# **Community Energy Efficiency Planning**

Pilot Evaluation Report

March 2015



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# **Executive Summary**

The Xcel Energy Community Energy Efficiency Planning (CEEP) pilot, implemented in 2013 and 2014, was a Demand-Side Management (DSM) effort aimed at providing communities with holistic energy planning support. The pilot also explored the potential to link energy efficiency and conservation activities in communities' energy plans to an uplift in energy savings claimed within Xcel Energy's DSM programs.

The pilot included four cities, with a total of over 280,000 Xcel Energy customers residing in those communities. Analysis of the pilot indicates a lift in specific DSM programs when a community's planned strategy included targeting a specific DSM program—in particular Home Lighting & Recycling, Refrigerator Recycling, and Small Business Lighting programs. Qualitative surveys indicated an overall satisfaction with the community energy planning process and third-party contracted implementer (Brendle Group) as well as an increase in satisfaction with Xcel Energy as a company.

#### **Results**

The results/learnings/key findings of the CEEP pilot are a compilation of input from the third-party implementer, the pre- and post-pilot surveys of participating community committees, an analysis of DSM participation data and associated energy savings from Xcel Energy's data tracking systems, and feedback from Xcel Energy Program Managers involved with the pilot. The key outcomes are summarized into the following categories: Workshop Process, Workshop Participants, Plan Implementation, Willingness to Recommend, Value of Pilot, and DSM Impact. A high-level summary of the CEEP communities and their participation impacts is shown in Table 1 below.

Community	Residential Customers	Business Customers	Implemented Activities	2014 DSM Program Participants*	2014 DSM Savings*
Aurora	136,068	23,125	2	0	0
Grand Junction	39,960	3,737	11	10	121,282 kWh
Lafayette	10,874	848	4	0	0
Salida	3,668	613	7	47 <sup>1</sup>	32,003 kWh

<sup>\*</sup> Rebate participation and savings likely due to CEEP activities.

Table 1: CEEP Pilot Summary

#### Workshop Process

Three ½-day workshops were an integral part of the planning process and provided the proper environment in which to create the building blocks of a viable Community Energy Efficiency Plan. The key outcomes learned about the workshop process include:

<sup>&</sup>lt;sup>1</sup> Includes Home Lighting & Recycling participation assumption of 11 bulbs per customer.

- The time and effort commitments were clearly explained and reasonable for most Workshop participants.
- Resources were provided to meet the program goal of developing a community energy plan.
- Workshop participants without previous experience with Xcel Energy programs or working in energy
  efficiency responded that their participation in the CEEP Program positively influenced their impressions of
  Xcel Energy.
- Brendle Group viewed as an active partner; Xcel Energy in a more passive role.

# Workshop Participants

Central to the workshop process were the participants, who, in many ways shaped the outcomes of the process. Findings related to CEEP workshop participation include:

- Overall [workshop participants were] similar to the community at large (Voice of the Customer <sup>3</sup>"VOC" survey respondents) with two exceptions:
  - o They were more familiar with energy efficiency programs.
  - Most (90%) had participated in an energy-savings program compared to 10% of the community at large.
- Most participants in the workshops were volunteers.
- The 6-12 month timeframe to show impact was considered too short.
- A majority of the surveyed workshop participants indicated an improved level of satisfaction with Xcel Energy regardless of their level of prior experience with Xcel Energy and our programs.
- Participants also stated that their knowledge of Xcel Energy DSM programs increased as a result of their participation in the CEEP pilot.

# Plan Implementation

Beyond energy savings, the core output of CEEP was development of an Energy Efficiency Plan [or broader Energy Plan]. The CEEP pilot resulted in several important learnings regarding implementation of the Plans:

- Most participants interviewed for the baseline survey felt uneasy about executing the plan.
- Communities need more than 6 months of support during the implementation phase to successfully implement the community energy plans.
- Communities acknowledged that the plan helps to identify additional resources and that not all resources are expected to come from Xcel Energy.

<sup>&</sup>lt;sup>2</sup> Company roles were set up in this manner. Brendle Group served as the lead administrator and the expert in energy planning. Xcel Energy served in an overall management and directional role to provide DSM and company knowledge and steer the process in the right direction.

<sup>&</sup>lt;sup>3</sup> Voice of the Customer is a routine survey conducted by Xcel Energy to gauge customer perceptions and awareness of our programs in the marketplace

 Community staffing and funding resources appear to be the biggest barriers to implementation of CEEP strategies/projects.

# Willingness to Recommend

With regard to whether the participating communities would be willing to recommend CEEP to other cities:

- Fourteen out of 19 participants surveyed said they would recommend this to other communities.
- There is strong support for collaboration with other communities, especially with implementation.

# Value of Pilot

With regard to the overall benefit of CEEP, the following were key outcomes:

- The benefits of participating in the CEEP Program identified most often by the interviewees were an increase in awareness and knowledge of energy efficiency and an increase in the communities' awareness of existing community sustainability efforts.
- Participants found participating in the CEEP Program valuable for their communities, even if the community energy plan was not ever fully implemented.
- The overall value of the implementation process ranged widely between workshop participants.

  Although most participants agreed their community benefited from the CEEP Program, some expressed skepticism that it would result in increased energy savings.
- The impact of participating in the CEEP Program on a participants' familiarity with and opinions of Xcel Energy depends on the amount of interaction participants have with Xcel Energy and their experience with energy efficiency prior to working with the Program.
- The process increased recognition of the value of Xcel Energy and its programs.
- The process enhanced overall customer satisfaction with Xcel Energy for most workshop participants.

## **DSM** Impact

Comparisons of the number of rebate payments processed in 2013 vs. 2014, along with implementation of CEEP projects, suggested the following correlations:<sup>4</sup>

- Small Business Lighting saw a lift of 17% in Grand Junction, CO. This appears to align with Small Business
  Lighting outreach and assessments that happened over the summer as 121,282 kWh from nine projects
  that were initiated and closed between June and August 2014.
- Home Lighting & Recycling saw a lift of 600% (20,551 kWh from 517 bulbs) in Salida and the timing of the bulbs that were sold aligns directly with the True Value Energy Corner project.

<sup>&</sup>lt;sup>4</sup> It is important to note that this year-over-year comparison can be influenced by many other factors (weather, economic activity, changes in programs and marketing efforts, timeframe in which energy efficiency projects were executed), so all results are only indicative and should not necessarily be solely attributed to CEEP.

- Refrigerator Recycling in Salida exceeded 2013 levels by 33% (8,719 kWh from 13 participants) likely due to the contest that was held in Q3-2014.
- The residential Evaporative Cooling product had 17% fewer participants in 2014 vs. 2013, perhaps due
  to cooler weather. However, Grand Junction's participation in that product was only down 7%, which
  may be due to Xcel Energy's presence (driven by CEEP) at several events over the summer as part of
  Consumer Education market transformation efforts.

While satisfaction with Xcel Energy improved, community engagement with implementation was lower than anticipated and linking efforts directly to energy savings was difficult unless there was a specific implementation strategy that targeted a specific DSM product.

#### Recommendations

Recommendations from the evaluation of the CEEP pilot are summarized in terms of impact to the overall process, community participation, and implementation of activities which ultimately defines the value of the offering.

#### **Overall Process**

There are several recommendations regarding the CEEP process as a whole:

- Match customer expectations by expanding planning and implementation support beyond DSM programs to address all relevant energy issues (e.g. renewable energy)
- Provide both planning and implementation support for communities at a level that aligns with Company goals.
- Allow longer timeframes for planning and implementation than were projected for the pilot.
- Explore a tailored structure to the program with different levels of support to match community engagement, resources, estimated savings potential, and needs.

#### **Program Participation**

Recommendations regarding the participation from communities include the following:

- Develop a Program Application process that:
  - Conveys the value of the offering
  - o Provides a platform for equal access for communities in which to participate
  - o Evaluates community resources and commitment and efforts around energy management
  - Is clear and transparent
- Continue to keep Xcel Energy staff involved and in an active participatory role.
- Continue to utilize volunteers as well as paid staff as participants in the process and continue to be clear about time commitment and role.

# Implementation / Creating Value

Creating value for the participating communities is critical to their engagement and completion of projects identified in their plan. Recommendations regarding implementation of projects include:

- When tying implementation of energy plan strategies to DSM programs, track specific activities and consider other DSM promotions occurring at the same time.
- Consider identifying similar nearby communities not participating to compare participation and savings against over a long timeframe to discern long-term incremental DSM savings.
- Continue to investigate methods and resources to turn commitment into action/implementation. This could include:
  - o Limited-time incentives and special promotions
  - o Linking incentives to community performance and level of commitment
  - o Configuring offering to match community needs
  - o Tracking and publicizing results with different key stakeholder groups to maximize engagement
  - o Educating about and aligning with utility programs
  - Creating systems or processes to make it possible for community funding to create communityspecific bonuses or special offers over and above Xcel Energy's standard DSM offering
- Consider accessible, easy-to-use, and visible communication tool for continuous, ongoing measurement of community goals.
- Consider creating a standard template of community-energy Web content for communities to use to engage and inform residents.
- Create standardized, easy-to-understand community energy reports that require minimal utility effort to deliver and meet common community energy-data needs.

Although the pilot was measured to confirm it met its intended design objectives, successfully achieving them does not indicate that the program should proceed to the full market. Along with demonstrating that a community energy planning process could be effective, pilot success was to be defined by various factors, in particular showing an increase in the amount of energy efficiency activities implemented within the pilot communities. Early learnings contributed to the creation and implementation of the *Partners In Energy* program in 2014 and the additional findings illustrated in this report are meant to help to refine and advance the *Partners In Energy* program currently underway and continue to build on the framework of the CEEP pilot.

# **Community Energy Efficiency Planning Pilot**

## **Background**

In 2012, as part of the 2012/13 DSM Plan Stipulation and Settlement Agreement for Public Service Company of Colorado (PSCo), Xcel Energy released an "Innovative Technologies & Program Ideas" Request For Proposals (RFP) in order to supplement its existing energy efficiency portfolio with innovative technologies and program ideas for niche markets or markets where it is believed the Company could more broadly serve a customer segment. The RFP was meant to fill an energy savings gap that the Company was forecasting in 2013. The Brendle Group's response to this RFP, while not selected specifically to meet the energy savings gap, offered a unique program approach for Xcel Energy to engage local communities in Colorado in developing energy plans with specific strategies and implementation steps for energy efficiency and conservation. The concept of providing holistic planning and implementation as a means to drive energy efficiency and conservation has proven highly successful in other market segments, and there was a need being voiced by communities for assistance in developing energy management plans (post-ARRA)<sup>5</sup> and thus, the Company concurrently awarded the Brendle Group's proposal as well.

# **Objectives**

The objectives of this pilot included efforts to determine if Xcel Energy could successfully support a community energy planning framework that would provide value to both the community and Xcel Energy. In addition, the pilot tested if the development and implementation of a community-level energy plan could successfully drive increased energy efficiency and conservation activity. More specifically:

- Test the methodology to support strategic community energy plans resulting in the design and delivery
  of energy strategies to commercial, residential and public sector (or government) customers in an
  organized, community-specific approach that aligns with Xcel Energy's existing and future DSM
  offerings.
  - a. Deliver the pilot to a total of 150,000 customers. It was anticipated this would require approximately 4-6 communities.
  - b. Engage the community framework, including service, non-profit, social and business organizations.
- 2. Improve pathways to increased market penetration of Xcel Energy's direct impact DSM programs through quantifiable community-wide strategies in efficiency and conservation.
- 3. For the communities served, increase the communities' understanding and perception of Xcel Energy DSM offerings.
- 4. For communities served, identify additional resources beyond the community and Xcel Energy that can be leveraged to support energy planning, implementation, and plan evolution.

<sup>&</sup>lt;sup>5</sup> American Recovery and Reinvestment Act of 2009, H.R. 1 (111th)

# **Tracking & Evaluation**

Brendle Group provided performance monitoring to Xcel Energy to track the progress of the pilot and confirmed the outcomes. The evaluation, measurement and verification (EM&V) component includes:

- Number of communities served and their customer populations;
- Number of strategies identified that promote increased participation in Xcel Energy DSM offerings, including associated energy savings estimates
- Customer satisfaction with support services evaluated through a pre- (baseline) and post-pilot
  participant survey to ensure sustained satisfaction, implementation, and overall value to
  communities and Xcel Energy
- Metrics including communication channels used, tactics executed, numbers of customers reached, and energy savings identified through potential strategies

Information collected to inform these components is provided in the Community Energy Efficiency Plan Summaries.

Several metrics were used to measure the success of the pilot. Please refer to the Appendix B for the "Evaluation Matrix" table. It is important to note that because this pilot project was focused on driving additional energy efficiency and conservation activities through the development and implementation of a community-wide energy-efficiency plan and strategic implementation of projects, there was a lag in identifying and measuring increased program participation given the nature of the planning activities, the types of projects, and timelines for project implementation.

# **Pilot Description**

The CEEP pilot was designed to deliver a cohesive planning framework and platform to engage communities as they participate in Xcel Energy's DSM programs. It was also designed to provide communities support both in facilitating the planning process to approach energy management through a coordinated strategy and to provide the necessary tools to drive implementation of energy efficiency and conservation projects.

The concept of providing holistic planning and implementation as a means to drive significant energy efficiency and conservation has proven highly successful in other market segments. Xcel Energy was interested in identifying a methodology to deliver this to communities.

The objective of the pilot was to determine if providing strategic support in the development and implementation of a community-level energy efficiency plan can successfully drive increased energy efficiency and conservation activity. Xcel Energy also hoped to gain insight as to what tools and resources are most useful in driving energy efficiency and conservation through this type of initiative, and test how receptive the support infrastructure of volunteer and professional organizations in a community are as potential delivery vehicles for conservation and energy-efficiency initiatives.

The focus of these strategic community energy efficiency plans is to design and deliver strategies that leverage a targeted suite of DSM offerings tailored to the local commercial and residential customer base in an organized, community-specific approach. These efforts should result in additional participation across our entire energy efficiency and conservation product portfolio, plus provide the participating communities the tools and

inspiration to develop additional energy efficiency and conservation opportunities specific to their individual needs and resources.

# Target Market

The primary target market for this pilot was communities that had not initiated an energy planning process, had stalled in their implementation, or had a sustainability or energy efficiency/conservation framework, but lacked actionable plans. The pilot helped community leaders, through a structure of workshops and facilitated meetings, to develop an individualized plan to engage their commercial and residential population of a specific community. Potential communities also needed to have a population of at least 5,000 and be located in Xcel Energy's Colorado service territory.

# Pilot Design

Delivery of CEEP to each community included these five work scope areas:

- Facilitating the collection and reporting of a community-specific energy baseline using a forecasting tool. This tool included utility data provided by Xcel Energy and provided a means for communities to assess their aggregated energy use, identify target sectors for reduction and alignment with DSM programs, and model scenarios for reduction based on DSM programs, estimated participation, and custom inputs.
- Assisting the community in prioritizing and developing energy reduction targets using the data tool and
  a structured methodology that partners these goals with identified strategies, metrics and a plan for
  tracking progress;
- Providing a plan template to document focus areas, goals, strategies, and approach for implementing the strategies; Developing an implementation and tracking plan to document implementation progress to date as well as next steps and to prompt continued effort and measurement;
- Supporting the communities as they launched their plans and initiated implementation of their DSM strategies. This support was targeted at maintaining the momentum of the plan and included variable activities related to the needs and strategies of each pilot community.

#### Budget

The original budget of \$169,500 included program planning, program design, administration, program delivery, and measurement & verification (M&V). In 2014, Xcel Energy determined that there would be value in pursuing \$56,000 in additional expenditures to provide ongoing energy-efficiency project implementation support for the communities, as well as funding to support the fourth community, Aurora, through the planning and implementation process since they had been late to join the pilot.

#### Timeline

The original timeline of the pilot as presented to the participating communities:



The actual timeline varied, as expected, by community based on when they initiated the process and which activities they chose to pursue in support of their community goals.

# Community Energy Efficiency Planning Process

As part of the pilot, communities received the following information via the "CEEP Planning Guide" to help explain to the participating communities about the CEEP process and energy plan development.

The energy efficiency plan for each community is a roadmap used to help identify a specific community's philosophy towards energy efficiency along with taking stock of existing practices and helping to define appropriate goals and strategies that support that philosophy. Each plan is unique and meant to reflect a community's demographics, building stock, and overall community needs and planning approach.

The planning process follows a particular flow as shown in the following illustration and includes these main topics: baseline information on the community (energy use, practices), energy use forecast (which covers the selected planning timeframe), overall vision, goals), strategies (to achieve those goals), action plan, progress measurement and documentation.

#### Workshop Objectives

An integral part of the planning process, three ½-day workshops provide a great environment in which to create the building blocks of a viable Community Energy Efficiency Plan. The general outcomes of the workshops include:

- building a community energy baseline
- identifying community vision and focus areas
- setting goals for each focus area
- identifying and developing strategies for achieving goals
- outlining metrics to track progress, and refining the strategies so that communities have a planned, step-wise approach for implementing the strategies



Image courtesy of Brendle Group

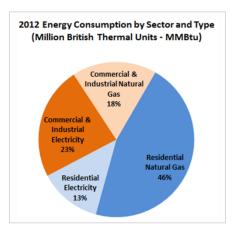
Communities move through these components at varying paces among the three workshops.

#### Baseline Energy Scenario Tool (BEST)

A key part of the planning process involved setting an energy baseline for each community using a

forecasting tool. The Baseline Energy Scenario Tool (BEST), included utility data provided by Xcel Energy, provided a means for communities to assess their aggregated energy use, helped to identify target sectors for reduction and alignment with DSM programs, and modeled scenarios for energy reduction based on DSM program participation.

The analysis takes the community's utility data, demographics, and program input to build several charts which are then incorporated into the Community Energy Efficiency Plan. These charts include: community energy inventory, potential electricity and natural gas savings by DSM program, and a comparison of the costs and savings.



**Example of Energy Inventory** 

# **Participation**

#### Recruitment

One of the first pilot lessons learned was that recruitment of interested communities with the resources and commitment needed to participate took longer than expected. Several communities were invited to participate in CEEP, but after explanation and deliberation, several declined. This delayed the start, increased costs (due to the additional Xcel Energy Program Manager and Account Management labor required to identify, educate and engage additional communities), and compressed the time available to track results from implementation.

Reasoning that communities cited for choosing not to participate:

- Concern about amount of staff time needed and lack of capacity to take on another work program in 2013
- Lack of consensus among decision makers
- City preference for the private sector to lead the push to energy efficiency without city regulation
- Skepticism about value beyond best practices already underway
- Concern about City Council approval being a barrier
- Timing
- Limited interest in promoting Xcel Energy and uncertain community benefits
- Perception that Colorado Public Utilities Commission was directing Xcel Energy to do more that the offer was not sincere
- Lack of City Council direction to focus on community energy planning
- Concern that city has little upon which to build success (history of low engagement)
- Concern about obtaining participants for stakeholder group

# **Selected Communities**

The communities that participated in CEEP chose to do so for a variety of reasons, shown below in Table 2.

**Table 2: Community Participation Rationale** 

Communities Contacted	Rationale for Participating
Aurora	<ul> <li>Help fill some of the post-ARRA<sup>6</sup> financial gaps</li> </ul>
	<ul> <li>Avenue for promoting energy efficiency successes/initiatives</li> </ul>
Grand Junction	CEEP opportunity dovetailed with city's new Division of Economic
	Development and Sustainability
	<ul> <li>Had EECBG<sup>7</sup> funding for programs but no community strategy and</li> </ul>
	programs had low participation - CEEP chance to tie together and
	have concerted outreach
	<ul> <li>Community already had some baseline energy use inventory</li> </ul>
Lafayette	<ul> <li>Community interested in utility data, commercial efficiency,</li> </ul>
Larayette	renewables
	Had existing Lafayette Energy Sustainability Advisory Committee
	(LESAC) and sustainability consultant on retainer
	Had existing energy plan developed by citizen committee with little
	city input

<sup>&</sup>lt;sup>6</sup> American Recovery and Reinvestment Act of 2009, H.R. 1 (111th)

<sup>&</sup>lt;sup>7</sup> U.S. Department of Energy's Energy Efficiency and Conservation Block Grant (EECBG) Program, <a href="http://energy.gov/eere/wipo/energy-efficiency-and-conservation-block-grant-program">http://energy.gov/eere/wipo/energy-efficiency-and-conservation-block-grant-program</a>

# **Community Energy Efficiency Plan Summaries**

The following summaries were developed by each community to help hone in on the priorities for their cities and guide the efficacy of the energy plan development through the workshop process.

# Aurora, CO

**Vision:** When the energy efficiency related goals of the Community Energy Efficiency Plan are achieved:

- The city is reducing its greenhouse gas emissions and moving toward its greenhouse gas emissions goals using a well-defined baseline and continuous measurements.
- New buildings are built above the minimum building code and existing buildings in Aurora are retrofitted to be more energy efficient and contain more conservation features.
- Incentives are available to residents and businesses to encourage energy efficiency and\_installation of conservation features.

#### **Focus Areas:**

Residential and Commercial: Increase awareness of existing incentives, measures, and programs

Public/Institutional (formerly Health Care & Education): Increase communication and collaboration, benchmarking and recognition program

#### **Top Strategies:**

#### Residential

- 1. Connect energy efficiency to existing City programs
- 2. Support Aurora's "Shed More Light" program
- 3. Promote Xcel Energy Residential & Commercial Programs (Audits, Weatherization)
- 4. Identify program target areas

#### Commercial

- 1. Increase awareness in energy efficiency
- 2. Increase participation by large and small businesses in energy efficiency programs

# Aurora, CO (continued)

# Public/Institutional

- 1. Establish guidelines for routine communication of cross-institutional energy efficiency efforts
- 2. Promote community cohesiveness

# **Savings Targets:**

2014-2015 planning horizon36,562 MWh electricity savings312,300 therms natural gas savings20% reduction in community energy use by 2025

#### **Metrics:**

Number of Xcel Energy audits conducted

Number of communication projects completed (with Xcel Energy)

Number of households reached via targeted marketing

Annual number of incentives (by type) to Aurora accounts

Number of hours spent by city and partner staff in outreach

Case studies that represent increased access to resources and information

### **Electricity:**

Business: 1% reduction in total usage over the planning horizon Residential: 2% reduction in total usage over the planning horizon

#### **Natural Gas:**

Business: N/A Residential: N/A

# Grand Junction, CO

**Vision:** : Our Community will work collaboratively to manage energy use across all sectors to achieve the economic, social and environmental benefits of sustainability, thereby, keeping our businesses competitive, reducing energy consumption and costs, contributing to improved environmental quality, and promoting job growth in energy efficiency, innovation and diversification.

#### **Focus Areas:**

Commercial/Industrial (Business) Buildings Residential Buildings Renewable Energy\* Education and Outreach

## **2014 Top Strategies:**

- 1. Education Series for business sector
- 2. Building re-commissioning/tune-up program
- 3. Local retailer partnership
- 4. Persigo Wastewater Treatment Plant biogas project

#### **Metrics:**

# sessions/business reached
Uptake in rebate programs
# participants in re-commissioning
# rebates filed through local retailers
gallon equivalent CNG produced

#### **Savings Targets:**

3-year planning horizon 65,000,000 kWh electricity savings 950,000 therms natural gas savings \$5.8 million savings \$14 million cost to customers after rebates

# **Electricity:**

Business: 10%reduction in total usage over the planning horizon Residential: 7.5% reduction in total usage over the planning horizon

#### **Natural Gas:**

Business: 1% reduction in total usage over the planning horizon Residential: 3% reduction in total usage over the planning horizon

# Lafayette, CO

**Vision:** The City of Lafayette is committed to being a forward-thinking, unique, and inclusive leader in energy stewardship. The City will partner with residents and businesses to foster energy efficiency and conservation to help ensure a sustainable environment, healthy people, a strong economy, and community pride.

Focus Area: Commercial Buildings

# 2014 Top Strategies:

- 1. Building Permit Education initiative
- 2. Energy efficiency drive and contractor training
- 3. Green business award program expansion

#### **Metrics:**

# of hits to City's Building Permit website

Uptake in rebate programs

# contractors trained

# businesses in certification program

# businesses implementing at least one efficiency project linked to Xcel Energy DSM

# **Savings Targets:**

3-year planning horizon

6,280,100 kWh electricity savings

48,000 therms natural gas savings

\$ 521,500 savings

\$1,296,900 cost to customers after rebates

# **Electricity:**

Business: 8% reduction in total usage over the planning horizon Residential: 1% reduction in total usage over the planning horizon

#### **Natural Gas:**

Business: 4% reduction in total usage over the planning horizon

Residential: N/A

# Salida, CO

**Vision:** Our community will work to optimize energy use across residential, commercial, and governmental sectors through education, efficiency, and conservation, reducing Salida's overall energy consumption and costs.

#### **Focus Areas:**

Education and Outreach (catalyst) Municipal/Government Buildings Residential Buildings Commercial Buildings

# **2014 Top Strategies:**

- 1. Energy Focus webpage and education outlets
- 2. Energy Corner at True Value (light bulbs and energy efficiency tips)
- 3. Measure implementation and benchmarking in City buildings
- 4. Small Business Lighting campaign

#### **Metrics:**

# venues and contacts
Uptake in rebate programs
# participants in light bulb program
# equipment upgrades in municipal buildings
trends in energy use in municipal buildings
# lighting audits
\$340,000 savings
\$302,000 cost to customers after rebates

# **Savings Targets:**

5-year planning horizon 3,900,000 kWh electricity savings 37,000 therms natural gas savings

#### **Electricity:**

Business: 10% reduction in total usage over the planning horizon Residential: 3% reduction in total usage over the planning horizon

#### **Natural Gas:**

Business: 1% reduction in total usage over the planning horizon Residential: 3% reduction in total usage over the planning horizon

# **Pilot Analysis**

A combination of qualitative and quantitative data was gathered from a variety of sources. This included data tracking by Brendle Group, Xcel Energy Program Managers, Xcel Energy Corporate Communications, and two third-party market research firms, Integrative Growth and Cadmus Group.

Anecdotal information and program insight were received from Xcel Energy Program Managers involved with the pilot or others that had insight to share about their DSM programs. This information was used to provide clarity to the qualitative survey results as well as the analysis of DSM participation and any associated participation lift due to CEEP activities.

# **Participant Qualitative Surveys**

In December of 2013, April 2014 (baseline survey), and October 2014 (post-survey) a total of 20 workshop participants (the same participants were surveyed twice) participated in a telephone survey in order understand attitudes and expectations of participants in the workshops and the level of satisfaction of the workshops themselves. Workshop participants from each community were interviewed for a baseline survey and a post-implementation survey.

This qualitative data provided information about the community's knowledge of DSM programs and satisfaction with Xcel Energy due to the CEEP pilot. The data also helped to guide planning work during 2014 and has helped us understand the value of the planning workshops.

# **DSM Program Participation**

Rebate participation in 2013 and 2014 was compared for all four communities to look for lift in participation which may be due to CEEP efforts. Xcel Energy Program Managers were consulted to verify any lift seen in their programs and to determine if there was any tie to CEEP activities. Information about each city's rebate participation is shown in Appendix C.

It is important to note that year-by-year comparison can be influenced by many other factors (weather, economic activity, changes in programs, etc.); therefore all results are only indicative and cannot necessarily be attributed solely to CEEP.

#### **Tracking of Initiatives**

As tactics from each of the energy efficiency plans were implemented by the communities, each was tracked to understand resulting impacts, such as customers reached, DSM projects initiated, and energy saved. These impacts are summarized in Table 3.

Table 3: Tracking of Initiatives

Community	Project	Implementation Dates	Impact
Aurora	Global Fest (celebration of Aurora's international community)	8/23/14	Impressions: 1,500 Interactions: 175
	Chamber of Commerce "Business Before Hours" event	10/29/14	130 attendees
	Residential and Commercial Case Studies	2015 Planned	
Grand Junction	Business Education Series: events focused on Small Business Lighting, Building Tune-up, and Refrigeration programs	Summer 2014	3,825+ businesses reached with mailers promoting the Small Business Lighting program.
	Local Retailer Partnership: Energy Efficiency displays distributed amongst home improvement stores and other Residential program events	In process	Number of contractors with evaporative cooling information: >100 Number of retailers carrying higher efficiency equipment and filing rebates: 20
	Conducted SB Building Tune-Up outreach and assessments for commercial customers	Jul – Sep 2014	Number of program applicants: 3 Number of completed projects: 0
	Increase participation in Small Business Lighting	Summer/ Fall 2014	9 applications  Number of completed SBL upgrades: 10 Identified kWh from upgrades: 121,282 kWh
	Increase participation in Commercial Refrigeration	Fall 2014	Number of program applicants: 14 Number of projected projects (will be completed in 2015): 6
	Six major events promoting evaporative cooling; Kart Racing for Heroes, Country Jam, CO Lavender Festival, Palisade Peach Festival, GJ Rockies, GJ Farmer's Market	Jun-Aug 2014	51,850 Impressions 22,650 Interactions 604 Leads 41 Program sign-ups
	Persigo Biogas Project (non-DSM)		Design build awarded, currently finalizing contract for 1 <sup>st</sup> Phase, should start construction in early 2015.
Lafayette	Building Permit Education –Website update	Jun-Nov 2014	Number of permits issued with efficiency info: 830

	Contractor Training	5/29/14	107 attendees;
			Competition results: No direct numbers of projects were trackable; companies didn't want to be published
	Green Business Program	May-Oct 2014	Checklist & Points System developed, 425 Chamber members notified;
			Number of emails sent by Xcel Energy: 202 with 52 opens Number of participants: 12; 8 achieved bronze, silver, or gold
	Contractor Challenge	Jun-Sep 2014	
Salida	Energy Focus Kick-off for Earth Day	4/22/14	2 business contacted
			150 people fed
			50 CFLs distributed
			35 shower/aerator requests
	Energy Focus Webpage	June 2014	Webpage developed – 110 website hits as of 11/20/14
	Chamber of Commerce Email Outreach	Jan– May 2014	800 emails sent
	Residential Energy Efficiency initiatives: Lighting and Refrigerator Recycling	Jun – Sep 2014	517 CFLs sold through True Value Energy Corner display and additional free CFLs continue to be available at the Community Center
			Refrigerator Recycling Contest: 18 participants
			2 home audits performed
			# of light bulbs at Earth Day: 50 # of shower/aerator requests: 35Press release for double rebate for Lighting (September) Outreach through Business Alliance
	Commercial Energy Efficiency initiatives: Small Business Lighting	Spring-Fall 2014	Lighting Assessment for 10 Small Business & 4 Large Businesses;
			132,648 kWh identified potential lighting savings
	Funding for lighting upgrades for municipal buildings	Fall 2014	\$300 for LED holiday lights in 2014 \$700 for 2015 building upgrades

#### **Pilot Evaluation**

Given the breadth of stakeholders engaged in this offering and the complexity of the measurement and attribution of energy savings driven through the program, Xcel Energy anticipated that the success of CEEP pilot would be measured though an internal qualitative assessment. The costs associated with external evaluation would have been disproportionate to the size of the pilot program budget. Therefore, the pilot filing indicated that assessment may include:

- Level of target market interest. Types of services and resources that the communities required to complete their plans and support implementation
- Activity levels in direct impact Xcel Energy rebate programs. Activity levels to be compared in participant communities versus past years and similar non-participant communities
- Number of projects initiated and planned for implementation
- Ability to meet customer expectations and drive end-use program activity within the budget of the program
- Anecdotal reports on customer satisfaction and energy efficiency/conservation activity levels
- Informal participant interviews

# Consultant Level of Effort

Brendle Group regularly tracked their hours spent on planning and implementing with the pilot communities. The data shows that the level of effort does not appear to be directly related to the size of the community since a minimum number of hours are needed for consultant support regardless of community size.

Hours spent on Aurora reflect the effort to get the community on board, filter and analyze the much larger data set, complete an additional analysis of the data by zip code, and to be responsive to the needs of a much larger community in general. Brendle Group chose to have two staff members support Aurora given the nature and complexities of the community. So, for very large communities it will be important to estimate more planning and implementation hours, though as the table below shows, the hours per customer metric is more efficient for larger communities.

	Customer Accounts	Consultant Outreach Hours	Planning Hours	Planning Hours/ 1000 Cust	Implementa- tion Hours	Implementa- tion Hours/ 1000 Cust	Total Consultant Hours	Total Hrs/1000 Cust
Lafayette Totals	11,722	25	183	216	85	100	268	22.86
Residential	10,874		0	0	0	0	0	0
Commercial	848		183	216	85	100	268	316
Grand Junction Totals	43,697	25	184	4	48	1	232	5.31
Residential	39,960		92	2	24	1	116	3
Commercial	3,737		92	25	24	6	116	31

Salida Totals	4,281	25	212	50	72	17	284	66.34
Residential	3,668		74	20	25	7	99	27
Commercial	613		138	225	47	76	185	0
Aurora Totals	159,193	60	360	2	100	0.6	520	3.27
Residential	136,069		180	1	50	0	230	2
Commercial	23,125		180	8	50	2	230	10

Table 4: Consultant Level of Effort

# Community Level of Effort

The level of effort and in-kind contributions by the communities themselves were tracked and are summarized in Table 5 below, the value has been calculated using an average rate of \$60/hour, based on regional averages for municipal staff.

		Implementation		
	Planning Hours	Hours	Other In-kind	Total Value (\$)*
Aurora	74	72	TBD	\$8,760
Grand Junction	80	40	\$0	\$7,200
Lafayette	135	30	\$400	\$9,900
Salida	160	60	\$200	\$13,400

Table 5: Community Level of Effort

# **Consultant & Participant Feedback**

#### General Feedback

As planning work started with the communities in 2013, general feedback was received noting a very positive response and helpful suggestions from workshop participants. Here are some examples:

"...I also think having a venue like this gave us a great opportunity to get know more of our local businesses and other agency at different level. We had a good cross section of our local business sector."

"My only concern with the process is the back end cost and needed resource. It was important to make sure the goals are achievable with what resources are available."

"...I wanted to add to your conversation yesterday... after looking at this SIC data again I realized that this project has a major benefit in helping us form a working relationship with Xcel [Energy]. Most of us know the difficulties in trying to get these kind of numbers from Xcel [Energy] and in a "normal" situation; this information would have taken many months to get from Xcel [Energy] and even then I am not sure how easy it would be for someone to sift through it and do what Brendle did to make sense of it all. So, that in itself is a major benefit!

"... after looking at this SIC [Segment Industry Code] data again I realized that this project has a major benefit in helping us form a working relationship with Xcel [Energy]..."

Plus, it has opened doors for easy communication with Xcel [Energy] if we have a question regarding one of their programs, we know who to contact and already have that relationship and get a speedy reply (I am not indicating that they wouldn't be speedy regardless, but because of the newly formed relationship, I think it is a benefit!).

Lastly, to have the Brendle Group really making us accountable and leading the project along is a major benefit as well!"

"The City is really pleased with the level of support from our team and also the direct participation from Xcel [Energy] energy representatives. [Participant] commented how important and useful it is to have Xcel Energy in the room answering questions, taking on action items, and following up on unknowns."

#### **Consultant Recommendations**

By the end of 2013, with 10 workshops completed, the third-party implementer was able to compile a list of recommendations to carry the team forward into 2014. Additional learnings were also captured after implementation support was complete.

#### Outreach

- Open for all Xcel Energy communities but limit the opportunity to a reasonable number of communities per year to ensure adequate resources to deliver a positive community experience
- Open to communities that have plans that may simply need help with implementation or quantifying outcomes
- Create levels of support tied to levels of community commitment and investment, and require the community project manager to provide:
  - o Long-term plan leadership and ownership to execute with partners
  - o Channel resources for communicating opportunities and initiatives
  - Staff time for development and upkeep, coordination, events, tracking, and plan updates
  - Venues for sharing success in the community
- Create expectations that are targeted at tangible/measurable outcomes with later phases for broader focus

- Get more financial commitment from communities up front and require a 2-year commitment
- Consider peer-to-peer networks of communities to share tips, tools, and resources along with community mentoring and recognition to keep communities engaged and help others new to the process

#### **Planning**

- Provide communities support with:
  - o Identifying stakeholders
  - Developing and facilitating workshops
  - Analyzing community data, identifying target sectors, and setting priorities
  - o Identifying implementation steps and metrics
- Keep to a 6-month timeline
- Streamline Workshop #1 eliminating much of the background material and driving more toward the work of the plan
- Prescriptive Drive to DSM for at least 3 projects and/or require they tie directly to kWh reduction
- Modify the baseline tool (BEST) and how it is delivered by
  - o developing scenarios earlier in the process,
  - o simplifying the tool to make it less intimidating, and
  - o including protocol for adding additional data in future years
- Communicate available programs more clearly and earlier in the process
- Assume third-party administrator will write plan schedule such that final plans are complete before end-of-year holidays
- Require a single, designated project manager from the community that will be accountable for program success and has the authority to complete and implement the plan
- Provide more details on expectations and responsibilities for the communities
- Clearly define vendor and Xcel Energy representative roles and responsibilities for communities
- Encourage an avenue for communicating planning and implementation progress with the community at large beyond stakeholder group to engage and develop channel for implementation

#### **Process**

- Create an "Xcel Energy Tool Kit" document Commercial/Residential DSM literature included in the Guide which fully explains all Xcel Energy program services, general support and program offerings; NOTE: this was completed early in 2014.
- Develop case studies from pilot communities.
- Allow flexibility in the planning schedule to accommodate a traditional planning schedule or a compressed schedule (3 months or 6 months).
- Modify the "CEEP Guide", template, and presentation materials to reflect pilot feedback and greater clarity on activities and responsibilities after the workshops and into implementation.
- Create boundaries of program resources, roles and expectations.

#### Implementation

- Communicate boundaries around reasonable effort and expectations for all parties
- Help with first quarter activities to get implementation underway

- Develop content and resource links for web sites and outreach materials
- o Develop measurement methods relative to general education, communication, and outreach
- o Develop content for contractor training, challenges, recognition programs, etc.
- Help communities with monitoring and reporting, benchmarking, baseline tool maintenance, and future community data updates
- Help identify funding sources for communities
- Designate a local Xcel Energy representative that will follow implementation through as direct point of contact
- Develop tracking tool for accountability beyond planning and clearly establish roles and responsibilities
- Strongly encourage annual reporting to keep momentum beyond first year
- Link incentives additional incentives directly to community performance and to existing DSM offerings
- Offer extra incentives for successful execution
- Additional implementation support to consider:
  - Content development and resource links for web sites and outreach materials
  - o Measurement methods relative to general education, communication, and outreach
  - Contractor training, materials for outreach, contractor challenge program, and recognition program development
  - Participant challenge program development and collateral content as well as integration with other programs
  - Co-branding facilitation and integration of programs, initiatives, existing resources, and events among partners (focused audits, events, etc.)
  - o Monitoring and reporting, tool maintenance, and future data updates
  - General implementation management to keep things moving and help with tracking
  - Direct contact with Xcel Energy program managers and vendors, as well as marketing and channel support

#### **DSM Impact**

Several community activities had the ability to directly impact participation in Xcel Energy DSM Programs. In some cases, specific DSM programs were targeted, and communities also held educational events designed to generally help increase participation in Xcel Energy DSM programs. At the time of the pilot evaluation, the City of Aurora had not started implementing their plan, so DSM impact was not yet clearly tied with CEEP activities.

Listed below, by community, is the list of Xcel Energy DSM programs that had the potential to be impacted by tactics identified in each energy efficiency plan. The tables summarize the Xcel Energy DSM programs that saw an increase in participation between 2013 and 2014. This information, combined with the tracking of initiatives (Table 3), helped in determining if CEEP activities had a direct impact on DSM programs.

#### Aurora

#### **Potential Program Impact**

#### Residential

- Evaporative Cooling
- Home Lighting & Recycling

- Insulation Rebates
- Residential Air Conditioning
- Refrigerator Recycling

#### **Business**

- Cooling Efficiency
- Energy Analysis
- Heating Efficiency
- Lighting Efficiency
- Motors & Drives Efficiency
- Recommissioning
- Refrigeration Efficiency
- Small Business Lighting

**Note:** Since Aurora didn't start any implementation in 2014, there was no need to analyze the rebate counts between 2013 and 2014 as was done with the other three communities.

#### **Grand Junction**

# **Potential Program Impact**

- Evaporative Cooling
- Energy Analysis
- Home Lighting & Recycling
- Small Business Lighting
- Recommissioning

Table 6: Grand Junction Rebate Lift

Segment	Program	Rebate Count 2013	Rebate Count 2014
Business	Custom Efficiency	1	4
	Energy Analysis	1	10*
	EDA	1	3
	Lighting - SB	90	105
Residential	Home Lighting & Recycling (bulbs sold: Jan-Dec)	136,858	172,659
	Home Performance	0	3

<sup>\*</sup>One audit definitely due to CEEP

# Lafayette

# **Potential Program Impact**

- Recommissioning
- Small Building Tune-up
- Small Business Lighting

Table 7: Lafayette Rebate Lift

Segment	Program	Rebate Count 2013	Rebate Count 2014
Business	Compressed Air	0	1
	Cooling	1	3
	Energy Analysis	1	2
	EDA	0	2
	EEB	0	2
	Heating	0	1
	Lighting	12	20
	Lighting - SB	2	7

# Salida

# **Potential Program Impact**

- Home Lighting
- Small Business Lighting
- Refrigerator Recycling

Table 8: Salida Rebate Lift

Segment	Program	Rebate Count	Rebate Count
		2013	2014
Business	Lighting	1	8
	Lighting - SB	9	12
	Motors	1	8
Residential	<b>Evaporative Cooling</b>	2	6
	Home Energy Audits	0	1
	Refrigerator Recycling	12	18
	Home Lighting & Recycling	73	517
	(bulbs sold: Jan-Dec)		

#### Results

# DSM Program Lift

Due to several projects resulting from CEEP, it is reasonable to directly attribute participation lift in the following communities with the following programs.

#### **Grand Junction**

- Evaporative Cooling: While overall program was down 17% from 2013 (likely due to cooler weather), Grand Junction participation was only down 7%
- Small Business Lighting: 121,282 kWh from 10 projects initiated and completed between June and August 2014 likely due to mailer that was sent out to businesses

#### Salida

- Home Lighting: 600% lift (20,511 kWh) from 2013 likely due to True Value Energy Corner project
- Refrigerator Recycling: 38% lift (11,492 kWh) likely due to the Refrigerator Recycling Contest

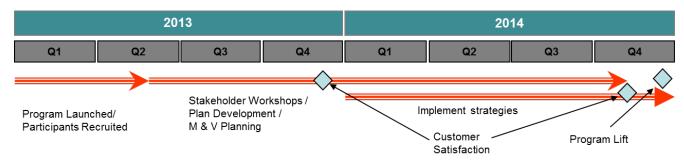
#### **Timeline**

The original schedule of the pilot was set for twelve months, but the timeline was extended to 24 months. This was due to several factors:

- the length of time it took to identify communities that were willing to participate
- community internal approvals to participate
- community internal approvals to accept the energy efficiency plans
- community internal approvals to move forward with plan implementation

Grand Junction, Lafayette, and Salida started their planning phase late in Q3 2013 and Aurora's planning started in Q1 of 2014. This led to extension of the pilot for a second year in order to finish the planning phase with Aurora and to provide project implementation support for all four communities.

The following diagram reflects the actual pilot timeline.



# Baseline Survey Findings

In December 2013 and April 2014, the research firm, Integrative Growth, conducted 20 qualitative interviews with workshop participants from all four communities in the CEEP pilot. Here are the high-level findings.

- Workshop Process
  - Brendle Group viewed as an active partner; Xcel Energy in a more passive role.
  - The time and effort commitments were clearly explained and reasonable.
  - Resources were provided to meet the program goal of developing a community energy plan.
  - Most feel uneasy about executing the plan.
- Willingness to Recommend
  - All participants would recommend this to other communities.
  - There is strong support for collaboration with other communities, especially with implementation.
- Overall this group of stakeholders is similar to the community at large with two exceptions:
  - They are more familiar with energy efficiency programs.
  - Most (90%) had participated in an energy-savings program compared to 10% of the community at large.
- Impact of the pilot on Overall Satisfaction with Xcel Energy
  - Increased recognition of the value of Xcel Energy and its programs.
  - The process enhanced customer overall satisfaction with Xcel Energy for most workshop participants.

#### Post-Pilot Survey Findings

In October and November of 2014, the research firm, Cadmus, conducted 19 qualitative interviews with the workshop participants (16 from the Baseline Survey and 3 new). This Post-Pilot Survey was meant to determine if the project implementation support provided by Xcel Energy as well as the overall CEEP pilot had any effect on customer satisfaction with Xcel Energy and to learn about ways the process could be improved. Here are the high-level findings.

- The amount of experience a participant had previously with Xcel Energy programs or working in energy efficiency affected whether their participation in the CEEP Program influenced their impressions of Xcel Energy.
- Participants found participating in the CEEP Pilot valuable for their communities, even if the community energy plan was not fully implemented.
- The benefits of participating in the CEEP Pilot identified most often by the interviewees were an increase in awareness and knowledge of energy efficiency and an increase in the communities' awareness of existing sustainability efforts.

- Despite the support provided, communities need additional resources to implement their community energy plans.
- A majority of those interviewed believe their communities will continue implementation of their energy plans.
- The impact of participating in the CEEP Pilot on a participants' familiarity with and opinions of Xcel Energy depends on the amount of interaction participants have with Xcel Energy and their experience with energy efficiency prior to working with the Program.
- Participating in the CEEP Program had minimal immediate impact on interviewees' participation in Xcel Energy's energy-saving programs.
- Workshop participants had varying levels of participation in the implementation of the community
  energy efficiency plan (many not involved at all) and communities had different levels of resources
  and support for plan implementation.
- Large differences emerged in how interviewees perceived the value of the implementation process.
- Communities need more support during the implementation phase to successfully implement the community energy plans.
- Although participants general agreed their community benefited from the CEEP Pilot some expressed skepticism that it would result in energy savings.

The following table compares the Xcel Energy's "Voice of the Customer" (VOC) survey results, which regularly measures customer's perception of Xcel Energy, to similar questions asked of the pilot workshop participants.

Table 9: Summary of VOC and CEEP Survey Reponses

Question Text	XCEL ENERGY VOC May 2014 (n=471)	CEEP Interviews May 2014 (n=20)	CEEP Interviews Oct/Nov 2014 (n=19)	
Question Text	Agree	Agree	% Increased/ Improved	% Stayed the Same
Xcel Energy provides all the info I need to use energy more efficiently.	80%	58%	37%	63%
I am familiar with the Xcel Energy energy efficiency programs.	40%	80%	58%	42%
Xcel Energy provides customer service that responds to my needs.	92%	75%	32%	68%
Overall satisfaction with the service provided by Xcel Energy.	93%	75%	47%	53%

This next table focuses on questions around the workshop participant's familiarity of the programs and services Xcel Energy offers and general perception of Xcel Energy.

Table 10: Impact of CEEP on Participants' Familiarity with and Perception of Xcel Energy

	•		Doub E.		97		
Question Text: Since Participating in the CEEP Process Has	Total (n=19)		Past Experience with Xcel Energy Programs (n=12)		Little or No Past Experience with Xcel Energy Programs (n=7)		
	Increased/ Improved	Stayed the Same	Increased/ Improved	Stayed the Same	Increased/ Improved	Stayed the Same	
Average number of respondents	9	10	4	8	5	2	
Number of Responses							
Q5a your level of familiarity with the programs and services Xcel Energy offers increased, decreased, or stay about the same?	11	8	9	6	6	1	
Q5bhas your impression of the importance of having an action plan to facilitate energy-efficiency in your community increased, decreased, or stayed about the same?	9	10	4	8	5	2	
Q5c your opinion of whether Xcel Energy provides you with all the information you need to use energy more efficiently changed?	7	12	3	9	4	3	
Q5d your opinion of whether Xcel Energy provides customer service that responds to your needs changed?	6	13	2	10	4	3	
Q5eyour level of satisfaction with the service provided to your community by Xcel Energy changed?	12	7	7	5	5	2	
Q5fyour level of satisfaction with Xcel Energy in general? READ LIST:  1. It has improved 2. It has stayed the same 3. It has deteriorated.	9	10	4	8	4	3	
Q6your awareness of the opportunities and programs offered to you by Xcel Energy changed?	11	10	2	6	7	0	

Note: Decreased and deteriorated were possible responses, but were not given by any interviewees.

The survey participants were asked what types of support are needed to aid in implementation of the Community Energy Efficiency Plans.

Table 11: Suggestions for Implementation Support

33 1	· · ·
Implementation Support Needed	Number of Respondents (n=11)
Funding	
For staff time (4)	_
To support implementation (2)	7
Commitment from government (1)	
Continued support from the Brendle Group staff	
Technical expertise (2)	
Facilitation and coordination support (1)	6
General support (3)	
Data/Metrics for monitoring the impact	5
Xcel Energy's continued presence in community	1
Programs specifically supporting goals of the plan	1
Targeted marketing	2
None	1

#### Post Pilot Survey Recommendations

Cadmus made the following specific recommendations as part of their report:

- Consider evaluating a community's resources up front. As part of each community's bid for
  participation in a future program have them provide an assessment of what resources they can provide
  for implementation. Then, once a community is selected include a resource component to the energy
  plan, based on what is available from the community and what can be provided by Xcel Energy.
- 2. **Consider holding regular meetings with stakeholders during the implementation phase.** Such meetings can serve to help maintain the momentum established during the planning phase, keep the community involved, and bring to light any challenges early in the process, so they can be addressed in a timely manner.

<sup>8</sup> Regular meetings were held during the implementation phase. It's possible that those surveyed just did not know that these meetings were occurring.

3. **Establish an accessible and easy-to-use dashboard** for continuous, ongoing measurement of community goals.<sup>9</sup>

# **Additional Learnings**

#### Data

Communities value the data that participation brought to the table. This learning process about what data is valuable and how communities want to see it helped inform the Xcel Energy "Community Data Reports" project now under development.

#### Flexibility

Each community has different needs both in terms of what they want from an energy plan and how they want to develop and implement that plan. A standardized approach to community energy planning will not meet all communities' needs.

#### **Energy Savings**

Energy savings are difficult to isolate and measure with certainty outside of community-specific short-term promotions. Because each community is unique and factors other than pilot participation can impact differences in energy efficiency programs year-to-year, there isn't a surefire way to measure in the incremental savings. However, we can measure year-over-year savings or particular promotion impacts.

#### Holistic Need

Customers want to plan for a holistic view of energy rather than just energy efficiency. This was a primary learning that led to the current *Partners In Energy* approach rather than continuing with the Commercial Energy Efficiency Planning Pilot as initially designed. Future efforts will need to take this diverse need into account when planning resources and budgets for community-focused efforts.

#### Ongoing Utility Involvement

Originally this pilot was designed to be primarily vendor-driven. We quickly learned that marketing, community affairs, and account management need to be engaged on a fairly significant way in order to fully enable the plan's success and help the customer have a good experience. The utility needs to plan and budget for internal resources for this to succeed.

#### Recruiting

Recruiting participants takes a long time and was more difficult than originally anticipated. Participation takes commitment from communities to fully engage, solicit volunteers, gain necessary governmental approvals, etc.

<sup>&</sup>lt;sup>9</sup> Integrative Growth. *Community Energy Efficiency Planning Pilot Qualitative Interviews Management Summary Draft*. May 2014.

#### Conclusion

In conclusion, the Community Energy Efficiency Planning (CEEP) pilot appeared to provide value to the communities and their respective workshop participants. The benefits of participating in the CEEP pilot identified most often were an increase in awareness and knowledge of energy efficiency and an increase in the communities' awareness of existing sustainability efforts. The time and effort in the planning process were clearly explained and reasonable according to the participants. Community resources were provided to meet the program goal of developing a community energy plan and most participants would recommend this to other communities.

Implementation of the community energy plans brought a level of uneasiness to workshop participants in that there was concern that it would be difficult to move implementation forward. This could have been for several reasons: 1) level of implementation expertise was low with volunteers; 2) many workshop participants did not have the level of authority or position in the city to make implementation happen; 3) many volunteers did not have resources to add to the implementation effort; and 4) workshop participants were not necessarily the right people to execute the plan. Despite the implementation support provided to communities during the pilot, it appears that communities will still need additional resources to finish implementation of their community energy plans.

There was some skepticism from participants that the CEEP effort would result in energy savings. However, it was shown that specific, targeted efforts did result in energy savings that wouldn't have occurred otherwise.

Along with DSM impact, the pilot enhanced customer overall satisfaction with Xcel Energy for most workshop participants and increased recognition of the value of Xcel Energy and its programs. Although, it appeared to have minimal immediate impact on participation in Xcel Energy's energy-saving programs by the workshop participants themselves.

Recommendations to aide in the implementation of *Partners In Energy* include:

- Provide both planning and implementation support.
- Obtain an increased commitment level from communities.
- Provide additional incentives/levels of support within a tiered program structure
- Invite all communities, but make the offering limited.
- Create peer networking & collaboration opportunities.
- Evolve the process documents based on participant feedback.
- Consider evaluating a community's resources up front.
- Consider holding regular meetings with stakeholders during the implementation phase.
- Establish a method for continuous, ongoing measurement of community goals.

# **Appendix A: References**

Cadmus Group. Xcel Energy CEEP Participant Interview Report. November 2014

Xcel Energy. Aurora Creative Brief/Tactical Plans. December 2014

Integrative Growth. Community Energy Efficiency Planning Pilot Qualitative Interviews Management Summary Draft. May 2014

Brendle Group. Salida CEEP Implementation Tracker and Plan Monitoring. July 2014

Brendle Group. Grand Junction CEEP Implementation Tracker and Plan Monitoring. June 2014

Brendle Group. Lafayette CEEP Implementation Tracker and Plan Monitoring. June 2014

Brendle Group. Aurora CEEP Implementation Tracker and Plan Monitoring. December 2014

Brendle Group. Recommendations for 2014 to Xcel Energy. December 2013

Xcel Energy. Lessons Learned – 2013 CEEP Pilot. December 2013

Xcel Energy. Evaluation of Community Energy Planning Pilot. October 2013

Brendle Group. CEEP Guide, June 2013

Xcel Energy. 60-Day Notice. Community Energy Planning Pilot. December 2012

# Appendix B: Evaluation Matrix

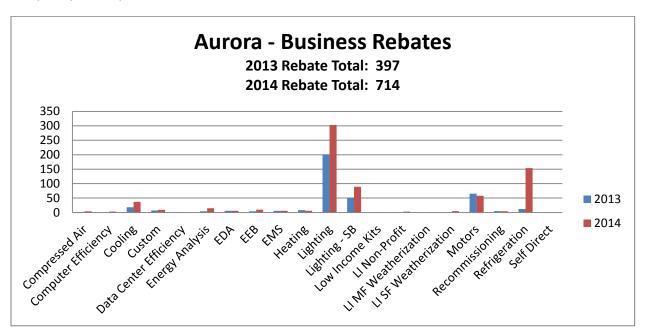
Metric	Measurement	Goal	Resource	Deliverable	Data Requirements
Community Interest	Number of communities approached through each strategy (personal contact, email, etc) versus number to respond, participate, or be wait-listed.	4 to 6 communities participating in CEEP	Brendle Group	<ul> <li>List of communities contacted, whether or not they participated and reason why/why not.</li> <li>Number of community energy planning groups formed and types of services and resources communities required to complete plans and support implementation.</li> </ul>	- Meeting notes, appointment schedules - Lists of cities pitched to and staff titles - Decisions and outcomes
Necessary Level of Support, Target Areas	Number of consulting hours spent with each community in each phases (planning, opportunity identification, infrastructure, group recruiting, etc.). This will be evaluated for trends based on community demographics and conservation potential and used for future planning.	Hours per 1,000 residential customers will be tracked to determine appropriate market segmentation for future offerings	Brendle Group	<ul> <li>Project hours per segment population</li> <li>Tools and resources employed to drive conservation</li> <li>Project hours spent planning versus hours with community staff/members</li> </ul>	Hours, segment population by community
Number of projects initiated and planned	This will have an element of uncertainty given that projects often are not recorded or tracked in our systems until they are at least partially implemented. Participating communities will be compared against their baseline relative to DSM activity as well as against non-participating communities as plans are implemented (2014). Anecdotal information should also be collected from program managers, account managers, community service managers, and the Brendle Group.	Measureable increase in program participation and energy savings as appropriate in the specific community projects that are implemented	Internal Xcel Energy / Brendle	<ul> <li>Number of DSM projects before and after. Broken down by type and segment</li> <li>Number of customers enrolled; number of customers with energy baselines and forecasts, reduction targets and plans developed.</li> <li>Metrics including kWh of energy savings identified and number of participants in Company rebate programs</li> <li>Any specific CEEP campaigns in SalesForce</li> <li>Participation in training and events</li> </ul>	- Baseline participation data by program, by segment Method to normalize data for changes in weather, economic factors.

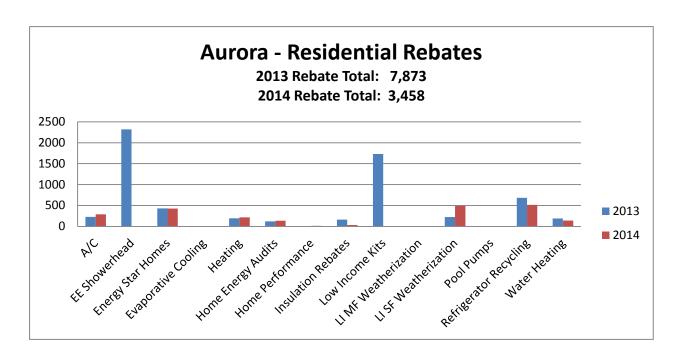
Customer satisfaction	Separate the respondents from participating communities to the Customer Engagement (Voice of the Customer) survey and Home Use study to determine if there are any discernible differences versus historical activity or comparisons to others. Informal conversations and stakeholder feedback should be compiled to evaluate the pilot on a qualitative level. This should address were the participants satisfied with the offering and it should be categorized to determine what components drove satisfaction and where there are gaps in the offering.	Although this will be tracked no goal will be set due to the limited market size and diversity within the pilot participants	Market Research / Third Party	- Survey of participating communities vs. comparable non-participating communities in specific programs.  - Measure sustained satisfaction, implementation and overall value to communities and the utility to support longer term implementation.  - Methodology identified to deliver a coordinated energy conservation support strategy for community-level energy planning.  - Anecdotal reports on customer satisfaction and conservation activity levels.  - Determine if the resources provided are a practical means to give communities the critical momentum to drive their planning process to implementation. Overall value delivered?	- Perception of Xcel Energy, value of program Notes from PM, Community relations, Brendle.
Additional resources leveraged to support energy plans	Resources, including cash, grants, in-kind labor hours, customer participation hours, etc., identified by participating communities to implement and measure plan strategies over time. These additional resources (beyond ARRA, etc.) will enable communities to grow their plans as they achieve and set new energy targets.	Each participating community identifies both dollars and in-kind contributions to plans beyond Xcel Energy phase of effort	Brendle	- Survey results on dollar values of additional resources	Dollar values, in-kind value, services

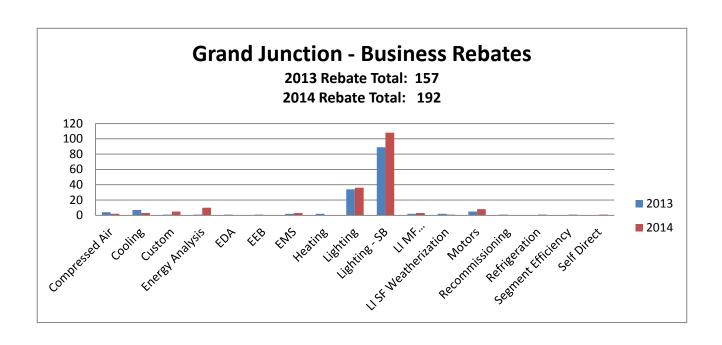
# **Appendix C: Community Rebate History**

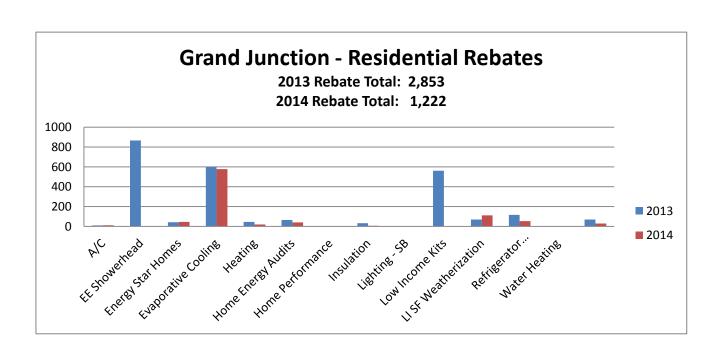
The Company uses a cloud-based software system, SalesForce, to track DSM rebate participation and that data was used to determine the participation lift resulting from the CEEP pilot.

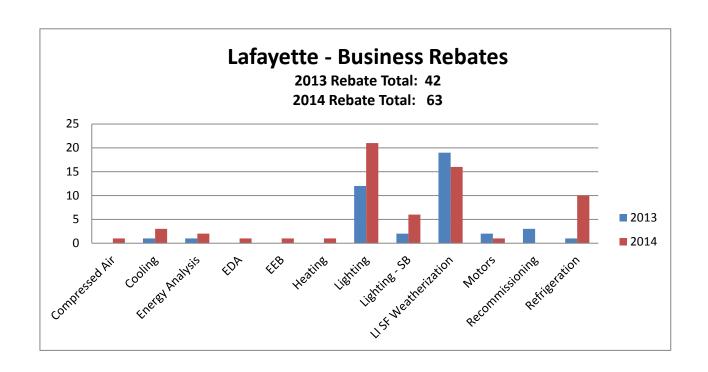
*Note:* Rebates that were forecasted to be finalized in 2014 were included in the tables below, however the data was compiled prior to year-end.

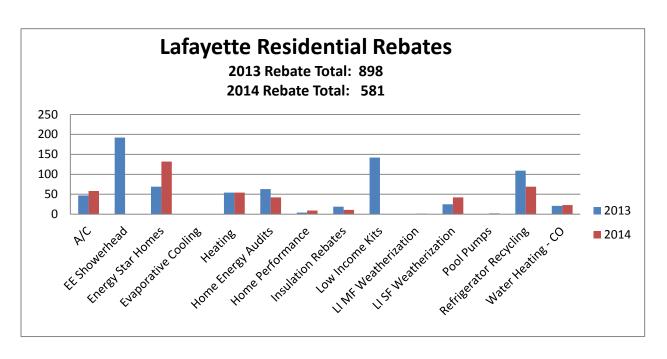


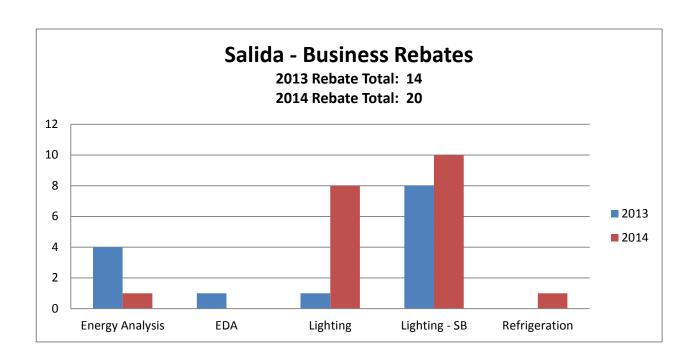


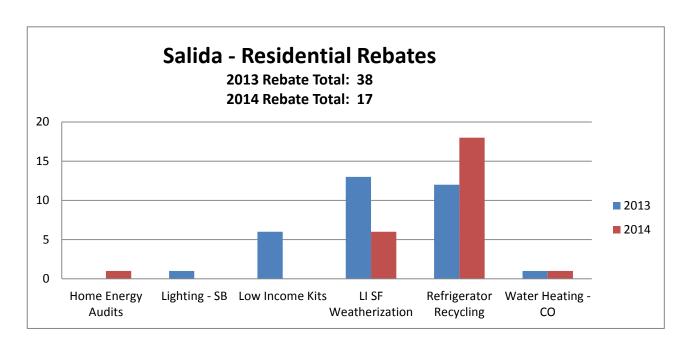












# Home Lighting & Recycling

The following table summarizes the total CFL and LED light bulbs sold through the program in 2013 and 2014 and the percent increase in participation between the two years. It is important to note that even if there was measured program lift, this is not necessarily due to CEEP activities. While it was determined that the lift in Salida, in particular, was due to CEEP activities, the lifts experienced in Aurora and Grand Junction were most likely due to other program marketing activities.

Table 12: Home Lighting & Recycling Bulb Sales

<b>Bulbs Sold</b>	20	13	2014		% Lift	
City	Jan-Sep	Total	Jan-Sep	Total	Jan-Sep	Total
Aurora Total	301,562	390,439	361,972	593,845	20%	52%
Grand Junction Total	95,375	136,858	117,579	172,659	23%	26%
Lafayette Total	17,171	20,049	15,185	23,272	-11%	16%
Salida Total	30	73	517	517	1,623%	608%
<b>Grand Total</b>	414,138	547,419	495,253	790,293	21%*	46%*

<sup>\*</sup>weighted average