

OCTOBER 9TH 2024 - MEETING SUMMARY

Building Emissions Performance Standard (BEPS) Technical Rulemaking Working Group

Zoom Call 10AM-12PM

Present: Alistair Jackson, Caroline Traube, Edmée Knight, Evan Cobb, Gabriella Henkels, Luke Howard, Ian Brown, Irina Rasputnis, Joe Malaspino, Mark DiPaolo, Mel Knox, Nina Olivier, Rebecca Becker, Srini Pendikatla, Steve Abercrombie, Steve Schmidt.

Regrets: None.

City of Seattle BEPS and Facilitation Staff: Gemma Holt and Nicole Ballinger (OSE), Anna Kelly, Catherine Ozols, and Faith DeBolt (SBW), Kirstin Pulles and Sepideh Rezania (Unrooz)

Additional City of Seattle Staff (Observing): Ashley McCulley (OSE), Kelly MacAvaney (OSE), Kyle Berbel (OSE), Michelle Caulfield (OSE), Mike Roos (OSE) and Rebecca Baker (OSE)

Meeting slides are posted at: <https://www.seattle.gov/environment/climate-change/buildings-and-energy/building-emissions-performance-standard/beps-rulemaking>

Agenda:

Topic	Time
Welcome + Introductions <ul style="list-style-type: none">• Quick Recap of Meeting #3	10 mins
Review: Introduction to benchmarking verification data <ul style="list-style-type: none">• Data verification requirements in BEPS• Key findings from OSE data verification pilot	15 mins
Review: BEPS Qualified Person Requirements <ul style="list-style-type: none">• When a Qualified Person must verify data, and credentials for Qualified Persons	10 mins
Mentimeter Discussion: Fuel sources and utility meter verification	10 mins
Breakout groups <ul style="list-style-type: none">• Verifying whole building GFA• Verifying space use types and floor area	20 mins
Break	5 mins
Breakout groups <ul style="list-style-type: none">• Site visits by Qualified Persons	25 mins

Review: Ownership verification update • Update on ownership verification for private & nonprofit building portfolios	10 mins
Wrap-Up & Next Steps	10 mins

Working Group Discussions Summary:

1. What additional information may need to be collected to verify fuels used and meters in the building?

Topic: The current data verification requirements from the pilot program require building owners to:

- a) Identify all fuels serving the building, including energy used in all common and tenant spaces for heating, cooling, hot water, cooking and other activities
- b) Obtain comprehensive list of all utility meters serving the building
 - a. Via a building walkthrough to inventory all utility meters; referencing utility bills; or contacting tenants for meter numbers, addresses served, and utility providers
- c) Confirm meter list aligns with current energy meters and aggregate meter list(s) from utilities

OSE asked the Working Group about whether any additional information could be useful in verifying fuel use and meters in buildings.

Discussion: The following items were submitted via Mentimeter as possible pieces of additional information to be collected:

- Data center submeters
- Production meters for onsite generation
- Submeters (garage, data center and for Cycle 1 exclusions)
- Purchased district energy meters – ex. CenTrio, or district energy systems connecting multiple buildings
- EV charger info: # and type of associated sub-meters
- Semi-accurate consumption estimates for broken meters. Sometimes takes quite a while for utility to repair and estimates that are used are way off
- Tenant submeters for fuel (like kitchen gas) if we'll be allowed to exclude that data for compliance
- Pool submeters to exclude fuel for pool heat
- Verifying correct accounting of energy production, esp. if no production meters
- Deduct meters where there are ground leases for buildings on a campus without utility metering – this can be challenging in ESPM

2. What are acceptable sources / methods for reporting valid whole building GFA?

Topic: Accurate Gross Floor Area (GFA) is critical for correctly calculating GHGI, GHGIs, ACP, and penalties. GFA from the initial benchmarking verification is the BEPS official record for future compliance (unless a change is later verified). A benchmarking verification report will require a description of the data source for GFA. OSE recognizes need to minimize reporting burden while ensuring accurate data. The King County Assessor's records have some data accuracy issues.

OSE asked the Working Group to share additional sources, beyond King County Assessor Data, that can be used to report a valid whole building gross floor area.

Discussion: Working Group members expressed concerns about how conditioned spaces will be measured, since unconditioned spaces like parking garages should not be included. Another shared that they use Energy Star Portfolio Manager (ESPM) to calculate GFA. In ESPM, they include all vertical penetration while parking and non-enclosed storage is excluded. The data is validated by external individuals and are referencing BOMA calculations. They shared that most large commercial buildings will have BOMA calculations – but these are expensive. These measurements can also vary depending on how the GFA is measured, but BOMA calculations are how most large commercial buildings understand their GFA. Another member, though, expressed that most buildings under 100,000 SF will not pay for these kinds of measurements. The Working Group asked if a Qualified Person would be required to certify the GFA measurement, and were concerned that if so, this would mean three different points requiring verification by a Qualified Person. OSE expressed that this would likely not be the case. One member shared that they found 5 or 6 different certified GFAs for the same building – between the King County assessor, State database, architecture plans, Seattle Department of Construction and Inspections, and within their own records. They saw differences of up to 10%. They feel that consistent measurements of one building are likely. Differences in square footage could be a challenge when a building owner buys a building, gets a different measurement, and now finds themselves out of compliance with BEPS. Older buildings may have a lot of unconditioned or lightly conditioned storage space, and it is not consistent whether this is counted in GFA or how these should be approached. OSE reminded members that the BEPS legislation does not cover parking areas, outside bays, and docks. Bike storage in a parking bay, for example, would not be included. Another Working Group member shared that the King County records are not very accurate, and using those records will likely mean that fines are low as they often don't include additions and substantial alterations. They reinforced that measurements between different sources always vary. Small percentage differences aren't surprising. Some sources, for example, will include unconditioned spaces while others don't.

Recommendations:

- BOMA measurements
- State database

- Architectural plans
- Seattle Department of Construction and Inspections

3. What are acceptable methods for verifying space use types and floor area?

Topic: Space use types and floor area must be accurate, so buildings are using the correct building activity types when calculating GHGIT. The City's proposal from meeting 1 is that all secondary space uses greater than 5,000 square feet (SF) must be included as unique space use types. Space uses less than 1,000 SF should be combined with largest space type. Building owners can decide to either breakout or combine space uses between 1000 SF and 5000 SF. Data centers, laboratories, and restaurants must be included as unique space use types regardless of size.

OSE asked the Working Group to share methods which can be used to verify space use types, and the floor areas of those space uses.

Discussion: The Working Group voiced that alignment with Washington's CBPS is important. Washington State has published a library of 100+ property types and OSE could review table 7-4 to align property types between the two standards. Another member asked where the gross floor area can be found for their building, and OSE recommended reaching out to the benchmarking help desk. Another recommendation was to provide clear guidance for building owners on how to measure use spaces, if the documentation does not already exist. For example, does a Qualified Person need to do the measurement?

Suggestions for documentation that can demonstrate space use types and floor area for each type:

- Take-off drawings
- Drawings from surveyors
- Site visits
- Photos
- More recent buildings might be able to use permit data, code compliance, energy modelling, space maps, architectural drawings
- CoStar
- Fire evacuation floor plans can be a good starting point for older buildings as well

4. Should site visits by a Qualified Person be required for benchmarking verification?

Topic: A Qualified Person is responsible for all BEPS reporting:

- a) Verifies benchmarking data accuracy and makes corrections
- b) Submits greenhouse gas emissions (GHG) report for BEPS compliance
- c) If using, completes Decarbonization Compliance Plan

A "Qualified person" means a person having training, expertise, and at least three years

professional experience in building energy use analysis and any of the certifications or licenses outlined in Slide 16.

Qualified Person Credentials per BEPS

“Qualified person” means a person having training, expertise, and at least **three years professional experience** in building energy use analysis and any of the following **certifications or licenses**:

Credential	Organization
Professional Architect	Licensed in the State of Washington
Professional Engineer (PE)	Licensed in the State of Washington
Building Energy Assessment Professional (BEAP)	American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)
Certified Energy Auditor (CEA)	Association of Energy Engineers (AEE)
Building Operator Certification (BOC) Level II	Building Potential (formerly Northwest Energy Efficiency Council)
Certified Commissioning Professional (CCP)	ANSI/ISO/IEC 17024:2012 accredited organization
Certified Energy Manager (CEM)	Association of Energy Engineers (AEE)
Energy Management Professional (EMP)	Energy Management Association
Sustainable Building Science Technology Bachelor of Applied Science (BAS) degree	South Seattle College or other equivalent Bachelor’s degree program focused on commercial building energy management and conservation

As with Building Tune-Ups, building owners with in-house staff that can demonstrate they have the years of professional experience and have one of the certifications or licenses, may serve as a qualified person. Or the owner may use an external service provider.

The same person or provider who prepares and submits the energy benchmarking report cannot submit the data verification report

OSE asked the Working Group whether Qualified Persons should be required to do site visits at each building once for each compliance cycle, including the pros and cons and possible alternatives. The Working Group was split into two groups to discuss this topic.

Discussion:

During the question-and-answer period before entering breakout rooms, one member expressed concerns about how condominiums would be impacted by Qualified Persons requirements and asked whether OSE has engaged with property management companies about their ability to support multifamily housing with these requirements. OSE confirmed that property management companies are part of their stakeholder engagement process. Another member asked for clarification about whether the second Qualified Person review was new for BEPS, and OSE confirmed that this is a new requirement as compared with the tune-ups policy. Another member suggested that a standard requirement should be created to give guidance on how new certifications can

be added to the credentials list. A member also expressed that requiring two steps of Qualified Person verification means double the cost for building owners who are hiring externally for these services.

Group A: Working Group members shared some of the challenges of requiring site visits by Qualified Persons: added costs, buildings can be difficult to access in some buildings (schools, for example), visits can be redundant if the building has good documentation. There were some pros shared as well: a Qualified Person can be helpful if the building doesn't have good documentation. One member was surprised to hear that a Qualified Person is required to review data every compliance cycle. They were concerned that differences between how verification is done between cycles could impact a building's ability to meet the GHGIT as planned. Commercial real estate may be unique in that there is more change, and so a Qualified Person may already be on site. Random site visits could cause budget issues for smaller businesses or buildings by adding unexpected costs, while having Qualified Persons agree to site visits on request can avoid some of this uncertainty and surprise. Working Group members expressed that maybe portfolios and individual buildings should have different rules. Buildings in portfolio may be similar, so perhaps a certain percentage of the portfolio could be audited instead of the entire portfolio. One member explained that site visits in their own buildings led to them discovering discrepancies within their data, such as ghost meters (a term for meter readings that continue even after a meter is removed from the site).

Some alternatives to consistent site visits by Qualified Persons include:

- Require site visits only for buildings without high quality documentation
- Require site visits only for the first verification cycle or major changes
- OSE provides a site visit for free
- Flag buildings from the most recent tune-ups cycle with unusual/incorrect data, and mark them for site visit review
 - OSE notes that this would exclude multifamily buildings which are exempt from the tune-ups ordinance as well as commercial buildings under 50,000 SF

Group B: Working Group members expressed that companies not based in Seattle would face additional costs and expenses to coordinate local site visits. Site visits may not be the best use of a Qualified Person's time if the goal is data accuracy. Accurate data can be attained via someone who is already onsite and can share information via things like photos, videos, third party audit tools, and virtual audits. Also, green workforce development can be supported through an auditing process, for example, rather than by driving up costs for building owners. Another recommendation was for OSE to provide guidance to Qualified Persons so that site visits, if required, use consistent methods. A Working Group member voiced that some reporting errors through missing utility meters can be a challenge for accurate data and asked if site visits would be part of this process. OSE confirmed that missing meters is something a Qualified Person could address via site visits. Of the options listed below, Group B generally supported a random selection/audit approach to site visits, and an education and outreach approach.

Some alternatives to consistent site visits by Qualified Persons include:

- Building in quality assurance checks to the BEPS tool
- Have someone who is already on-site coordinate data collection
- Spot checking, auditing – random selection of buildings for a site visit
 - This could also be an education and outreach opportunity
- Levy fines for inaccurate reporting
- Education approach – sharing tools for accurate data, free helplines and office hours, etc.
- Send City Staff to the site only if someone requests support

Organized by:



Facilitated by:



Technical analysis by:

