

# City of Boulder Energy Services Working Group March 5, 2015

9:00 -11:00 am  
City Council Chambers  
1777 Broadway, Second Floor

## **9:10 – 10:00 am**

Update on Proposed Requirements for Rating & Reporting and Energy Efficiency for Commercial and Industrial Business Owners

## **10:00 – 10:20 am**

Update on Legal Develops and Changes to Group

## **10:20 – 11:00 am**

Feedback on Criteria and Brainstorming

## **11:00 am**

Next Steps/Assignments

## **Attendees**

- **Staff:** Yael Gichon, Todd Jorgenson, Jonathan Koehn, Kendra Tupper, Elizabeth Vasatka
- **Working group members:** Tim Beal, Martha Campbell, Brad Davids, Greg Ekrem, Jeremy Epstein, Chad Garrett, Eldon Haakinson, Doug Hargrave, Tim Hillman, Robert Hutchinson, Larry Kinney, David Kline, Josh Kuhn, Linda Olsson, Ted Weaver

## **Rating & Reporting and Energy Efficiency for Commercial and Industrial Building Owners – Kendra Tupper**

- Kendra Tupper provided updates on city initiatives for Rate & Reporting and Energy Efficiency
  - EUI: Energy Use intensity (lower EUI = more efficient/higher Energy Star Score)
  - Source Site vs. Site EUI
- Question on how buildings quantify multi-use buildings
- Question on one-to-one formula between Energy Star and EUI for single-use buildings
- Question on how many building “zombies” are in Boulder (buildings that lack managers to make decisions on energy use)
- Proposal Options

- Once a year collect whole building energy use data
- Enter or import data into EPA's Energy Star Portfolio Manager (ESPM tool)
- Share Portfolio Manager data with City of Boulder
- Xcel Energy plans to automatically update data input in 2015
- Ordinance applies to building managers, not tenants
- May only apply to buildings over 20,000 sq. feet
- Currently, would apply to buildings with more than 15 tenants, where one tenant can't account for more than 15 percent of the energy
- New York, San Francisco, Austin and Seattle have similar programs
- Raise up low performers, reward high performers (target bottom half)
- Improve quality of building stock
- Increase awareness of efficiency opportunities
- Going to present several options to Council for what buildings would be affected and when
- Efficiency Requirements
  - Option 1: Various prescriptive requirements
  - Option 2: Whole building performance standards
  - Option 3: Energy Assessment with no required action
  - Option 4: Energy assessments with limited required action (only lighting and retro-commissioning)
  - Option 5: Energy assessments with required action (custom to each building, based on what is deemed cost-effective)
- City aiming for IECC 2018 with an outcome based compliance path
- Question on fines for non-compliance
- Question on implementing trading/community efficiency
- Question on reporting linked to labeling protocol
- Question on public disclosure for buildings
- Comment that city staff should talk about fuel price forecast and discount rate when presenting to council
- Question on whether city can publish top twenty performing builders right away (low, median, high scores)
- Kendra Tupper says city looking to big property managers to examine case studies
- Question on city buildings upheld to same standard cream-skimming. Program should enable payback period to be extended
- Question on if a building falls below low threshold for Energy Star rating (ex: 30), property manager would have to pay offsets → could be used to fund subsidies for loan funds, internal programmatic funds, etc.

- Question on how EUI is computed and how a municipal electric utility would change program
  - Site EUI measures natural gas and coal
  - Source EUI measures carbon emissions
- Comment on “double-dipping” with Xcel Energy renewable energy credits from on-site solar generation and possible impact on Energy Star score
- Comment on providing the public with ideal benchmark scores
- Comments on building in information from Xcel on gas consumption (residential and commercial)

### **Update on Legal Developments**

Yael provided background information on council decision to go to file petition with the Colorado Public Utilities Commission. She said the working group could help by identifying barriers (legal, regulatory) and how to overcome them. She emphasized coming up with energy services during PUC filing phase will poise city for day one, if a municipal utility is created.

Question on shift in working group direction: what can the city do prior to Day One?

- Jonathan Koehn responded, saying going to the PUC can help city refocus on its parallel track. These initiatives can make up a “no regrets” strategy – things the city can do whether a city-run utility is created or not. The city can also explore where the boundaries lay and how the city can overcome them. The delay also emphasizes the importance of the climate-energy nexus for the city.

Question on timeline and CAP tax

- Jonathan Koehn said that city always knew they would have to go to PUC. This ruling is basically a “flip-flop.” The city is aiming to get filing in the next three to four months and expects the PUC filing to take a year – their primary concern is ensuring the safety and reliability of the proposed system. The city expects condemnation to take two year and hopes to launch a municipal utility at the beginning of 2018.

Question on budget for new short-term ideas

- Yael responded that city could find funding from other sources for innovative climate action ideas
- Kendra said city could also redirect some CAP funding.

Comment that driving efficiency will lower stranded costs for acquisition

- Jonathan Koehn said Energy Future staff will go to Council May 12. He said he is started to shift emphasis from municipalization to short-term energy initiatives. He mentioned the Resource Acquisition group is also working on short term ideas, and city wants both groups to work together to meet criteria.

### **Overall Objectives for the City:**

Demonstrate the city's ability to deliver high value energy-related initiatives that align with the community's energy goals, build on existing efforts, and show tangible and meaningful benefits to the community

- Be strategic around opportunities
- Use time delay of municipalization to implement new services
- Jonathan Koehn: Can we do things “behind the meter” to test real and theoretical limits?
- DUE Ready Grant: consultant putting together what resilient energy systems could look like in Boulder
  - Three projects identified for 2015
    - Conversion to DC, on-site storage, on-site generation
    - Nanogrids: water treatment plant, Boulder Community Hospital, Boulder Housing Partners
  - Reform existing policy
    - Consortium of ten communities to advocate for interests at PUC
    - Exploring what policy what needs to be changed (regulatory, legal) to achieve energy goals regardless of municipalization
  - How can the city site solar in the smartest locations?
    - Partnership with NREL using LIDAE data to estimate solar capacity
    - Can use data in different ways to strategize how solar will play into overall portfolio
    - E-gauges can show impacts on real-time production throughout city
    - Develop financing mechanisms as alternative to Xcel's Solar Rewards program, perhaps reinvesting in local community instead
- New Approach for Energy Services Working Group
  - Evaluate projects in achieving energy goals
  - Develop implementation plan
  - Communications plan → show ways city is working with the private sector
- Timeframe and Deliverables
  - Good set of projects and programs poised for 2015
  - Wants Energy Services group to offer ideas, but also think about how these programs will roll out in the next two years
  - Meeting with Resource Acquisition Group to coordinate and come up with more detailed plan

### **Discussion of “no regrets” strategy**

- Comment that city should start collecting energy use data buildings as soon as possible
- Comment that city should start coordinating with other city institutions
  - Jonathan Koehn responded, saying the city is playing a more active role in Sustainability Alliance with the county, BVSD, etc.

- **Question** on if shallow savings on many buildings vs. deep savings on fewer buildings
- **Recommendation** to revise Windsorce program – green pricing
- **Recommendation** that neighborhoods could tax themselves for green energy
- **Request** for the staff to identify “gaps” that the working group could specifically address
- **Recommendation** to launch neighborhood competition/sweeps that would empower community members. These could be run through a non-profit organization. One outreach tool could be mailing lists. The program could offer community based rewards (such as trees)
- **Question:** should working group members post individual research on Basecamp before presenting on ideas?
  - Kendra Tupper: members should contact staff if they want to present at the next meeting
- **Recommendation:** targeting schools has ripple effect at home
  - Jonathan Koehn: partnership with BVSD could be successful
    - Move ideas to proposals with more fleshed-out plans
    - Think about resources/relationships that can be leveraged.
- **Question:** can the city accelerate existing programs to trigger new financing options?
  - What is the status of PACE?
  - Try pilot where city purchase energy for ESCOs and help finance retrofits for small buildings (based off Seattle program)
  - Not guaranteeing performance, but incentivizing ESCOs to harvest as much energy as possible to sell back to the utility
  - Would having off-balance financing be attractive to businesses?
  - Could concierge services help business owners understand financing better?
  - Comment that moving away from rebate model to encourage efficiency may be more advantageous in the long term
  - Wholesale contract bundling – switch decision-making. Take actuarial approach
  - JK concerned that too much efficiency will place businesses in new tariff classes, actually costing business owners more money
    - Inflexibility in rate department
    - Build in funding subsidies
    - Group action at PUC can help
    - Pair with EV charging, but not one at a time
- **Comment:** Community sweeps are visible and engaging
- **Recommendation:** Targeting plug loads could be easy, achievable tactic
- **Recommendation:** Get better trades to serve HVAC in Boulder
- **Recommendation:** Meter energy efficiency makes utilities whole. Could be powerful mechanism
- **Recommendation:** Develop actuarial ESCO Boulder risk pool
- **Recommendation:** Worth researching working with one prominent local light company

- **Comment:** Labs, universities more driven by federal regulation.
- **Recommendation:** For labs, rate reductions by using energy efficiency overnight (running chillers, etc.) Start introducing ideas to CU Boulder in the short term
- **Comment:** go after heavy users first for rate & response
- **Comment:** City should think about how to audit cannabis industry
- **Recommendation:** could target mobile home communities as well as multiple-family housing
- **Recommendation:** look into developing performance-based codes and green pricing program → must make it easier for community members to engage with
- **Recommendation:** package additional incentives along with retrofitting
- **Recommendation:** with high costs for rent, City should be sensitive that businesses may move out of town if penalties are high
- **Comment:** benchmarking provides opportunity to identify opportunities in sectors, building types, etc.
- **Recommendation:** Source EUI and Site EUI must be clarified when talking to Council about standards. City staff should lean toward source EUI.

#### **Next Steps/Assignments**

- Next meeting is April 16 with Resource Working Group
- Continue to develop ideas to package in work plan