



Where BEPS meets Code

What you need to know.

Will a 2017 DC Energy Conservation Code (DC ECC)-complaint building meet the BEPS threshold?

The short answer is that it depends on building typology and whether short- or long-term compliance with BEPS is a goal of the project. Given that ENERGY STAR score is a mix of contributing factors around energy use, energy source, and occupancy density, the DC ECC will only benefit the energy use impact of the score. The operations and human density will need to be determined through lease agreements (offices) and design decisions (multifamily).

Commercial Office. It is highly likely that commercial office buildings built under the current code would meet the thresholds for the first BEPS period. However, it is not a guarantee, and it's quite possible that an office building constructed to current code-minimum standards would only be compliant in the first cycle of BEPS, and may not be compliant long term as the standards ratchet up over time.

Multifamily Housing. It is, unfortunately, more likely that multifamily housing built to current code minimums would not meet the BEPS threshold, even in the first compliance cycle. The performance ranges are more varied depending on size of units and the unit mix in a building. These buildings would be considered compliant with DC ECC, but not necessarily with BEPS.

How should you think about this issue?

The code is full of minimums and achieving better performance is often within reach using generic, off-the-shelf equipment and ready-made solutions. It is even more critical for multifamily housing building owners and designers to carefully consider target performance ranges and determine what is required based on the building's characteristics. The earlier this is evaluated, the less costly it will be to make improvements.

How do you set efficiency targets for new construction?

When planning for higher levels energy performance, a project team must define an energy performance target early in the project process. We recommend using site energy use intensity (EUI) as the performance metric to track throughout the project. The intent is to reference and further refine this energy performance target throughout the design process.

However, the District's BEPS regulation references ENERGY STAR scores. ENERGY STAR scores are calculated based on source energy and various building specific operational characteristics, such as density and operational hours. We recommend using the EPA's Target Finder tool to identify a range of high-performance targets.

Site EUI

The site energy use (the annual amount of all the energy your property consumes on-site, regardless of the source divided by the property square foot.

Source EUI

The source energy use (the total amount of all the raw fuel required to operate your property) divided by the property square foot.

I just built a new building. Am I required to comply with BEPS?

A new building becomes an existing building as soon as it's built. If you are required to benchmark, you must start doing so the calendar year after receiving your Certificate of Occupancy and once a full calendar year of utility data can be collected. After a full calendar year of benchmarking data has been reported, a new building will be compared to the Standard at the beginning of the next BEPS period.