Minneapolis, Hennepin County, Metropolitan Council, Wells Fargo, Allina, Target).

|                |                               | 2014 |         | 2015 |         | 2016 |         | <br>Total |         |
|----------------|-------------------------------|------|---------|------|---------|------|---------|-----------|---------|
| Outreach       |                               |      |         |      |         |      |         |           |         |
| 1              | Residential General Outreach  | \$   | 15,000  |      |         |      |         | \$        | 15,000  |
| 2              | Business General Outreach     | \$   | 15,000  |      |         |      |         | <br>\$    | 15,000  |
| 3              | Residential Targeted Outreach | \$   | 45,000  | \$   | 45,000  | \$   | 45,000  | <br>\$    | 135,000 |
| 4              | Business Targeted Outreach    | \$   | 45,000  | \$   | 45,000  | \$   | 45,000  | <br>\$    | 135,000 |
| Metrics        |                               | \$   | 12,000  | \$   | 12,000  | \$   | 12,000  | <br>\$    | 36,000  |
| Communications |                               | \$   | 10,000  | \$   | 10,000  | \$   | 10,000  | <br>\$    | 30,000  |
| Administration |                               | \$   | 30,000  | \$   | 30,000  | \$   | 30,000  | <br>\$    | 90,000  |
| Total          |                               | \$   | 172,000 | \$   | 142,000 | \$   | 142,000 | \$        | 456,000 |

# LESSONS OF COMMUNITY BASED SOCIAL MARKETING: MY EXPERIENCE OF COMMUNITY ORGANIZING WITH OUR POWER

By Lee Samelson

Exceeding historical levels of energy efficiency participation for small businesses and residential neighborhoods requires a degree of skilled community organizing and educational outreach from block leaders and community groups.

Toward that purpose, I would like to share useful points I have learned when doing a home energy efficiency outreach project called Our Power in the midtown corridor South Minneapolis. The goal of Our Power was to reduce electricity and natural gas consumption by raising awareness among neighborhood residents about the availability of easy-access home energy efficiency programs and action steps one can take to save energy around their home.

I ended up learning some valuable lessons about community based social marketing that I would like to share now that we have a much broader coalition working toward the same goals. The idea behind Our Power was to be a catalyst to promote energy saving behavior changes. I later discovered how there were trapping of research findings from social psychology throughout the process of my work with Our Power.

## INTRO: WHAT DID WE DO AS OUR POWER?

For the majority of months during a 1 ½ year period I with the help of a frequently changing group of other interns. From mid-2011 to late 2012, we knocked on thousands of homes in 7 lower-income Midtown Minneapolis neighborhoods as the primary way of doing outreach on home energy efficiency.

When someone answered a door we gave a friendly introduction and asked if they had any energy use concerns in their home that have lead to high utility bills. Upon the feedback of whoever answered the door, we then made recommendations among 4 different easy-access affordable programs that assist with home energy efficiency, 7 different personal at-home action steps to save energy and 7 different types of community project ideas for someone to engage the neighborhood in home energy efficiency. The one action request we made on the spot was to ask the people we talk with to fill out forms saying they endorse the Our Power vision statement which is "We stand together in creating an energy future that is affordable, stable, healthy, job creating and environmentally sustainable" in addition to filling out contact information so we could follow up with their particular interests.

Here was the numbers breakdown on our results: For every 2 sign ups we got from doorknocking there were roughly 3 encounters we had where we simply handed out information and talked only briefly to people who would not or could not take the time at that moment to sign the paper to an explicit commitment of support.

For those who were not home or did not answer the door we left printed doorknockers in an attempt to make best use of our time going door-to door. Though it is disillusioning to fathom, it is likely that between 90-98% of our printed door-knockers were removed without being read in any depth. From those estimations only about 5% of those who received the door knockers probably read them enough to be effectively reached with the pro-environment/ save energy message. As I will share later, the whole reason why community outreach and organizing efforts are warranted here is because simply placing information around is unfortunately quite inneffective.

## WHAT COULD HAVE GONE BETTER

There were some things about Our Power which I could have done far better. There were some subtle mistakes I made that eventually led to feelings of indirect rejection. In my work with Our Power, I never encountered any teasing or reactionary ridicule for standing up for a good cause.

The feeling of rejection came from how we had an abysmal rate of people replying to our messages for follow up conversations. There was an encouraging number of people who expressed interest in a variety of community engagement projects in our initial doorknocking contact. At least 1 in 10 people who signed in in support of the Our Power mission statement expressed enthusiasm or excitement around the concept of doing a community energy team or weatherization work party. However almost none of them followed through in a way they have let us know about.

Most of my co-interns did not have deep experience with community outreach nor an expert understanding on the technicalities of building energy science. In hindsight I learned the mistake we made that I advise other groups not to repeat.

The mistake we made in organizing was to wait until a filled out Our Power form was entered into a database before assigning who will follow up with which contacts. Various technical problems with a database we were using slowed the follow up process.

Overall, we needed to follow up with the signatories at a faster rate than I initially anticipated. Calling someone back a month or two after the initial sign up or inviting them to our events several months later was too late to keep them engaged. When call backs were made a day or two after outreach there were some successes. Even after just a few weeks of waiting time before the follow up call, the vast majority either did not pick up the phone or reply to our messages.

In addition, building from our base of people who signed onto Our Power in order to catalyze neighborhood energy teams was much more challenging than we had first imagined. Our Power received another grant to do community energy teams. It became clear that the initial interest and excitement we encountered when first talking to signatories at their doorsteps was not translating into proposing or testing specific community engagement projects. As a result, we organized two neighborhood energy parties for Our Power as a second chance to draw our signatories in. However, even the people who showed up at the neighborhood energy parties were either not ready to commit to implementing community energy teams, or were planning to do so far into the future.

If I can put myself in the shoes of a resident who is being canvassed by Our Power, I would be hesitant to say no to project ideas when asked. The last thing I would want is to hurt the feelings of someone embodying a cause I care about. But caring about the cause would not take away hesitation I had to knock on my neighbors doors and be a good news evangelist for their home energy efficiency unless two conditions were met: If I had adequate knowledge of home energy saving to show confidence and if I had reassurance that my outreach would not be dismissed as intrusive nosy neighbor ordeal. To address the energy knowledge side of that equation, that is why I co-authored a step-by-step two dozen page home energy guide that is easy to refer people to.

For the other side of the equation, these supportive but hesitant potential community leaders deserved some sort of help and coaching on establishing the skills to self-organize and engage friends and neighbors around saving energy. But in order to get to that point, it would require us as organizers to hone our own skills. Specifically it is the skill of simplifying our asks for people to do community engagement in order to make it easy and accessible for others to join.

# THE SCOPE OF OUR FOCUS SYSTEMIC CHANGE VS INDIVIDUAL ACTION

We had a grand idea about building neighborhood energy teams. Was there any aspect about neighborhood energy teams that simply was not appealing enough to excite neighbors into taking time commitment to make them happen? Saving energy and money at the same time is basically the goal of any sane person. The goals we want to achieve are something that it is unconscionable to say no to. However energy efficiency takes work, requires effort and is not always easy. Once unnecessarily inefficient technology is mass-produced off assembly lines, and as soon as poorly designed, energywasteful buildings are constructed, it is kind of hard to put the genie back into the bottle.

That is why the more collective-scale goals like passing a law to require manufacturing more energyefficient appliances or requiring robust renewable energy standards illicit a different but more intense degree of excitement and enthusiasm. For many environmental activists, such systems-level transformations are the only changes substantial enough to save the world. Perhaps the lack of enthusiasm for starting neighborhood energy teams is that the daily life behavioral improvements were perceived of as not substantial enough to actually solve problems that are much more systemic in scope. On the positive side for many other people, improving one's own behavior and home energy efficiency is an endeavor that is more clearly within one's agency of control.

For people without the time or activist wherewithal to work toward system level changes improving one's own home energy efficiency, the programs and action steps with Our Power is at least a way to make progress. Neither are we guaranteed that fights for system level transformations are going to emerge victorious. Therefore making do with the home energy efficiency resources we have now least buys us more time until we finally put in place policies that will significantly reduce future emissions. Saved energy provides a cushion of less energy demand which makes retirement of dirtier power plants easier.

## THE REWARDING PART OF OUR POWER

The positive side of door-knocking with Our Power was hearing feedback from the people we talked to that we are one of the only groups effectively reaching out to them. Our greatest accomplishment has been tapping a broad and diverse base of deep concern on energy issues. We reached a broad range of community residents with varying degrees of attunement to energy/environment activities. It was quite inspiring to hear so many perspectives from neighborhood residents about all the reasons they endorse the general Our Power message of creating a better energy future – such concern ranged from neighborhood health, global environmental issues, energy poverty, corporate monopoly and fairness in allowing anyone to generate clean energy. Our biggest reward was encountering residents who had monthly energy bills in the range of several hundred dollars who shared surprise and excitement that there were in fact resources and programs for them to take advantage of. Those who have never heard of these programs and opportunities before were our target audience. So this is some good will to harness going forward.

# THE FIRST LESSON: THE "INFORMATION ONLY" APPROACH IS INEFFECTIVE

Popular wisdom holds that the mass media is a major influence upon our attitudes. However, first-hand contact we have with other people has greater influence. Therefore the highest desire among people organizing on sustainability issues such as we were with Our Power is to increase the likelihood that people will discuss our desired action steps and programs among other friends in their circles.

The media does have influencing power as far as the topics that lie within the realm of public discussion versus which topics get left in the background. If the media were to advertise the importance of issues related to saving energy and sustainability to a greater extent, it will build public awareness and understanding of the important issues. However, it would not be a guarantee of actual behavior change. Programs that rely heavily or exclusively on media advertising are limited in their ability to foster behavior change unless it is simple advertising.

The type of advertising the media is accustomed to deploying is meant to mobilize the viewer to switch from one brand of a product to another brand of a similar but competing product. Purchasing advertising is a simple strategy to raise awareness, but sustainable energy-saving behavior is not equivalent to a product to be bought and sold. Encouraging a new activity is a lot more complex and multi-step than reinforcing brand loyalty among similar competing products.

It is common wisdom that incentives to promote behavior change are only effective when they involve direct contact with people. People making outreach efforts on a variety of topics have long been quite frustrated by the ineffectiveness of information-only approaches, such as bill-stuffers, flyers, and direct mail, in a big part because it is to easy. That is why our work with Our Power had a community level aspect. Utilities have included energy saving information when they mail their bills to customers and community organizing/ outreach would not be necessary if the information only approach was effective in actually providing follow through. By all means, we have a role to provide information in order to set

some substance for achieving the desired behavior changes. The main point is that information just by itself is unlikely to be effective to a surprising extent.

Delivering programs that are actually effective in lowering people's energy use is the bottom line of this enlightened business. It is so easy just to distribute printed materials. But such well-intentioned outreach efforts have to take into the account the human aspects of promoting sustainable behavior not just the impersonal economic side. There is no substitute for direct personal contact and direct appeals from others.

# WHAT APPROACH INSTEAD? #1 THE ATTITUDE TO BEHAVIOR APPROACH

From my experience there were two different but parallel tracks to the Our Power informational message we gave. One track was based on the assumption that changes in their personal behavior will naturally follow if someone has a positive attitude about localized, renewable, job creating clean energy transition or expresses concern about global climate change. That assumption works hand-in-hand with a previous assumption that spreading knowledge about these issues will foster supportive attitudes. I find it much easier and more pleasant to do outreach with people in the public who already get the concept and already resonate with the basic message. Just because someone fosters a supportive attitude toward using less carbon fuel does not guarantee they will take the bus instead of driving alone. But that does not mean taking the attitude to behavior assumption is totally false and in vain.

One thing we undeniably accomplished with Our Power is raising the attitude level for an energy vision that is clean, affordable, reliable, job-creating, and localized among those who we talked with. Just the fact that we were committed enough to this cause to go knocking door-to-door spreading the message was convincing of our genuineness.

We hopefully enhanced the knowledge of energy-saving programs and action steps. At the moment of outreach, I was very focused on handing out succinct information that related to the energy use concerns each resident brought up. That was because we went door knocking with the assumption that the general public does has less than a stellar understanding of household energy consumption. As a result, external help is often needed to clarify residents on where they could best invest efforts to reduce their energy use. A big part of the problem is simply that the components of a home that use a lot of energy are not necessarily the ones that are the most visible.

Doing public outreach is well-reasoned and justified. But translating the dissemination of information into actual behavior change is the one area that actually counts in terms of saving energy. It seems like common sense that individuals who hold attitudes strongly supportive of energy conservation would be more likely to conserve energy. Even if it can be challenging, energy efficiency is the goal of every sane person. But attitudes and knowledge are not as closely associated with behavior as we would like to believe. Creating awareness of environmental issues does not make one as more likely to engage in pro-environmental actions as we would like.

It kind of boggles the mind how this correlation possibly be weak or non-existent. A weak or non-existent correlation is a sign that there are a variety of significant barriers that must deter individuals from engaging in our desired energy-saving behavior. Perhaps the simplistic and straightforward form of outreach is where informing an individual leads to attitude influence which in turn motivates behavior change. This attitude- to-behavior approach assumes that either lack of basic knowledge or unsupportive attitudes are the only two barriers to behavioral results. Before I examine what the other barriers could be, let's take a look at the other twin track of the Our Power outreach message.

# WHAT APPROACH INSTEAD? #2 THE APPEAL TO ECONOMIC SELF-INTEREST APPROACH

In addition to the simple information-attitude-behavior approach, the other parallel track to my Our Power informational outreach message was based on economic self-interest. We stated appeals to economic incentives into our verbal messaging such as ..."you can save money on your energy bill" in order to fire up motivation to get engaged with what we were offering. The theory was that presenting to someone a series of ideas or action steps as having concrete and tangible benefit to one's life increases the likelihood that they will play along with our program. Yet even when using the appeal to economic self-interest mysterious barriers still remained in our success in getting responses to our follow up calls.

Our assumption was that each individual we talk to would systemically evaluate the choices (such as whether to sign up for a bulk purchase of home insulation with neighbors or to simply install a low flow showerhead) and act according to what was within their economic self-interest. Isn't it true that people will behave accordingly as long as it is in their financial best interest given that they have the information provided to them in the right way? Wouldn't homeowners just simply retrofit their homes if it was factually clear that it was in their financial best interest to do so?

It is quite obvious why financial good sense alone is not quite a consistently reliable measure. It is because there are so many competing areas for an individual to invest money into. Let's suppose a well-meaning utility company were to spend tens of millions of dollars on advertising for energy conservation programs and the millions they invested into advertising ended up having little to no effect on actually reducing energy use. This scenario is closer to reality than we would like to think. There was in fact an act passed by the United States Congress which brought the Residential Conservation Service (RCS) into being. The RCS mandated that major gas and electric utilities in the United States have to provide homeowners with subsidized audits in order to lay out clear paths to energy efficiency. The program is not worth the millions invested into it if the actions that residents took were the mostly inexpensive behavioral adjustments that only reduced household energy use marginally and could be done without involving a contractor.

## THE ENERGY POVERTY DILLEMMA

One glaring barrier to the economic self-interest appeal is the limitations the low-income have on any action steps that requires up-front payments or having the credit ratings needed to take a loan.

With Our Power we were exposed to energy as an economic justice issue. We heard from a lot of firsthand accounts among the residents we doorknocked of dilemmas such as choosing whether to buy food over energy or energy vs medicine. The energy utility bills the lowest income pay are a very high proportion of their income in comparison to the affluent. The average family below the poverty line spends 15% of their total money on home energy (which means not counting gasoline for transportation). In some cases people in deep poverty pay as much as half.

Meanwhile, the average household pays around 5% for their home energy while high income households usually pay as little as 1% or 2%. Because, energy costs are usually such a negligible proportion of the budgets of high-income households, they may hardly even notice any financial consequences to wasteful but preventable energy consumption. For instance, they would have to be persuaded to invest their finances into home energy efficiency upgrades rather than spending the money on a vacation to Hawaii.

The problems of leaky energy-wasteful homes and low-income poverty have a particularly dark synergy with each other. Here is the fundamental dilemma energy organizing has to unlock. Those who are the poorest pay the most proportionately for energy yet have the least access to the home energy retrofit means to reduce their energy consumption. The people who need energy efficiency upgrades the most happen to be the same ones who are least able to afford the upfront cost of implementing them. The poorest are often either renters who have little control over their building or do not have the credit rating to take out a loan for home energy efficiency upgrades.

When rising energy prices combine with a lack of easy access to affordable energy efficiency upgrades, then it presents a threat to communities already mired with unemployment and foreclosure.

The Minneapolis Clean Energy Partnership gives us an opportunity to resolve some of these dilemmas. We can use community-based social outreach to secure and sustain broad and deep participation in stream-lined, well-coordinated residential energy efficiency projects. In addition, we can develop an integrated rental and multi-family energy efficiency program that can finally overcome the split incentive problem where land landlords are responsible for energy efficiency building upgrades while the tenants often pay the energy utility bills.

## THERE ARE DIFFERENT STRATEGIES ACCORDING TO WHICH BARRIERS TO OVERCOME

Given the parallel tracks of the Our Power outreach message, what other barriers are there to achieving our ideal vision of an energy saving neighborhood?

One obvious barrier is that renters have limitations or conditions on their freedom to follow through with home energy efficiency projects. In addition non-English speakers often have a language barrier in conversation but one which could be easily resolved by bilingual outreachers.

For simplicities sake, let's envision a scenario where there are no language or structural barriers of inconvenience to taking our recommended action steps to save energy. Let's couple the barriers that remain with some ways to overcome each one:

1: If the person I am doing outreach toward does not yet demonstrate the importance of taking our action steps, then it is an indication that favorable social norms are not yet operational in that person's social circle. In this case influencing social norms is the leverage for us to use.

2: If the person I am doing outreach with expresses the importance of the energy saving action steps but just has not acted or responded to our follow up attempts, then securing a commitment upon the time of communication becomes the leverage point. Securing commitment at the point of communication requires a bit of skill. But it is a lot simpler for individual people to secure commitment from other individuals than it is to influence social norms.

3: If the individual I am doing outreach toward does not quite have the initial level of motivation needed to take our action steps, then the needed leverage we use becomes offering incentives.

4: If a concept or action step about saving energy is not yet common knowledge to an individual or group I am doing outreach toward, then a basic spreading the word is required. Hopefully social diffusion is the leverage that does the work of spreading the message for us in that case.

## COMMITMENT AND APPEARING CONSISTENT

Given that we need organizing to achieve results in saving energy, what then becomes the backbone of organizing?

The strategy that first comes to mind for effective organizing is getting commitment. Commitment is defined as one individual pledging to another to carry out some specific form of activity. Perhaps that is the key to strengthening the correlation between supportive attitudes and energy saving behavior. Commitment must be the missing link between attitude and behavioral results.

There is an interesting psychology behind using getting commitment as a strategy. If someone I reached out to had already agreed to a small request a short time ago, they will feel more compelled to agree with a much larger and perhaps more invasive request. The reason why is because the previously assumed attitude-behavior order could actually be flipped in reverse.

According to Self-Perception theory if an individual is doing the recommended Our Power action steps, then the very fact of being engaged in these sustainable behaviors will improve their attitudes and perceptions of self. Such-self-perception theory works best for everyday routine acts like recycling and flipping off light switches.

But the very act of signing the Our Power endorsement pledges is actually an opening for selfperception theory. This signing was one very small behavior which we requested in anticipation that the small behavior will make the same individual more likely to engage in the much larger ask such as forming a neighborhood energy team.

Agreeing to a small request leads people to agree subsequently to do much larger asks. That is because doing the small request favorably alters the way they perceive themselves. When residents sign our endorsement pledges in favor of the Our Power energy vision, the act of signing subtly alters their attitudes on the topic. Complying with our initial request influences the way the signatory sees themselves in an enduring way; as the type of individuals who are concerned about energy efficiency.

Some energy efficiency organizations sometimes make the extra-generous gesture of handing out free shower flow restrictors. That is based on the understanding that people are more likely to actually install the device than people who would only receive a pamphlet about installing it among other devices. According to self-perception theory if they take the first step of installing the shower flow restrictor then they will be more likely to follow the other action steps in the pamphlet.

Despite the sometimes weak correlations between attitude and behavior, we are motivated to behave consistently and with integrity. Consistency and integrity where ones deeds match ones words is commonly regarded as an important character trait. Those who signed onto endorsing Our Power probably do not want to be perceived of as one of those inconsistent people who are untrustworthy and unreliable. We all instead want to be viewed as being honest and having integrity.

Therefore we should actively assist people to see themselves as ecologically concerned. When encouraging someone to try a new action step, we should begin by pointing out the other positive behaviors that they already engage in. That is why the Our Power forms we had signatories fill out distinguish between "I will commit to doing this behavior" and "I already engage in this behavior." That is why I gave positive feedback right on the spot when I encountered someone signing up.

At the end of an initial outreach conversation simply saying "thank you" would seem rather shallow and customary. It would be more meaningful to say "You are a generous person. I wish more of the people I met were as thoughtful as you". Because of self-perception theory we would leverage a lot more from that individual when doing follow up outreach.

# SECURING COMMITMENT: THE LINCHPIN OF ORGANIZING

When doing outreach it is recommended to try to secure a verbal commitment right up front.

For example, in the moment of outreach it would be very skillful to ask "When do you think that you will have the weather-sealing completed? ...Three weeks, ok I will give you a call around then, to check in with you to see how it is coming along, or if you are having any problems."

When we do get a household or business expressing interest in engaging in a new behavior that we recommend then we are presented with a valuable opportunity to ask "When do you think you will get around doing X?" Asking for a time frame is a gentle way toward securing commitment. Whatever time frame the individual responds with then next question to ask is "Would you like a phone call around that time so we could hear any difficulties you might run into?" In the event that the other individual agrees, then this dramatically raises the likelihood that they will carry out the new behavior. Pre-emptively agreeing to make a phone call in the future makes the desired follow up scenario more likely than simply but vaguely anticipating of that phone call or that email.

There is something else to remember while using this strategy of securing commitment. Commitment is commitment but it should still be voluntary. During Our Power Outreach I was careful to only seek to ask for commitments from people if they express interest taking the action. I knew that efforts will backfire if the person feels pressured to commit.

# MAKING COMMITTMENT PUBLIC

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When doing Our Power outreach we offered endorsement forms to sign because written commitments are much more effective than mere verbal commitments. There is a reason why early versions of Our Power forms had a check box where we asked permission to make a person's commitment public rather than endorsing our mission only in the private condition. The reason why making commitments public is a good strategy is because of our desire to be or at least appear consistent. Public commitments are more likely to be honored because a public commitment can be witnessed by others. There was even a brief period early in my time of doing Our Power outreach when we had residents get their photo taken while holding up the pledge board and asking to display the photos in public over the internet. The reason why this visibility- enhancing step of the outreach process was proposed is because home energy efficiency actions are largely invisible to the average neighbor. We eventually ceased obtaining public and durable commitments to publicly showcase desired actions. I was afraid it would be an awkward or invasive for us to ask for a photo at the moment of outreach or follow up on. On the other hand, there is no denial that people publicly displaying their commitment also has a positive effect upon social norms and remembering to follow through with our action steps.

# **GROUP COMMITTMENT**

Seeking commitments in groups is also effective because it leverages social norms in a way that individual isolated commitments are not able to. However the strategy of group commitment only works if there is good group cohesion to begin with. That is we so wanted to establish Community Energy Teams to carry out the mission of Our Power. When a group makes a commitment then social diffusion can do most of our work for us. If groups are well-established and the individuals already care how they are viewed by other members of the group then the idea of Community Energy Teams can have traction.

If a Community Energy Team actually happens then it is quite beneficial to the goals of organizing for energy sustainability. Actively involving another person and training a home owner to be actively involved in the assessment of their home is better than seeking a verbal or written pledge. The reason is because it taps into self-perception theory. Knowledge is enhanced when we observe the actions of others by modeling the behaviors. That is why group activities are encouraged.

At one point during Our Power, I recall blogging being done about commitments on the website being done in hopes that people will read it. That, in a sense, serves a surrogate for group activity. It is a mechanism for us to share about the success stories of a group activity with people similar to the group.

# THE ROLE OF BLOCK LEADERS

The biggest win we could have had in Our Power was finding out who the Community block leaders are. Block leaders are the ideal people to be particularly effective individuals for speak to other people in their immediate community in a way that implements the above described commitment strategies as long as they already engage in the behavior that is being promoted.

For many people in urban life today, one's social networks of friends, family and coworkers are more important than the mere geographical proximity of neighbors. Block leaders have the advantage of close geographical proximity. But the flip side (perhaps with rare exceptions) is that not everyone on their block is a close associate with each other. Nevertheless, block leaders are highly sought after in sustainability organizing because they usually know enough neighbors to have an impact upon social norms.

Among different demographics and identities, we are most likely to be influenced by the behavior of people we perceive to be similar to ourselves. The normative feedback which these "peers" give is what will most likely compel behavioral changes. While non-personal sources of information like brochures or advertising can get easily brushed aside, the conversations that we have with others we trust and perceive to be similar to ourselves will have a powerful influence.

Examples include "If these trusted people who are like me are installing programmable thermostats then so should I!" or "If my friends and neighbors are recycling then I must as well!"

It would be interesting to research how many people we reached out to who signed up for a program to install solar panels did so because they have friends and colleagues who already have installed them? How many people showed up at the Grow Solar workshops because their friends were going?

Some energy utilities have strategically tapped into this instinctive desire of ours to fit in with our peer group. Rather than merely giving information regarding energy conservation via door hangers this new approach gives utility customers information on their energy consumption coupled with information on whether their energy use was higher or lower than the neighborhood average. Then some type of emoticon could be used to drive home a point. This information coupled with an undesirable emoticon would supposedly motivate those using more energy than their neighbors to take actions to reduce their energy use in order to fit in. There is an obvious flip side. By that same logic, wouldn't households who were using less energy than the neighborhood average then increase their energy use upward just to fit in and be normal? No, not if they were praised for their low energy use with a positive emoticon.

Social norms could be used to encourage people to continue to engage in energy-saving behaviors and reinforced by praising those better than average. Social norms are not just invisible policemen coaxing us to avoid negative behaviors.

There are a couple of complications though. It is very awkward for us to directly invoke our desired social norms when an undesirable behavior is common. In addition it seems vacuous to invoke social norms on matters that are not observable to the outside.

Curbside recycling and grass cycling are visible and observable behaviors to the outside viewers. When composting happens in the back yard is not quite as visible. However putting a sticker on the recycle cart saying "I compost" makes the behavior more visible. Likewise home energy saving improvements are largely invisible to outside viewers. The visibility equivalent of inside home energy saving is the Community Energy Services yard signs that I occasionally see.

This need for some visibility brings up the idea of a block chalking their home energy usage on their sidewalk. An action step for a block leader could be to go knocking for a block chalking project. Perhaps they should ask the household permission to chalk their monthly Kilowatt hours rather than ask the answering household to chalk themselves. Otherwise the predictable outcome can be dejecting. When I went doorknocking with my block leader, 4 out of 5 who answered initially agreed to chalk their KWH but only 1 out of 4 actually followed through even when given a piece of chalk. Even if block chalking is successful, it has to be visible and noticeable from some distance in order to be effective to those who pass by and encouraging to those doing the chalking. It is a good idea to couple block chalking with a block party so that it has an audience.

# **INCENTIVES FOR DESIRED BEHAVIOR**

It would add great power to energy sustainability organizers if they could provide people feedback on their energy use. It would position us to offer incentives. But only the utility reading the meter is technically capable of doing so.

Utilities and businesses may offer incentives for individuals to invest in energy-saving upgrades. But incentives need to be large enough to be taken seriously and clearly coupled with the desired behavior to be effective.

Offering incentives is creating external motivations to play the roles of intrinsic motivations when a person's intrinsic motivations don't seem to be strong enough. The downside of introducing an incentive comes when it is removed away. The desired action loses momentum because the incentive displaced intrinsic motivation.

Here are some example incentives for the utility companies to offer: If an individual's electricity rates increased in proportion to their energy usage then that would provide an inventive to conserve. Also charging variable rates based upon time of electricity use is also an interesting incentive to match energy use with what is most convenient for the utility.

# ON-BILL FINANCING TO WORK PAST THE USUAL FINANCIAL OBSTACLE

The expense of having to pay an up-front cost is the most frequent barrier that homeowners have to upgrading their insulation, installing more efficient heating/ cooling systems or replacing old leaky windows with newer energy efficient models and so on. If the cost for these renovations could be paid

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for through the resulting savings in energy on the utility bill, then home energy retrofits will be more financially appealing.

Under an ideal utility scenario, residents and businesses would be able to finance both clean energy and energy efficiency improvements to their buildings on their monthly bill. With this on-bill financing, the monthly bill would be able to pinpoint the cost savings all the way back to the first month of the building upgrade. It is very beneficial to show these utility customers how much expense the improvements are saving compared with the cost of the loan repayment. On bill financing encourages both landlords and transient residents to participate in the investment because the financing mechanism could be linked to property's utility meter and could also be independent of household credit scores.

If the utility companies or their regulators refuse to make this on-bill-financing strategy available, then each individual is left to whichever loans, grants and rebates they offer for home energy retrofits. A more advanced way of doing Our Power outreach would be to offer more referrals to the financing aspect of home energy projects.

# **GIVING REMINDERS**

Even if people's motivation is honest and attitude is positive, a frequent barrier to desired behaviors is simply forgetting and having no prompts. These include forgetting to unplug the toaster, forgetting to turn off the computer forgetting to turn the thermostat down, forgetting to check tire pressure, forgetting to bring one's reusable shopping bag. Prompts ought to be specific and in close proximity to where the desired behavior takes place. That is why the Center for Energy and Environment uses a character named TOLBY (Turn Off Lights Behind You) placed next to light switches.

# THE IMPORTANCE OF BEING CLEAR

If the actions we advocate for are not clearly articulated, then they will not be widely understood or followed by the people we reach out to. Whatever action messages I give have to be clear and straightforward enough. Just telling households to go weather strip involves too many steps to be broken down.

When guiding someone, it is good to list behaviors that are non-divisible rather than broad strategies. Many of these sustainable energy-saving behaviors are actually clusters of different sub-actions. Composting is a good example of this. If any of these non-divisible sub-actions have barriers then the whole process of achieving the overall strategy is likely to cease.

When offering guidance to someone, it is also important to prioritize the end-state behavior because that is what actually yields the pro-environment benefit. Why should we encourage a prior behavior if it will not achieve the end-state behavioral changes that matter? Just the mere purchase of an LED light bulb is not an end state behavior. Actually installing it and using the LED light is. In addition, the mere installation of a programmable thermostat is not an end-state behavior. Actually programming the thermostat is the end-use behavior that actually reduces energy use. What use is it to purchase a programmable thermostat unless you actually program heating and cooling to match the time of day when one is active at home?

In addition, the vague, open ended nature of being a block leader for a community energy team was a detractor in getting follow up traction. That is why the most enduring ask for Our Power that lasted into the beginning of 2015 was the idea of doing a weatherization work party an activity that was more clear and specific.

## WHICH ISSUES HAVE TWO SIDES?

Green is not black and white in many cases. There a lot of these issues we mat discuss that have more than just one side to them. We did not hear much contrarianism to either the Our Power mission statement or the action steps we promoted as Our Power with the exception of one area. The matter of whether to use CFL lightbulbs was the most controversial issue where there were two sides. To some people, the toxic mercury and repulsive quality light from many CFLs cancelled out the benefits of being more energy efficient.

In the event where I am giving a mini-presentation on a topic while doing outreach, is it necessary to address both sides of an issue in order to be seen as fair? If I am presenting to an audience that does not already have a lot of understanding about the particular issue, then presenting both sides will be confusing rather than persuasive. However if I am with a well-informed audience who is aware enough of the issue to know that there is even another side to the issue, then I ought to at least acknowledge both sides in order to be perceived as credible.

## STRATEGIES TO CAPTURE ATTENTION

The reason why we used brightly colored door hangers for Our Power is so that it will get noticed. Fliers and bill inserts are so easy to just ignore and toss aside.

Without capturing attention, persuading an individual to go along with our program is impossible. Without using attention grabbing language, it is more difficult to get the desired responsiveness. If we are promoting a home energy audit program, it won't be effective to simply point out that there are numerous tiny and hard to detect cracks where air leaks out of even though it is factually accurate.

We could describe the amount of warm air being lost by not retrofitting a home by using more vivid language of all the air leaks adding up to a hole in the wall the size of a football. We could promote attic insulation programs by describing ones uninsulated attic as like going through winter wearing a rain jacket rather than a coat. Language that catches the attention increases the probability of responsive action and follow through. .....

The information I am offering will have to stand out amongst all of the other things competing for that individual person's attention. If what we say can be more easily remembered then it has greater power to influence attitude and behavior.

## FEAR AS A MOTIVATOR VS. POSITIVE VISION IN MESSAGING

Most sustainability action steps can be presented either glass-half-full "You should put plastic covering over old windows because you'll save in home heating bills". They could also be presented negatively as glass-half-empty "If you don't install this low flow showerhead you'll lose money by having to pay more for hot water." When doing outreach for Our Power, the default position we used most of the time was to present positive vision to take these action steps rather than the negative motivation of avoiding an undesirable outcome. This mode of operation was low-risk / low-reward. If our message emphasized losses that could occur as a result of inaction it would have been more compelling than messages which simply emphasize the positive savings as a result of taking action.

On one hand, we felt an obligation to be nice and congenial with people we do yet not know particularly when we are occupying a degree of their space and time. What motivated me and several others to hit the pavement for outreach organizing, was to communicate the existence of a threat. It is a challenge to balance both simultaneously. Most often the threat we implied was being financially trapped by high energy bills. Why would a given person be likely to take our action steps if there were never any stressful thoughts about what would happen if they don't take them? If all we say in outreach is vision of a clean renewable, affordable, reliable localized job creating energy future, then it sounds like something really nice on the side rather than something to actually prioritize or commit time toward. But follow-up with people is justified if there is indeed a threat such as high energy bills to resolve.

There are imminent threats to our planet on the macro scale which spill over as threats to our community on the micro scale. It feels like our moral obligation to communicate them to a broad audience. When doing outreach with people we do not know, I was afraid that if we invoked a fear-based message then it would backfire into the other person using emotion based coping rather than rational problem solving based coping. Our intended goal was for people to take direct action and do rational problem solving to alleviate the threat of high energy bills and so on.

The types of reactions I do not want to see from someone I am reaching out to is ignoring the issue, tuning it out, changing the subject when it is raised in conversation, resignation that there is anything that can be done, or denial that there is even a problem in the first place. There is a reason why we framed the Our Power messaging around the micro scale of our community rather than the macro scale planet as a whole. It was to lessen the likelihood of an emotion-based coping response.

If someone perceives that they have a lot of control over correcting a problem, then they are more likely to take the progressive approach we want them to rather than the reactionary approach we don't want. I expect one to feel a lot more control over improving their immediate community than the world as a

whole. How much control can "we" have regarding a global issue like global or peak oil? Ultimately we have to but that is determined by whether our sense of community and common purpose is strong enough to have confidence we can have an impact. However, if people are convinced there is little we can do personally, then our message will lead to all sorts of avoidance reaction rather than constructive engagement.

So what end sum conclusions can be drawn? Fear-arousing messages that involve undesirable scenarios need to be coupled with clear, empowering and concrete information regarding what the audience can do to remove the threat. Telling about the threats alone without a solution is like exploding a stick of dynamite in a steel room. If we were asked, it would be disingenuous of us to downplay the seriousness of the worst case energy overshoot scenario. But the feeling of common purpose given by our mission statement gives is meant to give a sense efficacy to dealing with the threat.

In general it is politically awkward to expound upon how dire a problem is without pairing it with some type of solution. So that is why a customary part of Our Power outreach was to share and get signatures of support for a visionary mission statement on how unleashing opportunities for energy efficiency and distributed renewable energy will provide job creation and local business development.

Minneapolis residents and businesses spend \$450 million annually on electricity and gas, and national research shows that at least 30% of our energy use is preventable waste. We have an opportunity to move tens of millions of energy dollars annually back into the pockets of Minneapolis families and businesses, while creating local jobs with a special focus on neighborhoods suffering the worst effects of energy poverty. We can produce very significant savings to Minneapolis residents and businesses that amount to tens of millions of dollars per year.