

Circular Letter No.: 2018.147 (Revision 2)

Issue Date: 14 May 2018

Revision Date: 3 May 2019

Application: BEAM Plus NB Version 1.1 & 1.2

BEAM Plus EB Version 1.1 & 1.2

BEAM Plus EB Version 2.0 Comprehensive Scheme and Selective Scheme

BEAM Plus BI Version 1.0

Effective Date: 3 May 2019

# Compliance of Building Energy Code & Energy Audit Code and Baseline Criteria for Energy Simulation

The Circular Letter clarifies the assessment requirement on the following pre-requisites and credits, which relates to the compliance of Building Energy Code (BEC) & Energy Audit Code (EAC) and the baseline standard for energy simulation:

- EU P1, EU 1 & EU 2 under BEAM Plus New Buildings v.1.1 & 1.2.
- EU P1, EU 1 & EU 2 under BEAM Plus Existing Buildings v.1.1 & 1.2.
- EU P1 & EU 2 under BEAM Plus v.2.0 Comprehensive Scheme and EU 2 under BEAM plus v.2.0 Selective Scheme
- EU 1 under BEAM Plus Interiors v.1.0
- 1. Technical Circular Letter No. 2016.132 dated 19 April 2016 and 2016.133 dated 13 May 2016 are hereby withdrawn.
- 2. All submissions regarding the abovementioned pre-requisites and credits shall observe the requirements as indicated below:

## **BEAM Plus New Buildings v.1.1/1.2**

- 3. The assessment criteria for <u>EU P1</u> has been clarified as follows:
  - i. For <u>ALL projects</u> undergoing <u>Provisional Assessment (PA)</u>, the Applicant shall provide (a) an undertaking letter endorsed by the developer or the project's Registered Energy Assessor (REA) or (b) duly completed Form EE-1 endorsed by developer or project's REA or (c) approval records of Stage One Declaration issued by Electrical and Mechanical Services Department (EMSD) declaring the BEC Edition that the building service installations in the development intends to follow<sup>2</sup>.

<sup>&</sup>lt;sup>1</sup> Developer means the owner of the land on which the building is built or will be built, in relation to a building or a proposed building. It shall have the same definition as the "Name of Owner / Developer" on the Project Information Fact Sheet.

<sup>&</sup>lt;sup>2</sup> The wording of this paragraph has been updated on 3 May 2019.

- ii. For *new building projects* undergoing Final Assessment (FA), the Applicant shall provide approval records on Certificate of Compliance Registration (COCR) issued by EMSD confirming the BEC Edition that the development has complied. If the project falls under Section 4 of the Building Energy Efficiency Ordinance (e.g. buildings not subject to the application of Building Energy Efficiency Ordinance), the Applicant shall then provide a finalized energy analysis report or relevant Technical Forms (i.e. Form EE-SU, EE-LG, EE-EL, EE-AC, EE-LE, EE-PB, etc.) checked and certified by the project's Registered Energy Assessor (REA) to confirm that the building complies with the same BEC edition as approved in PA.
- iii. For <u>Major Retrofitting Works (MRW)</u> undergoing FA, the Applicant shall provide the Form of Compliance (FOC) accompanied by the relevant Technical Forms (e.g. Form EE-SU, EE-LG, EE-EL, EE-AC, EE-LE, EE-PB, etc.) to confirm on the building service installations' compliance with the prescribed BEC edition. All data within the FOC and its relevant Technical Forms shall be checked and be certified by the REA. Evidences to demonstrate that the FOC and the relevant Technical Forms have been submitted to EMSD for records shall also be provided to demonstrate the compliance of the credit.
- 4. The methodology of the energy simulation for <u>EU 1 & EU 2</u> has been clarified as follows:
  - i. <u>BEC as baseline standard</u>: If the Applicant intends to adopt BEC as the baseline standard for energy simulation, the Applicant shall follow the same BEC edition as declared/confirmed under pre-requisite EU P1.
  - ii. <u>ANSI/ASHRAE/IES 90.1 (ASHRAE Standard 90.1) as baseline standard</u>: If the Applicant intends to adopt ASHRAE Standard 90.1 as the baseline standard for energy simulation, the Applicant shall follow the latest edition of ASHRAE Standard 90.1 coming into effect at the time of first assessment submission<sup>3</sup>, **except for lighting**. For lighting, the Applicant should adopt latest edition of BEC coming into effect at the first assessment submission. Subsequent assessments<sup>4</sup> shall follow the same edition of ASHRAE Standard as approved in PA.
  - iii. <u>Approved PA projects</u>: For projects that have already completed PA and with specific baseline standards approved, the Applicant can continue to adopt the same baseline standard in preparing the energy simulation for subsequent assessments. For the avoidance of doubt, the Applicant shall provide relevant justifications (e.g. extract of the PA report, extract of energy simulation report submitted during PA, etc). during subsequent assessments to demonstrate that the energy simulation submitted for FA is utilizing the same baseline standards as in PA.

## **BEAM Plus Existing Buildings v.1.1/1.2**

- 5. The credit name for EU P1 has been renamed as Energy Audit.
- 6. Technical Review Committee will accept energy audit report conducted in accordance with the EAC as an alternative in complying with the assessment requirement under <u>EU P1</u>. If the Applicant intends to adopt this method for assessment, the Applicant shall observe the following requirement:

<sup>&</sup>lt;sup>3</sup> First assessment submission refers to the date when the initial assessment is formally accepted by BSL. For example, if the project has both PA and FA, then it would be the date when BSL formally accepts the project for PA submission. If the project has only FA, then it will be the date when BSL formally accepts the project for FA submission.

<sup>&</sup>lt;sup>4</sup> Subsequent assessments refer to the assessment conducted after the completion of the PA (e.g. PA reassessment, FA, etc).

- i. The date of completion of energy audit<sup>5</sup> must be within the past 5 years of first assessment submission (e.g. If the first assessment submission is submitted on 1 January 2018, then the energy audit must be completed after 1 January 2013)<sup>6</sup> with the energy audit conducted using the latest EAC edition available at the date of commencement of energy audit<sup>7</sup>.
- ii. The form must be endorsed by a REA with REA registration number stated in the report.
- iii. The energy audit report must include all elements as stipulated in the Code of Practice for Building Energy Audit issued by EMSD.
- 7. The methodology of the energy simulation for <u>EU 1 & EU 2</u> has been clarified as follows:
  - i. Registered projects that have made the first assessment submission before 11 December 2016: The Applicant shall adopt BEC 2012 or ASHRAE Standard 90.1-2007 or equivalent as the baseline standard, except for lighting. For lighting, the Applicant shall adopt BEC 2012 as the baseline standard. Subsequent assessments shall follow the same edition of BEC or ASHRAE Standard 90.1 as approved in the PA submission.
  - ii. Registered projects that have made the first assessment submission on or after 11 December 2016: The Applicant shall adopt the latest edition of the BEC or ASHRAE Standard 90.1 or equivalent standard(s) prevailing at the time of the first assessment submission as the baseline standard, except for lighting. For lighting, the Applicant shall adopt the latest BEC edition prevailing at the time of the first assessment submission as the baseline standard. Subsequent assessments shall follow the same edition of BEC or ASHRAE Standard 90.1 as approved in the PA submission.
  - iii. <u>Approved PA projects</u>: For projects that have already completed PA and with specific baseline standards approved, the Applicant can continue to adopt the same baseline standard in preparing the energy simulation for subsequent assessments. For the avoidance of doubt, the Applicant shall provide relevant justifications (e.g. extract of the PA report, extract of energy simulation report submitted during PA, etc). during FA to demonstrate that the energy simulation submitted for subsequent assessments is utilizing the same baseline standards as in PA.

## **BEAM Plus Existing Building v.2.0**

- 8. The credit name for EUP1 under Comprehensive Scheme has been renamed as Energy Audit.
- 9. The energy audit requirement for credit <u>EU P1 & EU 2 under Comprehensive Scheme</u> and EU 2 under Selective Scheme has been clarified as follows:
  - i. The date of completion of energy audit must be within the past 5 years of first assessment submission (e.g. If the first assessment submission is submitted on 1 January 2018, then the energy audit must be completed after 1 January 2013)<sup>8</sup> with the energy audit conducted using the latest EAC edition available at the date of commencement of energy audit.

<sup>&</sup>lt;sup>5</sup> The date of completion of the energy audit shall be the same date as indicated under item (A)(1) in Part 1 of the Executive Summary of Energy Audit Report for Energy Audit Code (Form EE-EAes) published by EMSD.

<sup>&</sup>lt;sup>6</sup> The wording of this paragraph has been updated on 25 June 2018.

<sup>&</sup>lt;sup>7</sup> The date of commencement of energy audit shall be the same date as indicated under item (A)(2) in Part 1 of the Form EE-EAes published by EMSD.

<sup>&</sup>lt;sup>8</sup> The wording of this paragraph has been updated on 25 June 2018.

#### **BEAM Plus Building Interior v.1.0**

- 10. The methodology of the energy simulation for <u>EU 1 (Performance-Based Approach)</u> has been revised as follows:
  - i. Registered projects that have made the first assessment submission before 11 September 2016: The Applicant shall adopt BEC 2012 or ASHRAE Standard 90.1-2010 or equivalent as the baseline standard for energy simulation, **except for lighting**. For lighting, the Applicant shall adopt BEC 2012 as the baseline standard.
  - ii. Registered projects that have made the first assessment submission on or after 11
    September 2016: The Applicant shall adopt the latest edition of BEC or ASHRAE
    Standard 90.1 or equivalent standard(s) prevailing at the time of the first assessment submission as the baseline standard, except for lighting. For lighting, the Applicant shall adopt the latest BEC edition prevailing at the time of the first assessment submission as the baseline standard.
- 11. The baseline standards in calculating the <u>lighting power density</u> for <u>EU 1 (Prescriptive-Based Approach)</u> has been revised as follows:
  - i. Registered projects that have made the first assessment submission before 11 September 2016: The Applicant shall adopt BEC 2012 as the baseline standard.
  - ii. Registered projects that have made the first assessment submission on or after 11 September 2016: The Applicant shall adopt the latest BEC edition prevailing at the time of the first assessment submission as the baseline standard.

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Chairperson of Standards Sub-committee