Meeting Objective: Bringing energy efficiency strategies to small business can be a significant part of a community's comprehensive energy conservation program and help participating businesses keep costs down.

9:00 - 9:10  Welcome and Introductions

9:10 - 9:30  Climate Smart Loan Program for Commercial Buildings
Collin Tomb and Jeremy Epstein - Boulder County

9:30 - 9:50  Denver Energy Challenge
Sharon Procopio - Commercial Energy Program Administrator, City and County of Denver

9:50 - 10:10  Greening Lakewood Business Partnership – Business Energy Efficiency Program (BEEP)
Erich Harris - Sustainability Coordinator, City of Lakewood

10:10 - 11:00  Panel discussion, with questions from the audience

11:00  Adjourn
Speaker Biographies

Collin Tomb
Business Sustainability Specialist, Boulder County

Collin has specialized for 10 years in the design and analysis of low-energy architecture. In her role as Business Sustainability Specialist at Boulder County, she helps to develop EnergySmart's new business services and the trades and property owner relationships that help them succeed. She campaigned for and later managed the commercial round of the ClimateSmart Loan Program, and now manages the database of all participants in the EnergySmart services. Collin holds a BA from Harvard in Biology and a Masters of Architecture from the University of Utah.ctomb@bouldercounty.org

Sharon Procopio, P.E.
Commercial Energy Program Administrator, City & County Of Denver

Sharon works with the Department of Environmental Health to develop partnerships with other agencies, businesses, and non-profits to implement greenhouse gas reduction projects that support Denver's Climate Action Plan. As part of her efforts, she manages the Denver Energy Challenge for Businesses, which provides education, free support services, and financial assistance to businesses in the City and County of Denver. Sharon holds a Master's degree in Environmental Science and Policy from Columbia University in New York as well as a Bachelor of Science in Engineering from the University of Florida. She is a licensed civil engineer with 8 years of experience working on resource conservation and efficiency projects and programs in Wyoming, New Mexico, and Colorado.Sharon.Procopio@denvergov.org

Erich Harris
Sustainability Coordinator, City Of Lakewood

Erich directs and coordinates numerous sustainability initiatives for the City of Lakewood. He gathers input from many internal and external departments and entities within the city and region to further enhance the long-term health and economic vitality of the City. Erich has a Master's degree in Environmental Science in addition to a professional degree in architecture and a bachelor's degree in biology and chemistry. He has worked in the environmental regulatory, sustainability consulting, and architecture fields for the past 15 years and has worked on large-scale projects in China, Canada, and Europe.EriHar@lakewood.org
Questions are answered in two parts:

CSLP: Answers pertain to ClimateSmart Loan Program (PACE-type).

BCF: Answers pertain to the planned Boulder County finance program.

PROGRAM GOALS

CSLP: To lower the upfront costs of energy efficiency improvements in times of tight commercial capital. To stimulate energy-efficiency improvement work and create jobs. To make it possible for businesses to reap energy and cost savings from improvements to their buildings without having to own the buildings for the duration of the payback periods of those improvements. To reduce greenhouse gas emissions from the commercial sector in Boulder County.

BCF: The goal of the planned finance mechanism is to utilize the public funding (DOE Better Buildings Grant) to leverage private capital in order to make loans for energy efficiency improvements to homes and businesses with an emphasis on making the program easy and simple to interact with. The DOE funding supports the simultaneous goals of creating jobs, achieving market transformation, and achieving low cost energy use, and thereby carbon emissions reductions.

TARGET CLIENTELE

CSLP: Commercial property owners and developers and businesses who own their facilities. We found the program was primarily of interest to small and medium sized property owners. Large property owners have access to financing and therefor were not as interested in the program.

BCF: Homes and Businesses in the Boulder County and City and County of Denver who need access to capital in order to implement energy efficiency and renewable energy projects.

FUNDING SOURCES

CSLP: Boulder County Staff provided through general funds; Rebate Incentives from ARRA Better Buildings grant. In November 2008, Boulder County voters approved Ballot Measure 1A, referred by the Board of County Commissioners, which permits the county to sell up to $40 million in bonds to fund the ClimateSmart Loan Program. The loans are funded by the sale of bonds and will be repaid through
special assessments, included in individual property owner's property tax statements. The special assessments will remain with the property when the property is sold, unless the seller and buyer agree to an alternate arrangement.

**BCF:** This program is a marriage of public and private funding. The vast majority of the public funding is going toward a loan loss reserve. Through this finance mechanism, we ensure that the public funds take on first losses in the event of defaults. This is critical in that it helps us achieve leveraging of the private capital (sourced from Elevations Credit Union's liquidity, and Funding Partner's foundation partners) while also serving to lower potential interest rates for the program.

**SUSTAINED FUNDING**

**CSLP:** The program completed one round of bonding in 2010, and plans are for a non-Property-Assessed Financing Program for 2012, to encourage participation by tenants and property managers.

**BCF:** This is a revolving loan program, meaning that these funds will go out to borrowers, be returned upon repayment, at which point they are available to be loaned out again. As data on typical default rates begins to make itself apparent, we can adjust our interest rates to ensure we have a financially sustainable program.

**PROGRAM MANAGEMENT/OVERSIGHT**

**CSLP:** The Commercial CSLP was overseen by Susie Strife and Ann Livingston in the Boulder County Commissioners' Office of Sustainability, and managed by Collin Tomb (Boulder County Environmental Health and Emily Beam (Boulder County Finance).

**BCF:** Boulder County will act as the "manager" of this program, working very closely with our sub grantee City and County of Denver. This program is managed out of the County Commissioner's Office of Sustainability and administered by grant-funded employees such as Susie Strife and Jeremy Epstein.

**CRITICAL STEPS**

**CSLP:** Passing Ballot Measure 1A (2008) to set up the Local Improvement District (LID) for the assessments; Defining the bonding mechanism; Conducting a demand study; Targeting and marketing to property owners; Determining applicable Davis-Bacon Wages and assisting contractors in compliance.
Speaker Boulder County Climatesmart Loan And Finance Programs

BCF: Working with DOE-funded technical assistance provider Matthew Brown to develop the funding structure. His firm, Harcourt Brown & Carey, has experience developing and setting up similar programs in other localities. Once Matthew Brown had proposed a finance structure, Jeremy Epstein (in the Boulder County Commissioners' Office of Sustainability) was tasked with moving this along through the political structure in order to ensure compliance with both DOE grant fund and County government regulations. Jeremy Epstein co-wrote and helped release the RFP. Now working with Elevations Credit Union to develop the programmatic details and a marketing plan and negotiating contracts with all of the intended partners. Anticipate a soft-launch sometime in March and then a full launch mid-spring 2012.

KEY PARTNERS

CSLP: Bond Counsel Russ Caldwell, D.A. Davidson & Co.; Five-member Advisory Committee, drawn from commercial energy efficiency, green construction and development communities.

BCF: Boulder County; City & County of Denver; City of Boulder; City of Longmont, Elevations Credit Union; Funding Partners for Housing Solutions; and Harcourt Brown & Carey.

WORKAROUNDS

SLP:

1. Small target market & reluctant borrowers due to recession and the fact that large property owners had their own financing. Developed bonus rebate incentives of up to 70% of the project costs (combination of utility and ClimateSmart rebates) up to a cap of 10,000.

2. Warning issued by the Office of the Comptroller of the Currency to communities pursuing commercial PACE loans, July 2010. Issued new acknowledgements to be signed by borrowers and mortgage lenders.

3. Davis-Bacon Act invoked by involvement of ARRA funds; no Wage Decisions available for energy efficiency work. Worked through the chain of DOE and DOL authority to receive a decision as to which Wages could be used for which jobs. Required contractors to declare in their final bids the Wages they would use.
Speaker Boulder County Climatesmart Loan And Finance Programs

BCF:

1. We are not doing any direct lending of federal funds to borrowers, so we don't encounter the difficulty of administering the Davis-Bacon Act.

2. Federal funds also carry with them numerous reporting and compliance burdens (Historic Preservation, Utility Release data etc.). Asking the Credit Union to develop processes to address these stipulations became overly burdensome to the point where progress was at a standstill. We decided to require loan participants become a part of the EnergySmart program because the infrastructure is already in place to collect necessary information for full compliance. It was a trade-off of sorts, because originally we wanted this loan to be extremely easy for the potential borrower and for Elevations to be the one stop shop. The program will still be easy for the borrower; however they will be required to speak with an advisor, which isn't such a bad thing because this gives them access to free advising on which measures would most benefit them and help identifying rebates and other incentives to bring down the cost of the project.

SUCCESS STORIES

CSLP: Concertos in Chocolate; 1011 Walnut St; Boulder Beer

BCF: This is Boulder County's 3rd attempt at an ARRA backed loan program. The residential component of CSLP was shut down by Fanny Mae & Freddie Mac and other hardships have served to redirect Boulder County's efforts toward commercial sector solutions. An RFP was released when another financial institution expressed interest in working with the County, but no response was received. Just getting a response and stepping up to the negotiating table is a great success for us. This is a groundbreaking program that should serve as a national model for jurisdictions looking to both expend public funding and involve the private sector in order to create workable energy efficiency lending programs.

EXPORT OR EXPAND

CSLP: Property-Assessed loans can have a limited market in areas where most commercial real estate is leased rather than owned by the occupants. The "split incentive" (in which property owners own the building, but tenants pay the energy bills) can make it difficult to encourage longer-payback improvements (mechanical, envelope improvements) regardless of financing. Local regulations would
have to permit Special Assessments of the PACE type, or be modified by a vote. However, commercial capital that is accessible especially to energy-efficiency projects and is competitive in rate should be attractive to any businesses or property owners who are motivated to make improvements but can’t afford the upfront costs of these improvements.

BCF: This program is scale-able not just in model, but also in its own right. Elevations Credit Union is already looking to utilize the infrastructure created for this program to bring to other communities throughout Colorado. There has been talk of scaling things up on a national level once Boulder County’s program has proven successful.

**LESSONS LEARNED**

**CSLP:**

1. A loan program alone, even in times of tight commercial credit, was not enough to motivate potential applicants. Rebate incentives were necessary to entice businesses to participate in the program.

2. It is important to develop and share local case studies across a wide array of energy efficiency projects and building types.

3. Initial outreach can require significant staff time before word-of-mouth marketing begins to take place.

4. It is essential to make program offerings firm before communicating them to contractors or public.

5. Contractors will sell an attractive program to clients and use their knowledge of this program as a competitive advantage in the marketplace. For this reason, it is very important to ensure contractors have a positive first experience with the program, as they will be the engines of this and future programs and market transformation.

6. A program may induce more work than is actually completed under the program. Interest in the program itself can get people thinking about projects that they may then fund in other ways, so the program has a positive collateral effect.

7. The Davis-Bacon Act wage class requirements can be challenging to oversee and implement when there are many contractors and many small projects.
8. Businesses and nonprofits are complex and can take a long time to get decisions through multiple decision-makers, stakeholders and boards. Business owners and managers are busy running their businesses and may miss important details, so it may be necessary to double-check their applications in order not to lose applicants on a technicality.

9. Contractors are uncomfortable with the government stepping between them and their clients. They particularly dislike it when the paperwork requires them to break down their costs in a way that reveals their profit margin.

10. "Early adopters" are tenacious and will endure significant inconveniences to accomplish their projects. Our participants were asked to do significant legwork, absorb countless updates and delays, and sign daunting disclosures, yet most of them persisted through to origination.

11. We found tremendous success with the CSLP property-assessed loan with small and medium-sized property owners. With 21 projects and an investment of nearly $1.5 million in energy saving and property enhancing projects, by all accounts the program was very successful. We also believe that we have reached the majority of businesses in Boulder County that are interested in this type of financing so we are looking at ways to expand the program to encourage participation by tenants and property managers.

BCF: Never underestimate the need for marketing. Although the program has not yet launched, our extensive research on other energy efficiency lending programs reveals that 10-20% of program funds should go toward marketing. A program can be amazing, but if no one knows about it, then money won't move and your program cannot succeed. Nearly $750,000 is allocated toward marketing the program; a record amount for marketing in Boulder County and close to 10% of total loan program funds. However, this program is building on an existing brand and a good deal of work was already done through the development of the EnergySmart program last year.

FOR MORE INFORMATION

PROGRAM GOALS

The primary goal is to help participating businesses reduce their energy use by 15% or more by providing education, support, and incentives to motivate action. Reducing energy consumption saves money while also reducing greenhouse gas emissions, in alignment with the goals of the Denver Climate Action Plan.

A second goal is providing direct support to small business owners to help them thrive as part of the larger Denver community.

TARGET CLIENTELE

Most businesses and non-profits located in the City & County of Denver, including commercial tenants, owners and property owners that have multiple commercial tenants, are eligible. ARRA does not allow assistance to Medical Marijuana facilities, Zoos/Aquariums, Casinos, Golf Courses, or Pool facilities. Mixed-use residential/commercial buildings are not yet served, as sector specific goals and requirements are refined.

The primary focus is helping small businesses <50,000 S.F., or with fewer than 25 FTE. However, almost any business can participate in some way, with services tailored to the applicant's size and resources.

FUNDING SOURCES


Main Street Efficiency Initiative (also tied to ARRA) EPA Climate Showcase Communities

City & County of Denver - Department of Environmental Health

SUSTAINED FUNDING

For long-term sustainability, a fee for service model is being developed that will focus on city appropriate services and functions that have an associated financial value to the business community.
Denver Energy Challenge
For Businesses

PROGRAM MANAGEMENT/OVERSIGHT

Denver's Department of Environmental Health manages the program with an in-house team includes a grant/reporting administrator, a residential program administrator, a commercial program administrator, two commercial energy advisors, and a residential outreach coordinator.

CRITICAL STEPS

1. Identify stakeholders and networks to connect businesses to program resources, help promote the program and engage and motivate participants.

2. Obtain legal guidance on program elements and requirements to ascertain feasibility.

3. Pilot with a small group of willing participants to tackle "low-hanging fruit" e.g., lighting.

4. Collect success stories to share during program expansion.

5. Setup an online sign up form and website to share program details.

6. Adapt as needed!

KEY PARTNERS

In addition to the grant sponsors above, key implementation and outreach partners include the Mile High Business Alliance, the Mile High Youth Corps, Conserve-A-Watt Lighting, Xcel Energy, Denver Office of Strategic Partnership (DOSP), Greenprint Denver (including their Watts to Water program), and the general contractor community.

WORKAROUNDS

1. Developed a database to aid reporting and participant management through each step of the process.

2. Review program rebates and requirements seasonally to manage demand & ensure goals are met.

3. Working with Xcel Energy to identify the best ways to share information and promote programs.

4. Adapting as needed!
Denver Energy Challenge
For Businesses

SUCCESS STORIES

3rd Avenue Studio Sa/on - replaced 62 halogen lamps with efficient LEDs saving greater than 30% on utility bill

Emich VW - replaced parking lot lights with efficient LEDs and saving $12,000 a year on utility bill

1515 Restaurant - started with lighting upgrade project and have now worked with program on several energy efficiency projects, including efficient A/C units, to continue find ways to save energy

EXPORT OR EXPAND

Easily replicated if working with Xcel Energy.

LESSONS LEARNED

1. Start with clear goals and outcomes.

2. Research and learn from similar programs.

3. Identify and partner those who can connect businesses to the program's resources, help to promote it and engage participants.

4. Start with a small group of eager participants first to help develop processes and identify challenges

5. Keep it simple!

6. Be flexible and ready to adapt as needed. Try not to get mired too much in the details of every process/program element; allow things to take shape without trying to fit a certain mold too closely.

7. One size does not fit all - every location and program will have differing needs and opportunities to consider. You can't always replicate a program, so pick the best parts and try new things in combination to build a successful model for your community.

8. Share and celebrate successes to keep up momentum.

FOR MORE INFORMATION

http://denverenergy.org/business
Lakewood Business Energy & Education Program (BEEP)

The City of Lakewood and The Greening Lakewood Business Partnership, which consists of several business associations, local colleges and universities, and non-profit entities, are partnering with a goal of engaging 1500 local businesses to improve their energy efficiency and profitability. The BEEP initiative has engaged 180 of the 1,500 in the last year.

The Program utilizes commercial energy efficiency students from Red Rocks Community College and other local colleges and universities. The students are trained in soft skills by the non-profit The Learning Source and provided technical training and leadership in energy efficiency from highly trained instructors from colleges. This model provides a well-balanced approach to sustainability by making businesses more profitable (economic), preparing individuals for the job market (social), all while reducing the impact on the environment.

PROGRAM GOALS

1. Assist interested Lakewood businesses with energy efficiency to increase the economic vitality of the City.
2. Develop a program that creates potential long-term employment.
3. Develop soft skills in addition to technical training.
4. Create a program model that other colleges, universities, and energy coach professionals can utilize.
5. Increase profitability of Lakewood businesses and reduce their environmental impact.

TARGET CLIENTELE

Lakewood businesses <200,000 S.F. and non-home based businesses (though they are not excluded).

FUNDING SOURCES

ARRA Grant of $94,000

SUSTAINED FUNDING

The Learning Source used the first round of funding to develop cost/benefit data to leverage community economic development dollars and develop financing partners who will be able to finance up front cost of items with monthly energy efficiency savings.
The current business plan also engages lower-cost student interns who, under the direction of highly trained technicians, provide services at a much lower rate than similar efficiency programs. In turn, the students gain valuable and marketable hands-on experience.

**PROGRAM MANAGEMENT/OVERSIGHT**

The City of Lakewood, The Alameda Gateway Association and The Learning Source provide program management and oversight. The Learning Source is one of the nation's largest adult literacy training programs and specializes in soft skills training to assist individuals with job placement. Various local non-profits and colleges also have key leadership positions to both assist and develop the program further.

**CRITICAL STEPS**

1. Numerous meetings, brainstorming sessions, and collaboration among the partners/participants
2. Developing trusting partnerships within the city including politicians and city management
3. Finding initial funding source to develop the training and model architecture for program.

**KEY PARTNERS**

1. The Learning Source
2. Red Rocks Community College
3. Alameda Gateway Business Community Association
4. City of Lakewood
5. Other non-profits
6. Other colleges and universities
Lakewood Business Energy & Education Program (BEEP)

WORKAROUNDS

1. Working with XCEL Energy and state representatives to provide easier access to tenants.

2. Development of internal social media program to provide greater outreach, exchange of ideas, and accountability among businesses in the program.

SUCCESS STORIES

The Elks Lodge in Lakewood is a community-gathering place. The BEEP Program has engaged its members in behavioral occupancy training and made no and low-cost recommendations to the Lodge. Based on BEEP findings, the Elks Lodge will save up to 30% on their energy bill after all measures are implemented.

St Johns Hospice has provided a critical business in the community for over 40 years. The BEEP Program has identified low and no cost items that will save the business over 15% on their energy bills in the next year. This assistance will allow them to expand their mission of assisting citizens in our community.

The Action Center serves as a model for other nonprofits in the community. The energy coaches in the program performed a level 1.5 energy evaluation of the buildings with recommendations. Since that time, the Action Center has elected to obtain a higher-level energy evaluation and apply for grant funds to implement energy reducing upgrades to the buildings. The entire effort demonstrates the benefits of energy evaluations that lead to taking action - one of the priorities of local utilities and the BEEP program.

EXPORT OR EXPAND

Other jurisdictions can replicate this effort by developing partnerships with local learning institutions that specialize in energy efficiency programs, business sustainability programs, etc. To date, two organizations have requested collaboration and are currently in negotiation stages. If programs are initiated, ideally they would involve the local municipality and have a strong interdisciplinary/soft skills component.

LESSONS LEARNED

1. Make sure your end goal is creation of a program that demonstrates a great return on investment dollars.
2. It is ok to focus on just low or no cost energy saving measures, such as occupancy behavior training, lighting, and energy saving equipment

3. Don’t assume it is an easy process to gain access to energy data from businesses and utilities.

4. Identify existing partnerships or relationships among cities and local non-profits or business organizations from which you can begin developing a program.

5. Eventual development of a mass marketing/social media program is key

FOR MORE INFORMATION

www.lakewood.org/sustainability/beepBRO2smal.pdf