

PAQS Sustainability Committee – Information on Green Buildings

Reported by the Hong Kong Institute of Surveyors (HKIS)

Dated 10 September 2023

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 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

For building energy:

- Buildings Energy Efficiency Ordinance¹¹
- Code of Practice for Energy Efficiency of Building Services Installation 2015¹¹¹²
- Code of Practice for Building Energy Audit 2015¹³

For water conservation:

- “Let’s Save 10L Water Campaign”¹⁴ (non-statutory)

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://www.elegislation.gov.hk/hk/cap610>

¹² https://www.emsd.gov.hk/beeo/en/pee/BEC_2015.pdf

¹³ https://www.emsd.gov.hk/beeo/en/pee/EAC_2015.pdf

¹⁴ <https://www.waterconservation.gov.hk/en/save-water/index.html>

For waste reduction:

- Product Eco-responsibility (Amendment) Ordinance 2014¹⁵ and Product Eco-responsibility (Plastic Shopping Bags) Regulations¹⁶
- Promotion of Recycling and Proper Disposal (Electrical Equipment and Electronic Equipment) (Amendment) Ordinance 2016 (Commencement) Notice 2018¹⁷
- Promotion of Recycling and Proper Disposal (Product Container) (Amendment) Bill 2015¹⁸
- Municipal Solid Waste Charging Scheme to be launched in 1 April 2024¹⁹

For indoor air quality:

- Air Pollution Control Ordinance²⁰
- Guidance Notes for the Management of Indoor Air Quality in Offices and Public Places 2003²¹(non-statutory)

For green products:

- CIC green product certification (non-statutory)²²

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

- 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 the energy consumption, are exempted from gross floor area calculations. The concession is currently capped at 10% of the total gross floor area of the development²³. As noted in paragraph 5 of APP151, a new project has to comply with certain criteria prior to its entitlement to this 10% concession²⁴.
- The HKSAR Government completed the review of the gross floor area (GFA) concession scheme for green buildings and is working closely with the stakeholders to formulate the implementation details of the proposal.²⁵
- With effect from 1 January 2018, new or existing buildings that have achieved Final Bronze 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 year.
- 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 ancillary facilities to carry out energy efficiency enhancement works.

4. Quantity Surveyors' involvement in green buildings

¹⁵ https://www.epd.gov.hk/epd/sites/default/files/epd/epd/PER_A_O2014_e2.pdf

¹⁶ https://www.epd.gov.hk/epd/sites/default/files/epd/epd/CAP_603A_e_b5.pdf

¹⁷ <https://www.elegislation.gov.hk/hk/2018/ln32/en>

¹⁸ <https://www.legco.gov.hk/yr14-15/english/bills/b201507033.pdf>

¹⁹ <https://www.gov.hk/en/residents/environment/waste/management/mswcharging.htm>

²⁰ <https://www.elegislation.gov.hk/hk/cap311>

²¹ https://www.iaq.gov.hk/wp-content/uploads/2021/04/gn_officeandpublicplace_eng-2019.pdf

²² <https://cicgpc.hkgbc.org.hk/>

²³ https://www.bd.gov.hk/en/resources/codes-and-references/practice-notes-and-circular-letters/index_pnap.html

²⁴ https://www.bd.gov.hk/en/resources/codes-and-references/practice-notes-and-circular-letters/index_pnap.html

²⁵ <https://www.info.gov.hk/gia/general/202106/23/P2021062300572.htm>

- 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 HKSAR Government announced the Hong Kong's Climate Action Plan 2050 on 8 October 2021 with an aim to achieve carbon neutrality before 2050.²⁶
- The Construction Industry Council (CIC) is under study to revamp its Carbon Assessment Tool. The HKIS Quantity Surveying Division has given their views to CIC on the potential areas of enhancing the tool.
- The Hong Kong Green Building Council (HKGBC) published the HKGBC Retrofitting Guidebook on 10 January 2023²⁷ with the aim of mainstreaming retrofitting to further reduce the overall energy intensity of the existing building stock.
- On 6 June 2023, the HKGBC launched Hong Kong's first "Climate Change Framework for the Built Environment" to provide definitions, calculation tools, and benchmarks for achieving industry goals and contributing to a goal of carbon neutrality²⁸. HKGBC published a booklet in 2022 providing a brief summary of the development of green buildings in Hong Kong.²⁹
- The Hong Kong Institute of Surveyors (HKIS) has set up a committee titled "Sustainability Committee" with the aim of collaborating the effort of surveyors from various disciplines in promoting sustainability. Further, the HKIS Quantity Surveying Division has also set up a committee titled "QSD sustainability Committee" to contribute to green buildings from quantity surveyors' aspect.

Quantity Surveying
Division of the HKIS³⁰

²⁶ <https://cnsd.gov.hk/>

²⁷ <https://tinyurl.com/2eszi9xa>

²⁸ <https://general.hkgbc.org.hk/download/ccf>

²⁹ https://www.hkgbc.org.hk/eng/resources/publications/HKGBC-Publication/Reports/green-building-in-action/images/Green_Building_in_Action_2022ENG.pdf

³⁰ Based on the reports published in <https://www.paq.s.net/node/192>

