



Building Performance Improvement Board

6/7/2023

Learn more at <https://www.montgomerycountymd.gov/green/energy/beps.html>

Agenda

- **Administrative items**
- **Recap actions from previous meeting**
- **Renewable Energy Allowance:**
 - **Offsite renewable energy considerations**
- **Baselining data quality considerations**



Administrative Items

Actions

- Approve 5/24 meeting notes

Actions

- Travel reimbursement forms due to Emily **ASAP**
- In person attendance through 5/24 →
- Receipts not required

Name	in person meetings through 5/24
Jill Goodrich	1
Adam Landsman	6
Julie Wolfington	6
Josh McClelland	6
Edward Musz	12
Gregory Goldstein	4

Actions

- Draft Board report on Building Performance Improvement Plans

Actions

- Meeting cadence moving forward
- Meet 3rd Weds of month moving forward?
 - July 19
 - August 16
 - Sept 20
 - Oct 18
 - Nov 15



Previous Meeting Recap

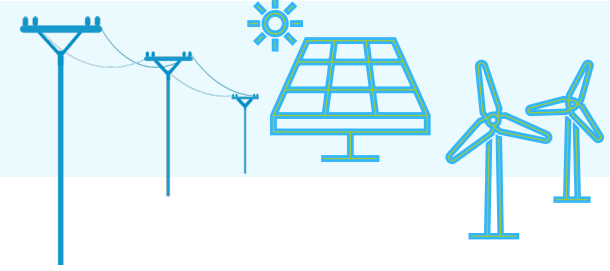
MDE Draft Regulations

- Discussed and provided notes to MDE on draft BEPS regulations

Offsite Renewable Energy Options

- Discussed offsite renewable energy options
- Most members that voted were in favor of providing a Renewable Energy Allowance for offsite renewable energy
- Somewhat split between what sources should count:
 - 7 favored alignment with Maryland RPS Tier One sources
 - 5 favored a County-developed list of sources: Three members preferred a more limited list (e.g., only solar and wind); Two members preferred an expanded list beyond Maryland RPS to include MRETS credits (certified renewable natural gas credits).
- Have yet to discuss/poll on locational boundaries and contract types

Offsite Renewable Energy: Characteristics of RECs



Locations

- RECs can be obtained from anywhere in the country (e.g. wind farm in Iowa).
- Many policies (e.g., RPS) place narrower geographic boundaries (e.g., in the same electricity market or state) on what RECs will count towards policy achievement.
- **The County will need to determine what, if any, limits to place on the location of the projects creating RECs that are eligible for the REA**
- **Strong stakeholder consensus that offsite projects closer to the County or integrated in closer contact to the County's electrical grid infrastructure be given a higher allowance than projects further away or in other grid systems**

Renewable Energy Allowances in Other Jurisdictions

Jurisdiction	BEPS Metric	Renewable Energy Allowance
City and County of Denver, CO	Weather-normalized site EUI (see 3.5 Renewable Credit)	Solar and wind; regardless of REC retention; onsite & long-term contracts (>5 years) fully credited; short-term contracts limited to up to 20% of the building's electricity usage and dropping to 0 credit by 2030; offsite = voluntary renewable energy program offered by Xcel Energy OR a community project located in Public Service Company of Colorado territory
City of St. Louis, MO	Weather-normalized site EUI	No allowance
State of Washington	Weather-normalized net site EUI (building net energy calc on p. 10)	Onsite allowance , regardless of REC retention (just requires "net" energy to be reported)
Washington D.C.	ENERGY STAR score	No allowance or equivalent for renewable energy (ENERGY STAR score reflects some benefits of onsite RE in lower source EUI/higher ES score)

Offsite Renewables: Locational Boundaries

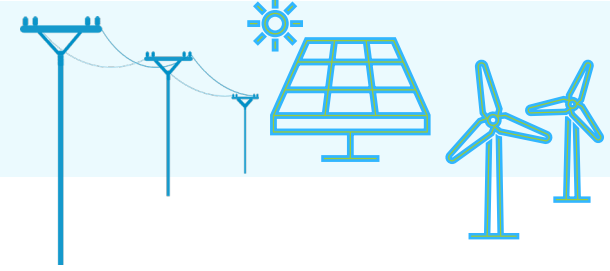
IF offsite renewables are allowed, should location of the offsite generation matter?

- Stakeholder consensus that offsite be given a lower allowance than onsite
- Strong consensus that offsite projects closer to the County or integrated in closer contact to the County's electrical grid infrastructure be given a higher allowance than projects further away or in other grid systems
- Denver limits credit to voluntary RECs obtained via an Xcel Energy program or a community project located in Public Service Company of Colorado territory only (no credit for projects further away)

Options

- **Option 1: Fixed location factor for any offsite renewable energy to discount it relative to onsite generation** (e.g., offsite REC * 0.5 for half credit, * 0.25 for quarter credit, * 0.10 for 10% credit)
- **Option 2: Provide two-tiered location factor: Least favorable location = within PJM, most favorable location factor = within Maryland** (e.g., within PJM = 0.5 factor, within MD = 0.75 factor)
 - *Using a location factor for the County or electric utility boundaries could create additional administrative burden since some RECs may not have location granularity easily accessible.*
- **Option 3: Provide three-tiered location factor – outside PJM, within PJM, within MD** (e.g. outside PJM = 0.25 factor, within PJM = 0.5 factor, within MD = 0.75 factor)
 - *Same issues as above with location info requirement creating additional administrative burden.*

Offsite Renewable Energy: Characteristics of RECs



Contract Type/Terms

- RECs can be procured in many ways. The contract type and duration can influence the type of benefits being conveyed.
- **County needs to determine what kind of contract types and durations are eligible for REA.**
- **Strong stakeholder consensus that certain renewable electricity procurement types with more direct renewable energy contributions be allotted a higher allowance than other procurement types.**
- **Specifically, stakeholders supported multiyear power purchase agreements and community solar commitments being allotted a higher allowance than the purchase of unbundled RECs.**

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Offsite Renewables: Transaction Types

IF offsite renewables are allowed, should transaction type and duration (contract length) matter?

- Strong consensus that some procurement types be allotted a higher allowance than others. Multiyear power purchase agreements and community solar commitments > unbundled RECs.
- Denver provides full credit for long-term (5-year) subscription, lease, or purchase of a share in either a voluntary renewable energy program OR a community project. Short term (min. 1 year) subscriptions can offset up to 20% of electricity use through 2026, 10% of elec use through 2029, and 0% after 2029.
- Option to provide a “procurement factor” to credit different transaction types differently:
 - **Option 1: No factor** – all offsite RE counted the same regardless of transaction type
 - **Option 2: Custom Factors:** Provide a custom set of tiered procurement factors to RECs based on the length and type of the agreement.
 - **Option 3: Code Alignment:** Align the procurement factors with existing 2021 International Energy Conservation Code’s Zero Energy Commercial Building Provision Procurement Factors

Table 3 Overview of 2021 International Energy Conservation Code’s Procurement Factors¹⁰

Class	Procurement Factor (PF)	Procurement Options	Additional Requirements (see also Section CC103.3.2)
1	0.75	Community Solar, REIFs, Virtual PPAs and Self-owned off-site	Various depending on option selected
2	0.55	Green retail tariffs & Direct Access	The offering shall not include the purchase of unbundled RECs
3	0.20	Unbundled RECs	The vintage of the RECs shall align with the building energy use

Offsite Renewables: Under-Resourced Buildings?

- Lower-resourced building owners almost certainly sell SRECS to boost onsite renewable energy economics
- May be more likely to engage in a solar PPA (no up-front cost of installation)
- May not have the means to purchase offsite green power (where there are no incentives or payback like for efficiency or on-site renewable projects)
- Stakeholders suggested the allocation of additional resources for under resourced buildings, such as technical assistance, and options for additional pathways to support their BEPS compliance

- **Additional thoughts on how to apply REA for under-resourced buildings?**
- **Thoughts on technical assistance or additional pathways for under-resourced buildings?**

Options and Decision Points: Offsite Renewables

- Should there be a cap on the allowance given for offsite renewable energy (regardless of location, procurement type, etc?)
- For example, an all-electric building purchases RECs for 100% of their electricity use via a virtual power purchase agreement from a solar array in MD. They would potentially be eligible for a large reduction in net site EUI based on their renewable energy allowance. Should the credit they can claim for the REA be capped?
 - Yes
 - No
 - If yes, **opinions on the cap amount?** (Denver caps offsite, short-term contract credit at 20% of the buildings electricity use)



Baselining Data Quality Considerations

Baselining Overview

- BEPS baselines average the two highest site EUIs out of the baseline period
- County, Group 1, and Group 2 baseline period is CY 2018 – CY 2022
- DEP can begin creating baselines for these groups now that many buildings have reported CY 2022 benchmarking reports
- Strategizing on how to treat some data quality concerns
- Exploring how to best communicate historical data, baselines, and targets to building owners

Discussion

Helpful Links

- [Benchmarking and Performance Standards Law](#)
- [Benchmarking Website](#)
- [BEPS Website](#)
- [Building Performance Improvement Board Website](#) (will include agendas, notes, and presentations)
- [BEPS Stakeholder workgroup + report](#) – completed before bill was introduced to gather stakeholder input on BEPS policy elements
- [BEPS Technical Report](#) – outlines options for site EUI targets by building type group and assesses feasibility and costs in representative case study buildings
 - [Presentation](#) of BEPS Technical Report to Council Transportation & Environment Committee
- [Allowance for Renewable Energy Technical Report and Recommendations](#) - provides information on determining how a renewable energy allowance should be defined and implemented within BEPS regulations
- On weather and business normalization:
 - [EPA technical reference guide on weather normalized energy use](#)
 - [EPA's Recommended Metrics and Normalization Methods for Use in State and Local Building Performance Standards document](#)

Helpful Links (continued)

- [Maryland Clean Energy Center 10/25 Webinar, Solutions to Achieve Building Energy Performance Standards recording](#)
- [Maryland Department of Environment BEPS page](#)

Questions?

Emily Curley

Building Energy Performance Programs Manager

Emily.Curley@MontgomeryCountyMD.gov

240-777-7707

BPIB Webpage

<https://www.montgomerycountymd.gov/green/energy/bpib.html>

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