

Commercial and Industrial (C&I) Energy Efficiency Requirements Working Group

First Meeting - Thursday, Oct. 23, 2014

Summary of high level discussion items and questions that follow the meeting agenda.

Attendance:

City of Boulder Staff:

- Elizabeth Vasatka, City of Boulder
- Kendra Tupper, City of Boulder
- Colette Crouse, City of Boulder

Working Group Participants:

- Sam Cohen (Elevations Credit Union)—in charge of owned and leased facilities at ECU
- Andy Vissers (Covidian)—energy management for Covidian campus
- Jay Wratten (WSP)—specialty lighting design
- David Garabed (DBI Board Member and Deneuve Construction)
- Pam Milmoe (BCPH)—EnergySmart and PACE
- Russ Chitwood (Nexant)—C&I energy efficiency programs for Xcel Energy
- Lauren Smith (SWEET)—commercial building energy efficiency
- Amy Ellsworth (Cadmus)—energy efficiency program design
- Doug (Iconergy)—engineering, small building to large building permitting and projects
- Dan Powers (Boulder Tomorrow)—business advocacy; previously on staff at Boulder Chamber

Meeting Agenda

Introductions: Elizabeth

Ground Rules: Kendra

City of Boulder past commercial energy efficiency initiatives (voluntary):

- C&I: nearly 60% of Boulder GHG emissions. High priority for Council
- 10forChange program: private/public partnership; voluntary participation by businesses to reduce energy usage by 10% through no- and low-cost efforts
- Commercial EnergySmart program: began 2011; energy efficiency services to provide technical assistance and incentives to residential and commercial sectors. Now funded through City and County
- PACE (Partners for a Clean Environment) Program: an umbrella program—one-stop sustainability shop for businesses. EnergySmart will live under this brand. Relaunching PACE end of 2014

Overview of commercial building energy use rating + reporting:

- Same as benchmarking and disclosure programs
- 12 large cities in U.S. have already adopted rating and reporting ordinances
- Phased approach to ordinance which entails what size and types of buildings will report first and over the years. Standard practice is, city buildings lead the effort and starts, then private sector with largest buildings first.
- What framework will work for Boulder?

Commercial building energy use rating and reporting pilot program:

- 2012-2013 city performed a pilot program that included 40 buildings, working with 17 property owners.
- Biggest outcome, was we need better ways to access whole building energy data
- “non-residential” preferential to “C&I”—diminishes ambiguity and is quick, clear and standard

Meeting logistics and next meeting dates and times:

- Meeting downtown Boulder works for all.
- Friday afternoons work for most folks
- Scheduled next two meetings,
- **Friday, November 14 from 1-3 p.m.**
- **Friday, December 5 from 1-3 p.m.**

Questions:

- Interested in more details about the NYC program and how it's verifying adherence to prescriptive measures (Pam)
 - o Phased program, so not much reporting as of yet. Mostly impacting big businesses at this point in time, and now moving into impacting As we move forward, we'll work to connect w/ someone from NYC to hear more about the program.
- Are all cities using same benchmarking tool? Is the data consistent (Sam)
 - o Yes. Everyone's using ENERGY STAR Portfolio Manager, and EPA is encouraging everyone to use SEED for standardized platform for data/documentation. City downloads file from Portfolio Manager, and then puts that into SEED. This is how you can see who has complied, who has not, etc.
- Have any cities reduced their incentives for energy savings as a result of mandatory requirements? (Andy)
 - o No, no city has done that. As buildings are seeing the savings from efficiency, more interested in taking advantage of incentives being offered by investor-owned utilities = win-win for utilities, businesses and cities. Most cities have worked with their utilities to design the programs and upload the data. Xcel is not participating due to outdated technology that is incompatible with Portfolio Manager, so this is not an opportunity that Boulder can take advantage of at this time.

- What other cities besides Boulder are interested in passing ordinances?
 - o Pittsburg, Burlington, Phoenix (in same place as Boulder right now). Boulder and these cities and Boston and Cambridge have received USDN grant to share best practices and lessons learned regarding this process. Other cities: Cleveland, Berkeley, Salt Lake. Quite a few middle range cities. Mention of CECO and RECO and why not successful—now moving to replace with ordinance that requires rating and reporting (BESO). City of Denver implementing robust voluntary program launching this month.
- Sense of budget necessary for implementing R&R programs?
 - o Most cities have not added much if any resources and have been light on program administration. 1 to 2 FTEs fully dedicated and nothing has been outsourced—everything is being overseen by city staff. This is fairly easy to track so long as there’s no heavy reliance on prescriptive measures. Boulder has opportunity to learn from efforts of other cities and has learned from voluntary pilot program.
- How are we addressing mixed use buildings? Need to sub meter always/all the time? E.g. data center, office space, manufacturing, etc. in single building can create a data collection and analysis headache. (Sam and Andy have both had to address this).
- What are the limitations of the ENERGY STAR Portfolio Manager tool, especially with regard to space/use types? (Doug)
 - o Consideration of exemptions (e.g. restaurants) and how we can engage them
 - o Shouldn’t expect improvements to Portfolio Manager happening quickly, because EPA just did an upgrade that was 10 year in the making.
 - o We should list out limitations of Portfolio Manager software tool.
 - o This is a place to start that is standard and consistent across the country. Working to build a culture of building performance, data collection, etc. in the sector. We want to know what our energy use intensity (EUI) for different buildings is in Boulder, and how that compares to the rest of the county. (Elizabeth)
 - o EPA has provided information from all sectors, so even businesses that are an exemption can see EUI averages for sector
 - City could use data from Portfolio Manager and EUI from EPA to create curve for exempted buildings
- What are the metrics and benchmarks this effort will manifest? How do we know if we’re succeeding? What are the metrics of success? We will need to set expectations and goals and communicate the ‘why.’ (Dan)
 - o Is it a per building metric or an aggregate metric?
 - o Kendra—it’s both. Portfolio Manager normalizes data. Having this database will help to show if we’re making progress in this sector. Concrete—is EUI of buildings this year different than it was last year? Focus on efficiency first puts operational savings back in building owners’ pockets. You can get a better Portfolio Manager score even if you are using more energy.
- What if you bring in a new product line that’s very energy-intensive? (Andy)
 - o We’ll need to get creative with metrics and tie them to productivity. EUI doesn’t make sense for industrial and manufacturing. Need to brainstorm a metric that makes sense

- for industrial sector and can track the goal of doing more business with less energy. Focus on telling story of economic vitality/productivity AND building performance and energy efficiency.
 - Between codes and existing buildings, we want our building sector to be as efficient (and productive) as possible
- How do we separate energy savings through programs such as EnergySmart versus energy savings through ordinance? (Jay)
 - Will businesses trigger code compliance or will they fall under this ordinance? (Jay)
 - Imperfect but you can use deemed savings to get at where savings are coming from (Doug)
 - Our number one priority is to improve building performance, regardless of why buildings are doing it—we shouldn't care too much where the energy savings are coming from (Pam)
 - Rating and reporting ordinance will allow us to see if our codes are having the intended impact (Kendra)
 - Integrate building codes and this ordinance to maximally leverage both of these and pave the way for prescriptive measures down the road. We should think about this as a single program—not as two separate programs (Amy)
 - Seattle and other cities are moving toward performance based measures
- What's the quality metric to make sure that the building has done more than just comply with EUI? (Jay)
 - Kendra: if we moved toward EUI performance-based requirement, we would need to address quality.
- Are we talking about people meeting an EUI requirement? (Jay)
 - Kendra: Maybe in the future, but not at this time and it would be more than just EUI and we would need to do spot check audits.

Expectations and Outcomes of this Working Group:

- What's required of a building owner and what are their benefits to this requirement?
- What's the interface with the business person to interact with and the document that a building owner would need to fill out. We need to define what it looks like on front end and back end (Dan).
- More context around each of the options listed in the PPT and more information about ENERGY STAR Portfolio Manager
 - Demonstration of tool for Working Group since some people are more familiar than others
- Training program for those impacted by ordinance
- Kendra: probably won't tackle industrial at this time since we don't yet have a metric that also ties to their productivity.
- Discuss and identify appropriate exemptions or special requirements.

- Full communication plan around this effort: The requirement isn't going to be submitting just a score—it's information for business tenants that can help them make better leasing decisions.