



BEPS Working Group Session # 3- Technical Assistance and Training August 6, 2019

For this breakout session, our hope is to look forward into the future and discuss what would be necessary for you to succeed once BEPS is in effect. If an offering exists, how can it be expanded or improved? Or if a program doesn't exist, what would the program be and how would it implemented? Our goal is to discuss how help folks prepare and succeed when BEPS rolls out in 2021, not to gather information on how things currently are being done.

Topic # 1 - Auditing and Analysis

Planning for the Long Run

- Helping owners look past the 5-year BEPS cycle where they could get 2-5% to be compliant, thinking about long term savings to meet multiple years of BEPS
- DOEE involved in capital improvement upgrades
- There is interest in having projections about what the median will be in future years
- Work with auditors and consultants to make a long-term plan, looking past the 5-year cycle
- Problem- DCSEU don't offer auditing services because there is no associated savings
 - Maybe if you get an audit that is paid for if you do the recommendations, but if you don't do the recommendations, you pay for the audit with interest (loan forgiveness program)

Audits

- Assistance paying for audits
- DCSEU could have a standard payment assistance program - DCSEU doesn't have a standardized rebated for ASHRAE audits, but it would be nice if they did have one (x2)
 - Loan forgiveness for implementing ASHRAE upgrades
 - Might prefer incentives over a loan
 - ASHRAE 1 or ASHRAE 2? Disagreement over whether ASHRAE 1 was worth the money or not, some say it depends on what building we are talking about
- Checklist or guidance for consistent third party audits/gap analysis (e.g. what to look for when doing a lighting audit)
- There is interest in a list of auditors vetted by DOEE, but there is concern from DOEE about preferential treatment
- Need focus on building operations, not just engineering upgrades
- Pre-audits for buildings with low capacity/financial resources to get them comfortable with

utility data, telling apart utility bills

Technical Assistance

- Would like technical assistance on how to optimize Energy Star score through E Star assistance
- Pre-Construction, Design Assistance
 - Solar guidance/assistance
 - Design calculator tool
 - Is most of that not covered by code requirements
 - Helpful- forecasting out what BEPS will be, private groups are already trying to do this on their own
 - Concern that new buildings are immediately getting knocked out

Tenant Engagement

- Most building owners didn't seem to have thought much about tenant engagement, but recognized that a lot of the building's load comes from tenants, a source they cannot control
- Especially multi-family because of privacy concerns
- Green leasing? No one seemed familiar

Training

- Especially for building owners that are less sophisticated
- Basic assistance on how to read utility bills
- Building operations, not just engineering upgrades
- Training for building engineers (there is a shortage of qualified engineers)
- Training on auditing
- Training connected to enforcement

Key Takeaways

- Analysis should help the owners look past the initial 5 years. Long term strategies.
- Interest in a 3rd party vetted vendor list by DOEE
- Guidance for building owner on auditing and managing a vendor through the process
- Need Tenant/Occupant Engagement guidance and training
- Training focused on operations and maintenance

Topic # 2 - Training

Reflections on list of proposed trainings

- No one in any of the cohorts had taken any related trainings. Audience was diverse, but did not include any facilities maintenance or building engineer staff.
- Cost was frequent topic of discussion

- Suggested to be free for general training, minimal cost for advanced trainings to help ensure attendance
- Delicate balance between free and charging for training. Need based scholarships could address this challenge
- Should be free because it is required by law
- Those who are least engaged likely need the most support
- Providing certificate at completion is very valuable.
- Need clearing house for training to know what is available as it is hard to keep track – High Performance Building Hub was common theme
- Engineer training should be offered in person, hands-on – less comfortable with on-line training
- Two tracks – what is required, and how to comply. “What” is best offered free through DC government. “How” should come from others – especially a Hub, can have a cost.
- Would be helpful to keep trainers on contract to offer follow-up answers later. Longer engagement is helpful.
- Central clearinghouse for any/all offered trainings
- Building engineer turnover is high – continued training needed
- Fear of staff leaving after training is real, but could be offset over time as more and more people are trained.
- Can offer compliance incentives for staff that have been trained?

Currently offered, but needs improvement

- Assistance with ENERGY STAR Portfolio Manager
 - Enhanced version of help center? Proactive training?
 - Will need additional capacity to handle questions from all non-compliant buildings as most will likely want to double check their status. Will there be chance to appeal?
- Benchmarking training
 - Direct people to EPA Portfolio Manager training
 - Best practices on what to exclude and how to optimize. Good to come from DC government. Should avoid enabling projects to game the system.

Not currently offered

- Education on legislation and rules – what required to do, when
 - FAQ for engineers
 - Regular presentation to AOBA meetings/events (1x or 2x per year), and others
 - Office hours are OK – people seemed open
 - Webinars better received – especially if targeted to industry or trades
 - Similar to LEED study guide, BEPS for Dummies
 - Webinars won’t reach all audiences
- Funding and incentive awareness and education
 - Hub could serve as this central clearing house
- TA for affordable housing owners to get through retrofit process
 - EEFA “One-Stop Shop for the Multifamily Sector “ document from Todd Nedwick at NHT as model

- Similar to NYC Energy Coach model
- Education to other agencies (DCRA, etc.) as retrofits will require permitting and interaction with other sister agencies
- Data verification training
 - More interest if allowed to do the verification in-house. Less interest if required to outsource.
 - Standardize process for verification to level playing field
 - Provide list of trained providers
- Building engineer training
 - IE Real time energy management, etc.
 - 3rd party provider is best, as compared to employer
- Support to help owners/operators determine ROI on energy improvements – help them make business case
 - Pick one tool most helpful for calculating ROI
 - Could pair with financial incentive compilation
- Tenant and resident engagement
 - DOEE present, or provide webinar, to reach tenants directly
 - Could build on IMT Green Lease program
 - Especially in multifamily residential properties!!
 - How can DOEE help owners manage engagement
 - Sensors and tools vs behavior change
 - How bridge the gap between existing leases and potential to implement a new, green lease
 - Can fines pass through to resident tenants? That would get their attention.
 - 80,000 rent controlled buildings – most master metered. Can't pass along cost to residents. How to engage tenants?
 - District may have to revisit what costs can be passed along to rent controlled tenants.
 - Tenant engagement is a losing battle – industry is focusing less as it is learning that it's a losing cause.
 - Other participants feel there's a lot to gain from tenant behavior.
 - Case studies and webinars
- Retro cX training – deeper than simple retuning
 - Especially if offered as prescriptive pathway

Key Takeaways

- Cost was a frequent topic of discussion – delicate balance between free and charging small fee
- Need clearinghouse for list of available trainings (Hub)
- Two tracks; what is required (DOEE) and how to comply (others).
- Topics:
 - Energy Star Portfolio Manager
 - Benchmarking
 - Legislations and rules
 - Incentives/Financing
 - Building operators

- Tenant and resident engagement
- Green Leasing
- Retro-commissioning/retuning
- Tie topics to items on the prescriptive pathway

Topic # 3 – Informational/Networking

What are the in-person informational and networking needs that you have vs. what are the tools and resources that you need to have at your desk? In-Person – ex. facilitated conversations, peer-to-peer sharing sessions, and presentations followed by networking opportunities, and building tours. Tools & Resources – ex. case studies, guides, and checklists

In-Person

- Building Tours (especially for new technology) – not just for building owners and property managers, but also for facility managers and engineers to get the chance to see new technologies and solutions hands-on, and ask questions about challenges
- Working groups by building types held bi-annually to allow peer-to-peer sharing on challenges
- Hotline/help-desk (phone and email)
 - Specifically for BEPS requirements
 - Help on translating scorecards into next steps, including where to go for financing and contractors
- Open annual meeting, similar to the BEPS working group meetings that bring together different types of stakeholders and allow for peer sharing
 - Or regrouping in 2-3 years to share successes and challenges
- Webinar course/hybrid that is accessible – early topics should be on what BEPS is, what the specific thresholds are and compliance works. Later topics should evolve toward technologies, solutions and case studies
 - With quizzes
 - Financing and how it integrates with pro-forma
- Green Operator training, such as Building Operator Training
 - Be sure to target building engineers (as they are the gate-keepers to decision-making) for training, advertising, case studies
 - Training on facilities maintenance
 - Could offer the types of training that allow owners to claim one LEED Point for LEED EBOM
 - Ex. Miami does green operator training
- Peer-to-peer group/networking, such as a happy hour or networking event
- Outreach to commercial real estate brokers, as they are the key to transactional decisions

Tools & Resources

- Education on long-term planning – while BEPS cycles are five years, longer term planning to help

with larger capital projects that might help improve energy to the point that they comply several BEPS cycles ahead

- Share assumptions/estimate for the 10-year ENERGY STAR Score for long-term planning
- Scorecard be part of property valuation
- Resources for procurement, including sample RFP language for specific project types and sample costing estimates for specific project types (namely, the recommended project types that are on the prescriptive path)
 - Tools to solicit services
 - Off-the-shelf specs
- Feedback loop – Reddit forum, Google Groups or weekly listserv that is searchable by:
 - By building type
 - By technology
- Financing contact list/allies
- Financing case studies
- Tool for calculating savings or guide on cost estimates
- Case studies
 - In DC, regional, and beyond
 - Developed by neutral parties/pilot projects
 - Two types aspects of the case studies are important:
 - Very detailed and includes financing for facility and project-level staff
 - Executive summary that is one page and includes costs, savings and ROI
 - Technical details in the appendix
 - Include failures and challenges as case studies, or as components of the case studies (list of common challenges and how to overcome)
- Develop marketing materials geared towards non-technical people
- City-wide guidance with summary of how all of the regulations fit together (benchmarking/transparency, BEPS, other laws that touch buildings like permitting, taxes, water, etc.)
 - Online tool that spits out guidance – a building decision-maker could plug in information about their building (location, size, age) and receive a list of the laws that they need to comply with and when
- Send out information about the need to comply with BEPS with the tax bill
- Incentives/rebates
- Expedited permitting process
- Demand response strategies
- On-bill financing
- Bundled conservation measures – which recommended ECMs make sense to do at the same time?

Key Takeaways

- People want a human-element, either in terms of a hotline or email, and also in terms of peer-to-peer sharing
- A common theme we heard in all sessions was that very detailed case studies with a one-page summary would be helpful

- Pairing case studies with resources for procurement or off-the-shelf specs/products could also be powerful
- Accessible webinars and trainings are always helpful
- We should create a weekly listserv or forum for people to discuss and build an online community that can crowd-surf answers to questions (searchable by building type or by technology)

Topic # 4 - Dystopia

DCSEU, Green Bank, DOEE help center, High Performance Building Hub DON'T EXIST!! What if nothing is provided for technical assistance and training, what is your plan? Who are you going to ask for help?

Who would you ask for help?

- Hire a consultant!!
- Call DOEE
- Ask peers
- Google*
- DCRA commissioning agent vendor list* (need a DOEE energy service vendor list)
- Look at existing relationships
 - Architect (design team)
 - Energy Service consultants
- Associations
 - AIA – District Architect Center
 - AOBA/BOMA
 - BPI
 - IFMA
 - AEE
 - APPA/AASHE
 - Licensing boards
 - ASHRAE
- Others
 - ULI
 - BIDS
 - EPA Energy Star
 - National Labs
 - USGBC
 - AWMA
 - Federal Energy Management Program
 - Energy Supplier (utility)
 - Universities – continuing education
 - Schneider Electric online training
 - Local 99 union

What are you asking for?

- Lessons learned
- Publicly available database of energy service vendors
- Training assistance
- White Papers