

PAQS Sustainability Committee – Information on Green Buildings

Reported by the Hong Kong Institute of Surveyors (HKIS)

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1. Green buildings assessment system adopted

The predominant green building assessment systems in Hong Kong are as follows:

- BEAM Plus New Buildings¹
- BEAM Plus Existing Buildings²
- BEAM Plus Interiors³
- BEAM Plus Neighbourhood⁴
- BEAM Plus Data Centres⁵
- BEAM Plus Existing Schools⁶

2. Statutory requirements or non-statutory guidelines on the following elements of green buildings

For building envelope:

- Building (Energy Efficiency) Regulations and Code of Practice for Overall Thermal Transfer Value in Buildings 1995 for office and commercial buildings⁷
- Guidelines on Design and Construction Requirements for Energy Efficiency of Residential Buildings 2014⁸
- Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers (APP-151) - Building Design to Foster a Quality and Sustainable Built Environment⁹
- Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers (APP-152) – Sustainable Building Design Guidelines¹⁰
- Climate Change Framework for the Built Environment (non-statutory)¹¹

For building energy:

- Buildings Energy Efficiency Ordinance¹²
- Code of Practice for Energy Efficiency of Building Services Installation 2015¹³
- Code of Practice for Building Energy Audit 2015¹⁴

¹ https://www.hkgbc.org.hk/eng/NB_Intro.aspx

² <https://www.hkgbc.org.hk/eng/beam-plus/beam-plus-existing-buildings/index.jsp>

³ <https://www.hkgbc.org.hk/eng/beam-plus/beam-plus-interiors/index.jsp>

⁴ <https://www.hkgbc.org.hk/eng/beam-plus/beam-plus-neighbourhood/index.jsp>

⁵ <https://www.hkgbc.org.hk/eng/beam-plus/beam-plus-data-centres/index.jsp>

⁶ <https://www.hkgbc.org.hk/eng/beam-plus/beam-plus-existing-schools/index.jsp>

⁷ https://www.bd.gov.hk/doc/en/resources/codes-and-references/code-and-design-manuals/OTTV1995_e.pdf

⁸ https://www.bd.gov.hk/doc/en/resources/codes-and-references/code-and-design-manuals/Guidelines_DCREERB2014e.pdf

⁹ https://www.bd.gov.hk/en/resources/codes-and-references/practice-notes-and-circular-letters/index_pnap.html

¹⁰ https://www.bd.gov.hk/en/resources/codes-and-references/practice-notes-and-circular-letters/index_pnap.html

¹¹ <https://general.hkgbc.org.hk/download/ccf>

¹² <https://www.elegislation.gov.hk/hk/cap610>

¹³ https://www.emsd.gov.hk/bceo/en/pee/BEC_2015.pdf

¹⁴ https://www.emsd.gov.hk/bceo/en/pee/EAC_2015.pdf

For water conservation:

- “Let’s Save 10L Water Campaign”¹⁵ (non-statutory)

For waste reduction:

- Product Eco-responsibility (Amendment) Ordinance 2014¹⁶ and Product Eco-responsibility (Plastic Shopping Bags) Regulations¹⁷
- Promotion of Recycling and Proper Disposal (Electrical Equipment and Electronic Equipment) (Amendment) Ordinance 2016 (Commencement) Notice 2018¹⁸
- Promotion of Recycling and Proper Disposal (Product Container) (Amendment) Bill 2015¹⁹
- Municipal Solid Waste Charging Scheme to be launched when conditions permit²⁰

For indoor air quality:

- Air Pollution Control Ordinance²¹
- Guidance Notes for the Management of Indoor Air Quality in Offices and Public Places 2003²²(non-statutory)

For green products:

- CIC green product certification (non-statutory)²³

3. Government incentives for providing new green buildings and existing green buildings

- Hong Kong's Climate Action Plan 2050²⁴
- For new buildings, the HKSAR Government provides a gross floor area (GFA) concession scheme for private developers to invest in innovative and green new buildings. Green features, which adopt a holistic life cycle approach, maximise renewable resources and green materials, reduce construction waste and minimise energy consumption, are exempted from gross floor area calculations. Subject to complying with certain criteria, the concession is 10% (maximum) of the total gross floor area of the development²⁵.
- With effect from 1 January 2018, new or existing buildings that have achieved Final Bronze rating/satisfactory rating or above under BEAM Plus are eligible to register under the Energy Efficiency Registration Scheme for Buildings. Capital expenditure incurred in respect of renewable energy and efficient building installations is allowed for tax deduction to be claimed in full in one year²⁶.
- The two local power supply companies, CLP Power and HK Electric, have set up the “CLP Eco Building Fund” and “HK Electric Smart Power Fund” to subsidise residential buildings and

¹⁵ <https://www.waterconservation.gov.hk/en/save-water/index.html>

¹⁶ https://www.epd.gov.hk/epd/sites/default/files/epd/epd/PER_A_O2014_e2.pdf

¹⁷ https://www.epd.gov.hk/epd/sites/default/files/epd/epd/CAP_603A_e_b5.pdf

¹⁸ <https://www.elegislation.gov.hk/hk/2018/ln32!en>

¹⁹ <https://www.legco.gov.hk/yr14-15/english/bills/b201507033.pdf>

²⁰ <https://www.mswcharging.gov.hk/en/>

²¹ <https://www.elegislation.gov.hk/hk/cap311>

²² https://www.iaq.gov.hk/wp-content/uploads/2021/04/gn_officeandpublicplace_eng-2019.pdf

²³ <https://cicgpc.hkgbc.org.hk/>

²⁴ <https://cnsd.gov.hk/>

²⁵ <https://www.bd.gov.hk/doc/en/resources/codes-and-references/practice-notes-and-circular-letters/pnap/APP/APP151.pdf>

²⁶ https://www.emsd.gov.hk/en/energy_efficiency/energy_efficiency_registration_scheme_for_building/

ancillary facilities to carry out energy efficiency enhancement works.

4. Quantity Surveyors' involvement in green buildings

- Cost and benefit analysis of green features.
- Life cycle costing analysis.

5. Useful links relating to green buildings

- Useful links are indicated in the relevant footnotes.

6. Updated developments of green buildings

- The Construction Industry Council (CIC) is under study to revamp its Carbon Assessment Tool. The HKIS Quantity Surveying Division had given their views to CIC on the potential areas of enhancing the tool.
- The Hong Kong Green Building Council (HKGBC) published the 2nd version of HKGBC Retrofitting Guidebook ²⁷ with the aim of streamlining retrofitting to further reduce the overall energy intensity of the existing building stock.
- In October 2023, HKGBC launched BEAM Plus New Buildings 2.0 (2023 Edition) with updated requirements on various sections of this assessment tool.
- In November 2023, HKGBC also launched BEAM Plus Interior Version 2.0 for both residential and non-residential units²⁸. It provides a set of items and requirements for interior fitout, renovation and refurbishment works towards rating achievement of BEAM Plus.
- In May 2024, HKGBC announced to develop a global version of BEAM Plus assessment tool that can be used for assessment of projects outside Hong Kong.
- In May 2024, the Government announced to defer the implementation of municipal solid waste charging (MSW charging) and will commence a series of measures including enhancing recycling facilities, stepping up public education and promotion, as well as studying how to improve the MSW charging scheme. The Government will assess the readiness of society and the implementation of the measures, with a view to reporting work progress to the Legislative Council towards mid-2025.
- From June 2024, as noted in paragraphs 5 to 9 of APP151, a new project has to comply with certain criteria prior to its entitlement to the 10% concession of the Gross Floor Area.²⁹
- HKGBC released the latest edition of “Hong Kong: Green Building in Action” summarizing the green building development in Hong Kong up to 2023.³⁰

²⁷ <https://retrofitting.hkgbc.org.hk/guidebook/download.php?ref=92750486>

²⁸ <https://www.hkgbc.org.hk/eng/beam-plus/beam-plus-references/manuals-assessment/manuals-assessment.jsp>

²⁹ <https://www.bd.gov.hk/doc/en/resources/codes-and-references/practice-notes-and-circular-letters/pnap/APP/APP151.pdf>

³⁰ <https://www.hkgbc.org.hk/eng/resources/publications/HKGBC-Publication/Reports/green-building-in-action/>

- The Hong Kong Institute of Surveyors (HKIS) has set up a committee titled “Working Group on Sustainability” with the aim of collaborating the effort of surveyors from various disciplines in promoting sustainability. In 2023 and 2024, the Working Group on Sustainability has organized various talks on green buildings, one of which had the participation of PAQS members.

Quantity Surveying Division of HKIS