

**Commercial Building Energy Labeling Working Group**  
**Meeting Minutes**  
**January 10, 2020**

Attendees: Mike Crowley (EVT), Nicole Duquette (EVT), Gretchen Schimelpfenig (BED), Chris Burns (BED), Keith Levenson (PSD), Kelly Launder (PSD, via phone), Mike Russom (BED), Jen Green (BED), Keith Downes (Navigant), Randy Dury (3E Thermal), Geoff Wilcox (OEO), Craig Peltier (VHCB), Dan Edson (BGS)

Approval of Minutes from 12/6/19 meeting

- Approved by voice vote.

State of Benchmarking in Vermont (Mike Crowley and Nicole Duquette, Efficiency Vermont)

- Don't have benchmarking across all programs, only on a program by program basis
- Mostly large industrial, multi-use buildings
- What is the value of Building Energy Labeling for long term or institutional building owners? State uses portfolio manager to verify results of projects.
- Portfolio manager is fuel blind and doesn't distinguish between construction types or regions
- Have had good results but challenging to do comparison across buildings.
- Industrial are often benchmarked on a process basis, not on a square footage basis.
- Programs/Projects:
  - SEMP – Portfolio Manager has been a good tool for prioritizing efforts. Don't need/use benchmarking to sell a project. Focus more on comparing own buildings to each other, not comparing nationwide. (Dan E)
  - Benchmarked 95% of K-12 schools (about 300 schools). Portfolio Manager is good for setting baseline, which may be more useful than comparing to other schools in other areas.
    - K-12 schools are treated differently now, as a campus.
  - Healthier Hospitals program – some hospitals performed pretty poorly despite making energy efficiency improvements. Some used wood pellets and energy portfolio manager doesn't allow for certain adjustments when using wood, so calculations aren't correct.
  - Continuous energy improvement program – Do benchmarking at beginning of program to set baseline for program participants
    - Hospitals, breweries, and cheese makers were included in cohort.
    - Multi-family housing – Started program with focus on Energy Star certification, stopped offering ES certification about 7 years ago due to changes in rating requirements. Currently focused on new construction and EVT certification.
    - 6 breweries in VT – comparing across breweries was challenging due to different sizes, unregulated fuel use, etc. Benchmarking based on gallons of beer produced. Commitment to min. of 5% energy use reduction.
    - Waste-water treatment facilities – trying to find similarities to compare was difficult, and portfolio manager/sq footage comparison wasn't useful. Benchmarked 8 plants on kWh per million gallons treated and kWh per pound BOD removed
  - Deep Energy Retrofit – Goal is 50% total energy reduction. Used Portfolio Manager to assess baseline and efficient energy use, but in portfolio manager can't isolate New England or within state.

- Automatic Data Uploads – developed to automatically upload electric data with portfolio manager (unregulated fuels need to be uploaded manually). Inconsistencies in the databases caused errors. Couldn't maintain due to costs and resources.

#### State of Benchmarking in Burlington (Gretchen Schimelpfenig, Burlington Electric Department)

- Burlington has a benchmarking page on their website. Customers fill out form for automatic upload, so they can get energy consumption data. Share 3 years of previous data and then provide monthly. Covers all customers. Aggregated AMI data.
- 2030 districts have less aggressive goals than the city net zero goals.
- Focusing on city buildings as one of the largest users in Burlington. Benchmarking 12 city buildings initially and hope to eventually benchmark all city buildings.
- Developing Property Energy Plans (PEP) for some customers, using data from Portfolio Manager. Show what they have been doing that is working and what else they could be doing. These allow them to decide what the EUI baseline is instead of what Portfolio Manager has, which can be considerable different, even for the same type of building. The challenge is to get property owners to update Portfolio Manager.
- Plan to continue developing PEPs for Burlington buildings, all 12 city buildings now have PEPs.

#### Burlington Net-zero Roadmap (Mike Russom)

- Working in collaboration with VGS
- Discussed typical net-zero roadmap draft, that they hope to finalize and have publicly available soon.
- Have you discussed how you're going to define net-zero? (Craig P.) Answer (Mike R): Have discussed, it came down to cost. For now the target is for standard Weatherization practices.

#### Overview of Burlington's Time of Sale Energy Efficiency Ordinance (Chris Burns, Burlington Electric Department)

- Have information on BED's website regarding this ordinance.
- Only covers rental units where tenants are responsible for paying energy bills directly (85% of units in Burlington).
- This ordinance was put in place because there is no real motivation for weatherizing these buildings, particularly when they have such a high occupancy rate in the city.
- Try to avoid going into better performing buildings and focus on lower performing buildings.
- Time of sale is too slow of a churn because it only applies when the building is sold. So Burlington is trying to come up with a program where every building needs to go through an inspection process on a rolling basis and then make efficiency improvements.
- Is energy disclosure part of this process? The certificate would be included when someone does a title search. But no energy disclosure requirement.

#### Discussion Questions:

- What are the ideal building types for energy labeling? (e.g., office buildings, retail)
  - What are the ideal building types and sizes to start with?
  - In Boston, it's based on square footage.
- What exceptions should be considered? (eg., anchor institutions such as government buildings, hospitals, etc.)

- There are certain types of buildings or portions of buildings that may be difficult to benchmark or label. For example, it may be difficult to label hospital. But is unlikely to be sold so does it matter?
  - Should we be focused more on retail/office buildings?
- What aspects of buildings should be labeled? (e.g., portions of building covered by energy code, while ignoring other energy consumption such as industrial process)
  - How do we disaggregate process energy? And what percentage of buildings does that represent?
  - Propose limiting energy label to systems covered by energy code and eliminate process energy and EVSE.
- How can an energy label fairly represent strategic electrification?
  - How can the label represent strategic electrification without disincentivizing EVSE?
  - It was proposed to provide two numbers: energy cost and carbon, rather than MMBtu. Use gross assumptions for carbon that shows the benefit of electrification.
  - Carbon may be very difficult to measure depending on where you are.
  - May have to make some gross assumptions, shouldn't complicate too much
- Should we make a distinction between labeling and benchmarking.
  - Labeling communicates energy characteristics to others, especially a potential buyer / renter.
  - Benchmarking is for internal use, comparing a building's energy characteristics to similar buildings.
- What's our goal now? Need to get on the same page on what the focus should be and would be great to figure out who would be on what subgroups and get a leader of each group.
  - Could do sign up for groups over email.
  - Would like to try to get consensus on subgroups if we can today
  - What's happening elsewhere that we could replicate in VT? Who's doing it well? Agreed to add Group 4 on Research on other initiatives [See proposed subgroup, below]

Subgroup Proposal:

**Group 1: Building Assessors**

Tim Heney, Geoff Wilcox, Randy Drury

- 1) Requirements for building assessors, including endorsements, licensure, and bonding
  - Technical resource call center
  - QA provider
- 2) Programs to train building assessors

**Group 2: Building Performance Reporting**

Craig Peltier, Mike Russom, Phil Cecchini

- 3) Reporting requirements and records management for building performance scores
  - Data storage
  - Public access to labeled building results
  - Appropriateness and viability of publicly disclosing the results of benchmarking as defined in 30 V.S.A 61
- 4) Requirements to standardize information on a building label
  - Label Design

- Tenant lease language

### **Group 3: Management**

Mike Crowley, Dan Edson

- 5) Other matters related to benchmarking, energy rating, or energy labels
  - Benchmarking and labeling service statewide management, providers and process
  - Budgets for supporting the recommendations
  - Schedule that addresses development, field testing, and reporting back to the Legislature
  - The impact of benchmarking, energy labelling, and energy rating, upon the housing market and real estate industry in Vermont
  - Evaluation

### **New Group 4: Research Progress in other jurisdictions, other initiatives**

Jen Green, Mike Russom

- **Dan will reach out to National Association of Energy Managers, etc. for input. Mike Crowley will ask DCSEU staff.**