PAQS Sustainability Committee - Information on Green Buildings

Reported by the Hong Kong Institute of Surveyors (HKIS)

Dated 30 October 2021

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

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 1995⁵ for office and commercial buildings
- Guidelines on Design and Construction Requirements for Energy Efficiency of Residential Buildings 2014⁶
- Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers (APP-151) - Building Design to Foster a Quality and Sustainable Built Environment⁷
- Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers (APP-152) – Sustainable Building Design Guidelines⁸

For building energy:

- Buildings Energy Efficiency Ordinance
- Code of Practice for Energy Efficiency of Building Services Installation 2015⁹
- Code of Practice for Building Energy Audit 2015¹⁰

For water conservation:

• "Let's Save 10L Water Campaign"¹¹ (non-statutory)

For waste reduction:

 Product Eco-responsibility (Amendment) Ordinance 2014¹² and Product Eco-responsibility (Plastic Shopping Bags) Regulations¹³

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

² https://www.hkgbc.org.hk/eng/EB_Intro.aspx

³ https://www.hkgbc.org.hk/eng/BI Intro.aspx

⁴ https://www.hkgbc.org.hk/eng/ND_Intro.aspx

⁵ https://www.bd.gov.hk/english/documents/code/e_ottv.htm

⁶ https://www.bd.gov.hk/english/documents/code/e ottv.htm

⁷ https://www.bd.gov.hk/doc/en/resources/codes-and-references/practice-notes-and-circular-letters/pnap/APP/APP151.pdf

⁸ https://www.bd.gov.hk/doc/en/resources/codes-and-references/practice-notes-and-circular-letters/pnap/APP/APP152.pdf

⁹ https://www.emsd.gov.hk/beeo/en/pee/BEC 2015.pdf

¹⁰ https://www.emsd.gov.hk/beeo/en/pee/EAC_2015.pdf

¹¹ https://waterconservation.hk/en/main.html

¹² https://www.epd.gov.hk/epd/sites/default/files/epd/epd/PER A O2014 e2.pdf

¹³ https://www.epd.gov.hk/epd/sites/default/files/epd/epd/CAP_603A_e_b5.pdf

- Promotion of Recycling and Proper Disposal (Electrical Equipment and Electronic Equipment)
 (Amendment) Ordinance 2016¹⁴
- Promotion of Recycling and Proper Disposal (Product Container) (Amendment) Bill 2015¹⁵
- Municipal Solid Waste Charging Scheme (expected to be implemented in 2019)

For indoor air quality:

- Air Pollution Control Ordinance
- Guidance Notes for the Management of Indoor Air Quality in Offices and Public Places 2003¹⁶ (non-statutory)

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 development. At this moment, the amount of GFA concession is the same for all projects even though they achieve different green building assessment ratings.

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 instead of the current time frame of five years.

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

- 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 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 with an aim to launch it in 2022.¹⁸
- The Council for Sustainable Development, established by the HKSAR Government for the promotion of sustainability in Hong Kong, is undertaking a public engagement exercise on the "Control of single-use plastics".¹⁷

¹⁴ http://www.legco.gov.hk/yr15-16/english/ord/ord003-2016-e.pdf

¹⁵ http://www.legco.gov.hk/yr14-15/english/bills/b201507033.pdf

¹⁶ http://www.iaq.gov.hk/media/8745/gn_eng.pdf

¹⁷ https://www.susdev.org.hk/en/index.php

¹⁸https://www.info.gov.hk/gia/general/202106/23/P2021062300572.htm

- The HKSAR Government announced the Hong Kong's Climate Action Plan 2050 on 8 October 2021 in order to strive to achieve carbon neutrality before 2050.19
- The Hong Kong Green Building Council (HKGBC) arranged a series of promotion activities including webinars for achieving carbon neutrality, and the details of webinars can be found in the following link: https://tinyurl.com/yetx5c5h.

Quantity Surveying
Division of the HKIS²⁰

¹⁹ https://www.climateready.gov.hk/

²⁰ Based on the reports published in https://www.paqs.net/node/192