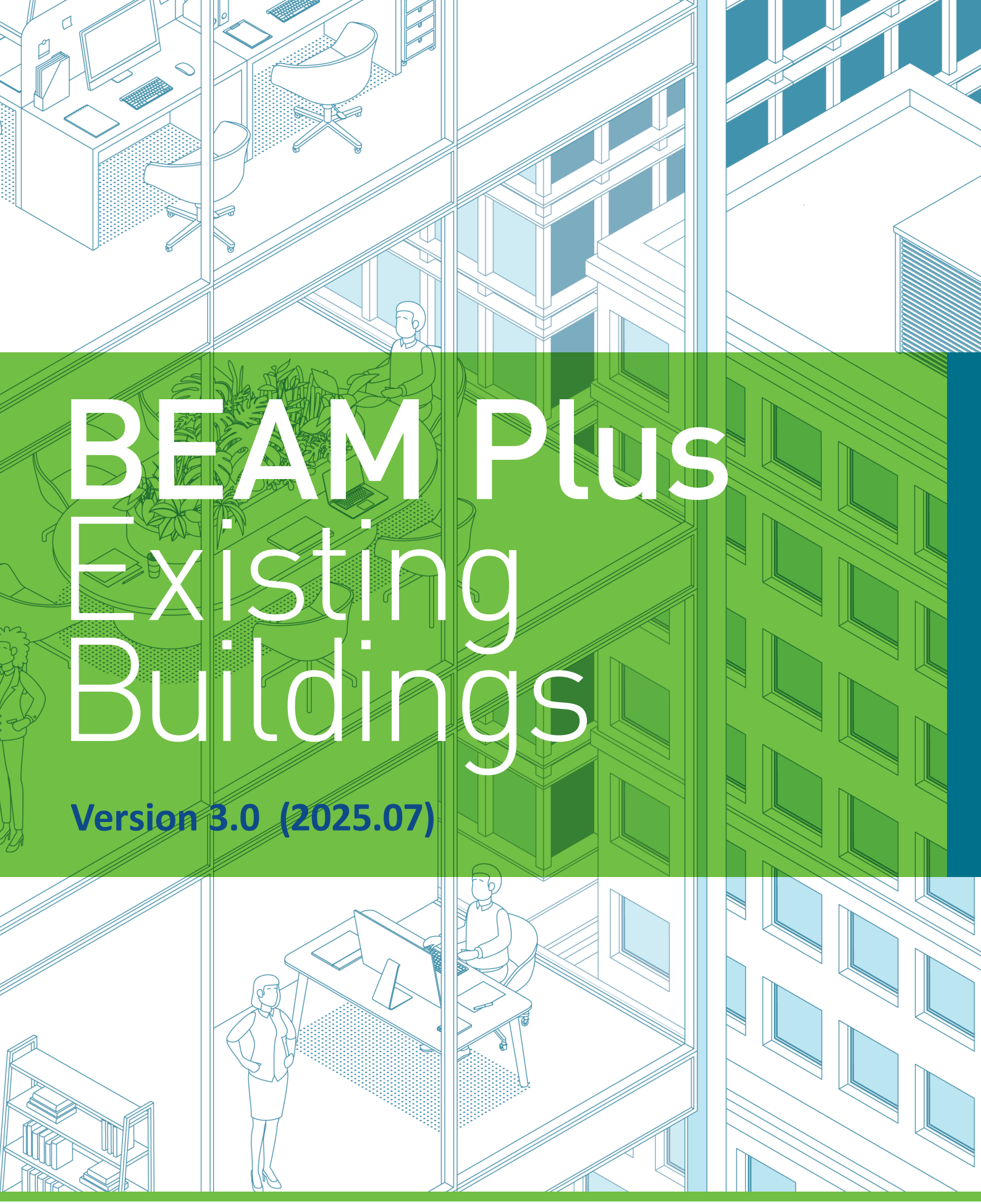


BEAM Plus Existing Buildings

Version 3.0 (2025.07)

HKGBC 香港綠色建築議會

BEAM 建築環保評估協會

Table of Contents

1. Introduction

1.1 Overview

BEAM Plus

Building Environmental Assessment Method (BEAM) Plus is a comprehensive environmental assessment tool for buildings which is carried out on a voluntary basis. It defines the best practice criteria for a range of sustainability issues across the whole life cycle of buildings and projects, such as how buildings shall be designed, constructed and operated, etc. Recognised as one of the world's leading green building assessment tools, it provides a comprehensive set of performance standards that can be pursued by developers and owners.

BEAM Plus Existing Buildings Version 3.0 (EB v3.0), owned and operated by the BEAM Society Limited (BSL), is a rating tool that falls under the BEAM Plus framework. It specifically focuses on the management, operation, maintenance, and environmental performance of existing buildings.

It aims to reduce the environmental impacts of existing buildings whilst improving quality and user satisfaction by the adoption of the best techniques available. It also drives the society to achieve carbon neutrality.

BEAM Plus Existing Buildings Version 3.0

The building operational emissions account for about 30% of global energy-related carbon emissions. Encouraging building owners, particularly in private sector, to adopt green building management and upgrade their building services systems can play a significant role in advancing sustainability and achieving carbon neutrality.

BEAM Plus EB v3.0 aims to increase participation in making existing buildings "Green", promote greater energy saving towards net zero emission, and foster education initiatives to induce behavioural change. This version encourages existing buildings to consider holistic green enhancements for more energy efficient and sustainable operations.

BEAM Plus EB v3.0 is unique in the way with the following features:

i. Copes with the global climate, physical constraints and ease of long-term facility management;
ii. Is unique in new features which may set precedent to promote sustainability in worldwide;
iii. Incorporates new initiatives to improve the energy efficiency and environmental performance;
iv. Aligns with the global target of achieving net carbon zero by 2050;
v. Shapes inhabitants' behaviour and lifestyle through demand-side management;
vi. Encourages enhancement to aged buildings;
vii. Embraces existing buildings of all ages;
viii. Contains various levels of practical requirements;
ix. Provides flexible implementation options to encourage participation.

BEAM Society Limited (BSL)

BEAM is owned and operated by BSL, an independent non-profit public body whose membership is drawn from many professional and interest groups in Hong Kong's building construction and real estate sectors. BSL is committed to developing and implementing the BEAM Plus assessment tools, assessing green buildings and training professionals.

Hong Kong Green Building Council (HKGBC)

HKGBC was established in 2009 as Hong Kong's industry body that coordinates efforts towards green building. HKGBC certifies BEAM Plus projects, accredits BEAM Professional (BEAM Pro), BEAM Affiliate (BA) and BEAM Assessor (BAS).

Development of BEAM Plus Existing Buildings Version 3.0

The development of EB v3.0 was led by the BSL Steering Committee, comprising industry practitioners and experts. Industry stakeholders have been consulted through engagement workshops to gather feedback and opinions on various aspects, including but not limited to, the overall framework, performance categories and their relative emphasis, assessment criteria, submission requirements and rating methodology. The Steering Committee comprises:

Convener – Ir Alvin LO

Members – Mr Benny AU, Mr Peter CHAN, Ir Prof CHAN Kwok Cheung Thomas, Mr TC CHAN, Ar CHEUNG Kong Yeung Thomas, Mr HO Lik Chi Nicholas, Ar Dr Tony IP, MH, Ms Melanie KWOK, Mr Andy LAI, Ms Sylvia LAM, Mr Andy LAU, Mr Alfred CK LEE, Ir Sr Jonathan LEE, Ir Sam LEE, Mr Stephen LEE, Mr K M SO, Ir Sr Martin WAN, Ms WONG Hiu Kwan Eva, Ir Matt YAU, Mr Andy YEUNG, Sr Kenneth YUN

Advisors – Ms Claudia CHIU Mei Wan, Ms KONG Tsz Yan, Mr LAM Tsz-fung, Mr Benson LEE Yau-hang, Mr Wallace LEUNG

Disclaimer

BEAM Plus has been prepared with the assistance and participation of many individuals and representatives from various organisations. The outcome represents a general consensus, but unanimous support from each and every organisation and individual consulted is not implied. The BEAM Plus documentation shall be reviewed on a regular basis and as frequently as necessary. BSL reserves the right to amend, update and change this Manual from time to time without prior notice. Where changes in regulations necessitate changes to the assessment criteria, they will be issued to all parties involved in an assessment and will be announced in the BSL's website. An appropriate transitional period shall be allowed for projects undergoing assessment process.

It shall be noted that none of the parties involved in the funding of BEAM, including BSL and its members, provide any warranties or assume any liability or responsibility to the users of BEAM, or any third parties for the accuracy, completeness or use of, or reliance on, any information contained in BEAM, or from any injuries, losses, or damages arising out of such use or reliance.

As a condition of use, users covenant not to sue, and agree to waive and release BSL and its members from any and all claims, demands and causes of actions for any injuries, losses and damages that users may now or hereafter have a right to assert against such parties as a result of the use of, or reliance of BEAM.

Limitations

BSL does not endorse any self-assessed rating awarded by the use of BEAM Plus Existing Buildings Version 3.0.

HKGBC offers a formal certification process of rating. Any users or parties without a formal certification are not entitled to issue any rating certification of BEAM Plus Existing Buildings Version 3.0.

Application and Eligibility

BEAM Plus EB v3.0 attempts to cover the management, operation and maintenance of all types and ages of existing buildings, from small single building to large buildings, including but not limited to commercial, educational, government, industrial, office and residential buildings, hotels and shopping centres etc.

Existing buildings that have not been certified by BEAM Plus or other green building certificates are also encouraged to participate in this Scheme. For

assessment criteria that reference specific local or national policies, guidelines, or targets, the Applicants may substitute these with equivalent policies, regulations, or targets applicable in their own local or national context. The Applicants are required to provide appropriate documentation or evidence to demonstrate the equivalency and relevance of any substituted requirements. If there are no applicable local or national policies, guidelines, or targets, the Applicant is required to adopt the requirement as stipulated in this Manual.

BEAM Plus does not assess any buildings or portions of any buildings that are unauthorised by local building ordinance of their respective region. In case any non-compliance works or unauthorised portions in a building are reported, both HKGBC and BSL reserve the right to deprive the awarded rating from the Applicant.

Assessment Boundaries

BEAM Plus concerns the interactions between the assessed building, neighbouring properties, and the neighbourhood in general. The assessment seeks to reduce negative impacts on neighbours and rewards efforts to improve the quality of the immediate surroundings to the benefit of the neighbourhood: the concept of ‘good neighbour’ buildings.

Under normal circumstances, BEAM Plus EB v3.0 only assesses those areas which are under the control of the Applicant. It is understood that the involvement of tenants also plays an important role in improving the building’s environmental performance. Therefore, credit points could be awarded when the Applicant can demonstrate that their tenants are also getting involved in the assessment. Details shall be referred to the assessment criteria of individual credit head.

1.2 Framework

Certification Framework

The BEAM Plus EB v3.0 certification framework follows the 'Plan-Do-Check-Act' methodology to support the continuous improvement of buildings. This framework is designed to offer applicants greater flexibility, enabling them to participate in the green assessment in alignment with their program, budget, and technical capabilities. An assessment framework with 2 Schemes is designed and presented in Figure 1.1, including:

i. Comprehensive Scheme A (One-step approach)

All aspects under this Manual are assessed in one-go and one full certificate is offered if the requirements are fulfilled.

ii. Comprehensive Scheme B (Step-wise approach)

Combination of performance categories' assessment is allowed. Intermediate result(s) for the assessed performance categories(s) will be issued. The Applicant is required to update the necessary information of the assessed category(ies) and submit the remaining category(ies) within 3 years of the issuance of first intermediate result.

An example of submission timeline is illustrated in Figure 1.2.

Comprehensive Scheme B is designed for buildings that need to be upgraded in order to achieve BEAM Plus certification. Building management may not have the full budget and sufficient time to upgrade all the systems in a single financial year. The intermediate certificate can recognise their effort in improving their building performance in certain area(s) before the final full certification. Buildings will be assessed and graded with the same standard under Comprehensive Scheme A.

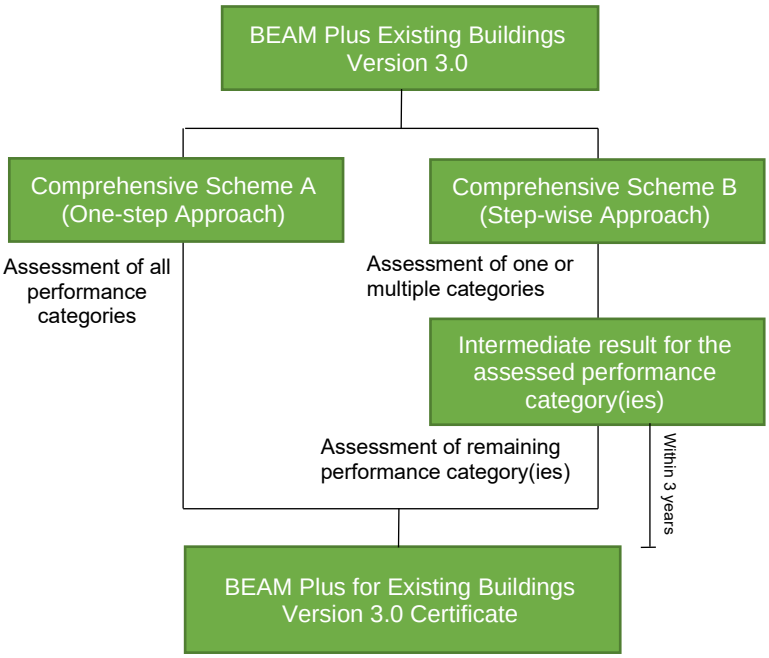


Figure 1.1 Assessment Flowchart of BEAM Plus Existing Buildings Version 3.0

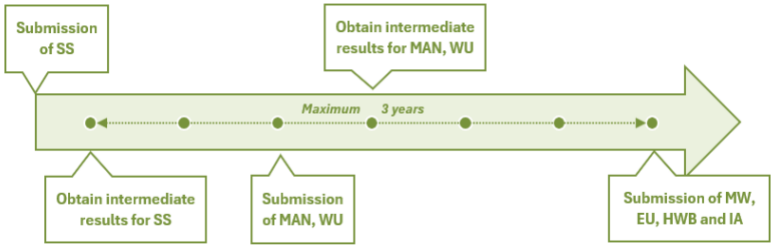


Figure 1.2 Example of submission timeline for Comprehensive Scheme B

Provisional Assessment (PA) is optional exclusively under Comprehensive Scheme A only and is not permitted under Comprehensive Scheme B. Please refer to the BEAM Plus Procedures Manual (Assessment) for more details.

Certification Process

Independent BEAM Assessors (BAS) or BSL in-house BAS would be assigned to each project to undertake the assessment works. The Assessment Sub-committee (ASC) of BSL will review the assessment reports done by the BAS, endorse the assessment results, and HKGBC to subsequently issue the certification. Detail assessment procedures can be found in the BEAM Plus Procedures Manual (Assessment) which is available in the HKGBC and BSL websites.

Documentation

The Applicant has the obligation to provide evidence demonstrating credit compliance. In BEAM Plus EB v3.0, only sufficient amount of material (by way of example) is required for submission. However, the Applicant must make sure all supporting information is timely collected and properly documented. If the BEAM assessor deems it necessary to request additional materials of the same sort for clarification, the Applicant is obligated to produce such materials upon request.

Certification Fees

BEAM Plus EB v3.0 certification fee comprises 2 parts, namely Registration Fee and Assessment Fee which are payable to HKGBC and BSL respectively. Optional processes like Credit Interpretation Request (CIR) and Appeals are subject to separate published charges. Details on the fee structure can be found in the HKGBC and BSL websites.

Certificate Validity

The validity of the BEAM Plus EB v3.0 Certificate can be referenced on the HKGBC's website.

If the Applicant fails to submit the required ongoing data report on an annual basis, the certificate will become invalid until the necessary data is submitted. This does not impact the grading, as the submission of ongoing data is solely required to maintain the certificate's validity.

On-going Data Report

The ongoing data report, which contains key sustainability data of the building, must be submitted annually by the Applicant following the issuance of the BEAM Plus EB v3.0 Certificate. This report demonstrates the ongoing tracking and monitoring of building performance. Notably, only those credits submitted for assessment will require annual submission of ongoing data. Details can be found in the submittal criteria for individual credits. Submittals that require ongoing data reports are denoted with the symbol "^".

Buffer Period for Record- Related Submittals

All record-related submissions such as building records, certificates, and measurement reports, are granted a 6-month buffer period unless otherwise specified.

For instance, MAN-03-01 on Staff Training and Resource requires the staff

training records for the past 12 months. Suppose the Applicant is making an initial submission on 1 January 2024. In that case, the Applicant may opt to provide a continuous 12-month record from either 1 July 2022 to 30 June 2023 or from 1 January 2023 to 31 December 2023 to fulfill the credit requirement. Initial submission refers to the first submission made either for Provisional Assessment or Final Assessment.

To maintain uniformity throughout the assessment process, the assessment period selected for record-related submissions must remain consistent across all credits and aspects. For example, if an Applicant opts to provide a continuous 12-month record from 1 July 2022 to 30 June 2023 for one credit, the same assessment period should be applied to all other credits requiring similar documentation.

Compliance Standards for Existing Provisions

BEAM Plus EB v3.0 assesses current building conditions. Pre-existing provisions that meet the stipulated requirements are acceptable for credit compliance. New installations for assessment are not mandatory.

Performance Categories

In BEAM Plus EB v3.0, credit heads are grouped into the following categories:

i. Management (MAN);
ii. Sustainable Site (SS);
iii. Materials and Waste (MW);
iv. Energy Use (EU);
v. Water Use (WU);
vi. Health and Wellbeing (HWB);
vii. Innovations and Additions (IA).

While BEAM Plus EB v3.0 adopts similar categories as in other BEAM Plus tools, the number and nature of credit heads within each category are specific to the context of operation, maintenance and management of existing buildings in different locations.

Management (MAN)

MAN focuses on the sustainable management of the occupied buildings during operation. The main objectives of MAN are as follows:

i. Environmental, Health and Safety (EHS) and Energy Management;
ii. Environmental, Social, and Governance (ESG) Disclosure;
iii. Operation and Maintenance;
iv. Green and Healthy Management.

Sustainable Site (SS)

SS focuses on the design and planning issues, and the integration of neighbourhood and site location. The main objectives of SS are as follows:

i. Pollution Prevention and Control;
ii. Urban Biodiversity;
iii. Heat Island Reduction;
iv. Building-scale Climate Adaptation Measures;
v. Neighbourhood Integration;
vi. Low Carbon Commuting.

Materials and Waste (MW)

MW focuses on the green procurement practice and minimisation of waste generation. The main objectives of MW are as follows:

i. Selection of Materials;
ii. Waste Reduction;
iii. Best Practice on Material Usage.

Energy Use (EU)

EU focuses on the evaluation of energy performance and reduction of energy consumption during occupancy. The main objectives of EU are as follows:

i. Energy Use Reduction and Control;
ii. Renewable and Alternative Energy Generation;
iii. Energy Management and Analysis.

Water Use (WU)

WU focuses on the reduction of water consumption and discharge management. The main objectives of WU are as follows:

i. Water Conservation;
ii. Effluent;
iii. Water Harvesting and Recycling;
iv. Water Management.

Health and Wellbeing (HWB)

HWB focuses on human development and indoor environmental quality. It is designed to expand the scope of previous indoor environmental quality (IEQ) category and adopt human-centric design elements. The main objectives of HWB are as follows:

i. Green & Healthy Living;
ii. Human Scaled Living;
iii. Indoor Environmental Quality;
iv. Good Hygiene Practices.

Innovations and Additions (IA)

IA focuses on promoting and rewarding true innovations. The main objective of IA is as follows:

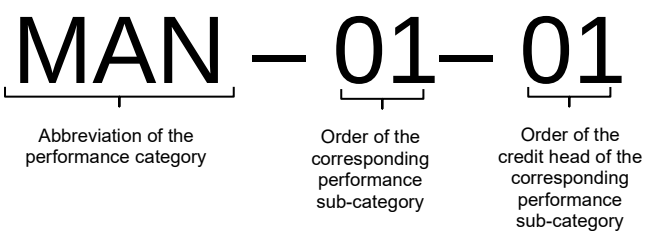
i. Innovation Techniques.

Credit Point Allocation

Credits points have been broadly allocated to each assessment criterion by taking into account other internationally recognised green building assessment tools as well as the sensitivity analysis and the comments received during the stakeholder engagement workshops.

Credit Code

All BEAM Plus tools will adopt the same nomenclature. The classification of each credit is divided into three levels which includes: i) Performance category, ii) Performance sub-category and iii) Credit head.



The coding system of each credit consists of English letters and Arabic numbers. The first level of the coding system is the performance category which adopts the abbreviation. The second level is coded by Arabic numbers to present the corresponding performance sub-category. The third level represents the order of credit head.

Absolute Point-Based Scoring

Having reviewed the local and international assessment schemes as well as echoing the design principle of “Simple”, the assessment result is calculated based on the total credit points achieved across the performance categories without category weighting or averaging scores.

IA Credit Point

The IA credit points in BEAM Plus EB v3.0 contribute to the total credit points earned across various performance categories. Each successful IA credit adds one (1) point to the total, with a maximum of ten (10) IA credit points available in the IA performance category for achieving a higher overall score in the assessment.

Determination of Overall Rating

The rating for projects certified under BEAM Plus EB v3.0 is calculated with the absolute point-based scoring system and subject to the following conditions:

i. Achieving the overall credit points required;
ii. Obtaining the minimum credit points in each performance category listed below.

EB v3.0 Certification		
Overall Credit Points Achieved	**Minimum credit points required in each performance category (excluding IA)**	**Rating**
75 points	MAN, SS, MW, WU & HWB: 4 EU: 15	Platinum
65 points		Gold
55 points		Silver
40 points		Bronze

If a project fails to meet the minimum credit points required in each performance category (excluding IA) and/ or does not achieve the overall credit points necessary for at least a Bronze rating, it will be regarded as “Assessment Completed Without Any Rating.”

The maximum attainable score for any project is 100 credit points plus 10 IA credit points.

1.3 Summary of Credits

<table>
<tr><th></th><th>Credit Head</th><th colspan="2">Credit Requirement</th><th>Credit Point(s)</th></tr>
<tr><td>2</td><td colspan="2">Management (MAN)</td><td colspan="2">38</td></tr>
<tr><td>MAN-01-02</td><td>Building Environmental Excellence</td><td>(a)</td><td>Complimentary Certification

1 to 2 credit point(s) for the building being certified with a final certification rating by any of the following BEAM Plus Assessment Tools:

<table>
<tr><th>BEAM Plus Assessment Tools</th><th>Bronze or Silver Rating</th><th>Gold or Platinum Rating</th></tr>
<tr><td>New Buildings (NB)</td><td rowspan="2">1</td><td rowspan="2">2</td></tr>
<tr><td>Existing Buildings (EB) (Comprehensive Scheme)</td></tr>
<tr><td colspan="3">The certification shall remain valid within 6 months prior to the date of the first assessment submission.

If the Applicant is making an initial submission on 1 January 2025, they shall ensure that the certificate is still valid on 1 July 2024 to fulfill the credit requirement.</td></tr>
</table>
(b) Environmental Excellence Certificate

Maximum 3 credit points can be achieved, with 1 credit point awarded for each environmental recognition obtained. The certificate shall cover all Applicant-controlled areas within the assessment boundary.

1. IAQ Certification Scheme (whole building);
2. Quality Water Supply Scheme for Buildings – Flushing Water;
3. Wastewi$e Certificate under The Hong Kong Green Organisation Certification (HKGOC);
4. Energywi$e Certificate under HKGOC;
5. IAQwi$e Certificate under HKGOC;
6. Carbon Reduction Certificate;
7. Hong Kong Awards for Environmental Excellence (HKAEE) – Property Management Sector Award;
8. ISO 14001 Certificate;
9. ISO 50001 Certificate;
10. Other green building related awards/ certification schemes/ campaigns which are not listed above.</td><td>5</td></tr>
<tr><td>MAN-02-01</td><td>Environmental, Social and Governance (ESG) Disclosure</td><td>(a)</td><td>ESG Committee

1 credit point for establishing a committee to oversee the building ESG issues.

(b) Policies on ESG Issues

1 credit point if the building has adopted at least five (5) different policies on ESG issues.</td><td>2</td></tr>
</table>

	Credit Head	Credit Requirement	Credit Point(s)
MAN-02-02	Net-zero Transition Plan	**(a) Near-term Decarbonisation Target (Scopes 1 and 2)** 1 credit point for establishing near-term absolute Scopes 1 and 2 GHG emissions reduction target. **(b) Near-term Decarbonisation Target (Scope 3)** 1 credit point for establishing near-term Scope 3 GHG emissions reduction target. **(c) Near-term Decarbonisation Target (Validation)** 1 credit point if the near-term decarbonisation target is validated by Science Based Targets initiative (SBTi). **(d) Long-term Decarbonisation Target** 1 credit point for establishing long-term decarbonisation target. **(e) Long-term Decarbonisation Target (Validation)** 1 credit point if the long-term decarbonisation target is validated by Science Based Targets initiative (SBTi). **(f) Net Zero Commitment** 1 credit point for the building management's commitment to achieving net zero by 2050. **(g) Net Zero Commitment Disclosure** 1 credit point will be awarded if the building owner discloses its net-zero transition plan and targets to the public.	7
MAN-02-03	Resilience Strategy	**(a) Climate-related Physical Risks and Opportunities** 1 credit point for detailing the climate related physical risks and opportunities identified, the methodology used for the assessment and the key metrics where applicable. **(b) Transition Risks and Opportunities** 1 credit point for detailing the transition risks and opportunities identified, the methodology used for the assessment and the key metrics where applicable (Metrics shall include energy, water, land use and waste management where relevant and applicable). **(c) Evaluation of Climate Resilience** 1 credit point for conducting climate-related scenario analysis to evaluate their climate resilience in the face of extreme weather events.	3

	Credit Head	Credit Requirement	Credit Point(s)
MAN-03-01	Staff Training and Resources	**(a) BEAM Accredited Personnel** 1 credit point for building-in-charge/ team lead has accredited with BEAM Pro qualification for EB v3.0. **(b) Professional Qualified Personnel** 1 credit point if the building-in-charge/ team lead under (a) above holds a professional qualification for the facilities management sector. **(c) Staff Training** 1 credit point for providing adequate and periodic training for the staff responsible for the MO&M of the individual building project/ each building project in the building portfolio.	3
MAN-03-04	Smart Facility Management	**(a) Good Practices for Operation and Maintenance Service** 1 to 2 credit point(s) for implementing at least five (5)/ ten (10) applicable good practices as stipulated in Best Practices for Operation and Maintenance Service published by EMSD. These practices can be selected from Best Practices Booklets and Handbooks on HVAC Installations, Electrical Installations or Lift and Escalator Installations. **(b) Best Practices for Operation and Maintenance Service** 1 to 2 credit point(s) for implementing at least five (5)/ ten (10) applicable best practices as stipulated in Best Practices for Operation and Maintenance Service published by EMSD. These practices can be selected from Best Practices Booklets and Handbooks on HVAC Installations, Electrical Installations or Lift and Escalator Installations. **(c) Digitalised Operation** 1 credit point for adopting digitalised facility management system for operation. **(d) Digitalised Maintenance** 1 credit point for adopting digitalised facility management system for maintenance.	6
MAN-03-05	BIM Integration	**(a) Maintenance of BIM Model** 1 credit point for maintaining BIM model including as-built fixtures, finishes and equipment data.	3

	Credit Head	Credit Requirement	Credit Point(s)
		(b) Use of BIM Model (Asset Management) 1 credit point for using BIM model for asset management. **(c) Use of BIM Model (Facility Management)** 1 credit point for using BIM model for facility management.	
MAN-04-01	Green Lease	**(a) Green Lease Incentive** 1 credit point for including measurable KPIs or sustainability tasks in the green lease. **(b) Green Lease Coverage** 1 to 3 credit point(s) will be awarded if at least 5%/ 10%/ 15% of leased areas implement a green lease.	4
MAN-04-05	Tenant Engagement Programme	**(a) Capacity Building Programme(s)** 1 credit point for organising capacity building programme(s) to the tenants for at least 10% of leased area. **(b) Carbon Audit to Tenants** 1 credit point for conducting carbon audit to tenants covering at least 5% of the leased area to help identify opportunities for decarbonisation. **(c) Decarbonisation Targets for Tenants** 1 credit point for assisting tenants in establishing decarbonisation targets based on the findings of the carbon audit. **(d) Award for Recognition** 1 credit point for organising award for recognition of excellence in sustainability performance of tenants. **(e) Carbon Related Pledge** 1 credit point for implementing sustainability related pledge, with measurable KPIs or sustainability tasks for at least 10% of leased area.	5

	Credit Head	Credit Requirement	Credit Point(s)
3	**Sustainable Site (SS)**		**17**
SS-01-01	Promotion of Public Transportation	1 credit point for the availability of convenient pedestrian access to mainstream public transport. **Alternatively,** 1 credit point for achieving Accessibility Index of 15 or more for all building types of a development.	1
SS-01-05	Noise Control for Building Equipment	1 credit point for demonstrating the level of the intruding noise at the façade of the potential Noise Sensitive Receivers (NSRs) is in compliance with the criteria stipulated in the Technical Memorandum for the Assessment of Noise from Places Other than Domestic Premises, Public Places or Construction Sites.	1
SS-02-01	Lighting Pollution Mitigation	1 to 2 credit point(s) for switching off landlord's controlled external lightings from 23:00 to 07:00 or 22:00 to 07:00. ***Alternatively,*** 1 to 2 credit point(s) for the building being awarded with a Platinum or Diamond Award under "Charter on External Lighting"; **or** 2 credit points for the absence of landlord's controlled external lighting.	2
SS-02-02	Site Biodiversity	1 credit point for implementing measures to enhance the biodiversity of the site.	1
SS-03-01	Urban Heat Island Mitigation Measures	1 credit point for demonstrating the implementation of adequate measures to mitigate the urban heat island effect within the project.	1
SS-04-02	Building-scale Climate Adaptation Measures	Maximum 4 credit points for incorporating one (1) to four (4) best practices as listed below into the building's climate adaptation plan: i) Heat waves; ii) Typhoon; iii) Lightning; iv) Heavy precipitations; v) Flooding; vi) Landslide; vii) Others.	4

<table>
<tr><th></th><th>Credit Head</th><th>Credit Requirement</th><th>Credit Point(s)</th></tr>
<tr><td>SS-05-01</td><td>Neighbourhood Integration</td><td>(a) Community Engagement

1 credit point for providing at least two (2) of the following items:

i) On-site venues or public spaces for community engagement;
ii) A permanent onsite display or digital platform promoting local amenities, such as facilities and services available in a nearby area that enhance the quality of life for building users;
iii) At least two (2) volunteer activities for community engagement attended by employees of the building management team annually;
iv) At least four (4) community engagement events available to the public free of charge annually;
v) Other features proposed by the Applicant.

(b) Community Space

1 credit point for providing at least two (2) of the following designated communal spaces/ strategies to building occupants:

i) Publicly accessible on-site resting spaces equipped with seating areas, available at no charge;
ii) Outdoor garden with natural and restorative elements, such as trees, plants, water features, etc.;
iii) No smoking is allowed for outdoor communal spaces except designated smoking area located at least 7.5m away from all entrances and fresh air intake;
iv) A regularly organised on-site market offering locally sourced food;
v) Canopy with a minimum width of 2m, serving as a protected zone against wind-driven rain/ sunlight at outdoor/ semi-outdoor communal area;
vi) Other features proposed by the Applicant.</td><td>2</td></tr>
<tr><td>SS-05-02</td><td>Active Commuting Support</td><td>1 credit point for providing at least two (2) of the following facilities in supporting active commuting:

<table><tr><th colspan="2">List of facilities</th></tr><tr><td>Regular occupants' access to showers</td><td>Regular occupants' access to lockers</td></tr><tr><td>Designated spaces of cycling parking for regular occupants</td><td>Designated areas for bicycle washing & maintenance</td></tr><tr><td colspan="2">Other features proposed by the Applicant</td></tr></table></td><td>1</td></tr>
</table>

	Credit Head	Credit Requirement	Credit Point(s)
SS-06-01	EV Charging Facilities	**(a) Medium EV Charging Facilities** 1 to 2 credit point(s) for providing medium chargers (output power ≥ 7kW) for at least 2.5% or 5.0% of all parking spaces for private cars, motorcycles and light good vehicles. **(b) Quick EV Charging Facilities** 1 credit point for providing at least two (2) EV quick chargers (≥ 50kW) in the carpark. **(c) Fast EV Charging Facilities** 1 credit point for providing at least one (1) fast charger (output power ≥ 100kW) in the parking spaces designated for coaches, light buses or and medium/ heavy goods vehicles.	4

<table>
<tr><th></th><th>Credit Head</th><th>Credit Requirement</th><th>Credit Point(s)</th></tr>
<tr><td>4</td><td colspan="2">Materials and Waste (MW)</td><td>29</td></tr>
<tr><td>MW-02-03</td><td>Ozone Depleting Substances</td><td>Option 1: Low-Impact Refrigerants

1 credit point for demonstrating all the equipment using refrigerants with Global Warming Potential (GWP) fulfils the prescribed criteria.

Option 2: Calculation of Refrigerants Impact

1 credit point for demonstrating all the equipment using refrigerants with a combined Ozone Depletion Potential (ODP) and GWP value less than or equal to the threshold.

Option 3: Refrigerants Management

1 credit point for demonstrating a phased down programme for existing equipment with refrigerant GWP value > the prescribed criteria.</td><td>1</td></tr>
<tr><td>MW-02-05</td><td>Use of Green Products</td><td>(a) Green Building Components

1 to 3 credit point(s) shall be awarded when renovations use certified green building components equivalent to 10%, 20% or 30% of the total building components cost. The products shall be certified under CIC Green Product Certification or other internationally recognised standards.

Types of building components are shown below:

<table>
<tr><th colspan="4">Building Components</th></tr>
<tr><td>Panel Board</td><td>Ceramic Tile</td><td>Adhesive & Sealant</td><td>Stone</td></tr>
<tr><td>Paint & Coating</td><td>Pavement Block</td><td>Thermal Insulation</td><td>Ready-mixed Concrete</td></tr>
<tr><td>Glazing</td><td>Plant-based Fibre Composite</td><td>Block for Internal Partition</td><td>Other products proposed by the Applicant</td></tr>
</table>

(b) Green Building Services Systems

1 to 3 credit point(s) shall be awarded when major retrofitting works use certified green building services systems equivalent to 10%, 20% or 30% of the total building services systems cost. The products shall be certified under CIC Green Product Certification or other internationally recognised standards.

Types of building services systems are shown below:

<table>
<tr><th colspan="4">Building Services Systems</th></tr>
<tr><td>Thermal Insulations</td><td>VRF Split Type System</td><td>Cooling Tower</td><td>Air-handling Unit</td></tr>
<tr><td>Fan Coil Unit</td><td>Chiller</td><td>Water Pump</td><td>Cable & Wire</td></tr>
<tr><td colspan="2">Lighting (LED lighting, Compact Fluorescent Lamp Bulb, Electronic Ballast)</td><td colspan="2">Other products proposed by the Applicant</td></tr>
</table>
</td><td>6</td></tr>
</table>

<table>
<tr><th></th><th>Credit Head</th><th>Credit Requirement</th><th>Credit Point(s)</th></tr>
<tr><td>MW-02-06</td><td>Life Cycle Costing</td><td>1 credit point for conducting life cycle costing analysis for active systems when undertaking major retrofitting works.</td><td>1</td></tr>
<tr><td>MW-03-02</td><td>Enhanced Waste Handling Facilities</td><td>(a) Recyclables Collection

1 to 2 credit point(s) for demonstrating the provisions of collection services or on-site recycling facilities/ designated storage area of any three (3)/ five (5) of the following waste streams:

<table>
<tr><th colspan="3">Waste Streams</th></tr>
<tr><td>Rechargeable Batteries</td><td>Regulated Electrical Equipment (REE)</td><td>Beverage Cartons</td></tr>
<tr><td>Fluorescent Lamps and Tubes</td><td>Restaurant Waste (Used Cooking Oils, Grease Trap Waste)</td><td>Small Electrical Appliances (cookers, toasters, ovens, irons, hair-dryers, phones, etc.)</td></tr>
<tr><td>Dried/ Canned Food</td><td>Food Waste</td><td>Paper/ Carboard, Metal and Plastics</td></tr>
<tr><td>Glass</td><td colspan="2">Seasonal items (e.g. red pocket, mooncake box, clothes)</td></tr>
<tr><td colspan="3">Other recyclables may be proposed at the discretion of the Applicant</td></tr>
</table>

(b) Recycling Performance

1 to 3 credit point(s) for demonstrating the annual recycling percentage by weight over the past 12 months meeting the prescribed requirements.

<table>
<tr><th>Credit Point(s)</th><th>Annual Recycling Percentage</th></tr>
<tr><td>1</td><td>10%</td></tr>
<tr><td>2</td><td>15%</td></tr>
<tr><td>3</td><td>20% or above</td></tr>
</table>

(c) Recycling Transparency and Disclosure

1 credit point will be awarded for premises that publicly disclose their recycling performance data on a quarterly basis.</td><td>6</td></tr>
<tr><td>MW-03-04</td><td>Action to Waste Reduction</td><td>(a) Waste Management Plan

1 credit point for developing and implementing Waste Management Plan (WMP) for building operations.

(b) Waste Stream Audit

1 credit point for conducting waste stream audit.

(c) Enhanced Waste Management Practices

1 credit point for developing and/ or implementing actions to improve recycling performance.</td><td>3</td></tr>
</table>

<table>
<tr><th></th><th>Credit Head</th><th>Credit Requirement</th><th>Credit Point(s)</th></tr>
<tr><td>MW-03-05</td><td>Waste Reduction Performance</td><td>(a) Reduction at Source

1 to 5 credit point(s) for demonstrating an annual waste reduction by weight for the past 12 months meeting the prescribed requirements. Baseline year can be any year in the past 36 months.

<table><tr><th>Credit Point(s)</th><th>Annual Waste Reduction Percentage</th></tr><tr><td>1</td><td>2%</td></tr><tr><td>2</td><td>4%</td></tr><tr><td>3</td><td>6%</td></tr><tr><td>4</td><td>8%</td></tr><tr><td>5</td><td>10% or above</td></tr></table>
(b) Continuous Improvement

1 credit point for demonstrating a continuous reduction trend of waste generation over the past 36 months.</td><td>6</td></tr>
<tr><td>MW-04-02</td><td>Green Purchasing Practices</td><td>Maximum 6 credit points for purchasing environmentally friendly or certified products for one (1) to six (6) types of consumable or durable goods in the past 12 months.

<table><tr><th>Credit Point(s)</th><th>Percentage of Environmentally Friendly or Certified Item for each type of consumable or durable goods</th></tr><tr><td>1</td><td>60%</td></tr><tr><td>2</td><td>80%</td></tr></table>
Types of consumables and durable goods are shown below:

<table><tr><td colspan="2">Consumable</td></tr><tr><td>Packaging materials</td><td>Paper for printing and photocopying</td></tr><tr><td>Paper products other than for printing and photocopying</td><td>Plastic and rubber products</td></tr><tr><td>Printing and publishing supplies</td><td>Stationery and office supplies</td></tr><tr><td colspan="2">Other consumable may be proposed at the discretion of the Applicant</td></tr><tr><td colspan="2">Durable Goods</td></tr><tr><td>Computer equipment and products</td><td>Electrical appliances</td></tr><tr><td>Light fittings</td><td>Furniture</td></tr><tr><td>Containers and collection bins for water/ recyclables</td><td>Office equipment</td></tr><tr><td colspan="2">Other durable goods may be proposed at the discretion of the Applicant</td></tr></table></td><td>6</td></tr>
</table>

<table>
<tr><th></th><th>Credit Head</th><th>Credit Requirement</th><th>Credit Point(s)</th></tr>
<tr><td>5</td><td>Energy Use (EU)</td><td></td><td>78</td></tr>
<tr><td>EU-00-01</td><td>Minimum Energy Performance</td><td>1 credit point for conducting energy audit in accordance with the requirements stipulated in the Code of Practice for Building Energy Audit issued by Electrical and Mechanical Services Department, HKSAR Government.</td><td>1</td></tr>
<tr><td>EU-01-02</td><td>Reduction of CO_2 Emissions</td><td>(a) Benchmarking

1 credit point for conducting benchmarking by EMSD Benchmarking Tool “Energy Consumption Indicators and Benchmark” or Energy Star Portfolio Manager for the energy performance of the landlord’s controlled area of the project.

(b) Benchmarking Ranking

1 to 4 credit point(s) when the energy performance of the landlord’s controlled area of the project achieves the below percentile under EMSD Benchmarking Tool “Energy Consumption Indicators and Benchmark”.

<table><tr><th>Credit Point(s)</th><th>Percentile under EMSD Benchmarking Tool</th></tr><tr><td>1</td><td>40th</td></tr><tr><td>2</td><td>30th</td></tr><tr><td>3</td><td>20th</td></tr><tr><td>4</td><td>10th</td></tr></table>
Alternatively,

1 to 4 credit point(s) when the energy performance of the landlord’s controlled area of the project achieves the benchmarking results obtained from Energy Star Portfolio Manager.

<table><tr><th>Credit Point(s)</th><th>Percentage of Reduction of Project Energy Use Intensity (EUI) Compared with Median Weather Normalised Source EUI Obtained from Energy Star Portfolio Manager</th></tr><tr><td>1</td><td>EUI Improvement ≤ 10%</td></tr><tr><td>2</td><td>10% < EUI Improvement ≤ 30%</td></tr><tr><td>3</td><td>30% < EUI Improvement ≤ 50%</td></tr><tr><td>4</td><td>EUI Improvement > 50%</td></tr></table></td><td>19</td></tr>
</table>

Credit Head	Credit Requirement	Credit Point(s)

(c) Self-improvement of Energy Utilisation Index

1 to 13 credit point(s) when the annual energy utilisation index (EUI) is reduced in a percentage below compared with that of the past 5 years.

For (1) Benchmarking result ≥ 30th Percentile under EMSD Benchmarking or (2) Percentage of Reduction of Project Source EUI under Energy Star Portfolio Manager ≤ 30% or (3) project only attempting EU-01-02(a):

Credit Point(s)	Percentage of reduction in Annual EUI
1	≥ 2%
2	≥ 3%
3	≥ 5%
4	≥ 7%
5	≥ 10%
6	≥ 13%
7	≥ 17%
8	≥ 21%
9	≥ 25%
10	≥ 29%
11	≥ 34%
12	≥ 39%
13	≥ 45%

For (1) Benchmarking result of 20th Percentile under EMSD Benchmarking / (2) Percentage of Reduction of Project Source EUI under Energy Star Portfolio Manager > 30% and ≤ 50%:

Credit Point(s)	Percentage of reduction in Annual EUI
1	≥ 1%
2	≥ 2%
3	≥ 3%
4	≥ 4%
5	≥ 5%
6	≥ 7%
7	≥ 9%
8	≥ 11%
9	≥ 13%
10	≥ 15%
11	≥ 17%
12	≥ 20%
13	≥ 23%

	Credit Head	Credit Requirement	Credit Point(s)
		For (1) Benchmarking result of 10th Percentile under EMSD Benchmarking / (2) Percentage of Reduction of Project Source EUI under Energy Star Portfolio Manager > 50%:	

Credit Point(s)	Percentage of reduction in Annual EUI
1	≥ 0.5%
2	≥ 1%
3	≥ 2%
4	≥ 3%
5	≥ 4%
6	≥ 5%
7	≥ 6%
8	≥ 7%
9	≥ 8%
10	≥ 9%
11	≥ 10%
12	≥ 11%
13	≥ 12%

(d) Continuous Energy Consumption Reduction Trend

1 credit point when landlord's energy consumption has continuously decreased over the past 3 years.

EU-01-03	Peak Electricity Demand Reduction	**(a) Development of Peak Demand Management Plan** 1 credit point for developing a Peak Demand Management Plan. **(b) Execution of Peak Demand Management Plan** 1 credit point for executing the Peak Demand Management Plan.	2

<table>
<tr><th></th><th>Credit Head</th><th>Credit Requirement</th><th>Credit Point(s)</th></tr>
<tr><td>EU-01-04</td><td>Metering and Monitoring</td><td>(a) Metering Provisions for Landlord’s Electrical Loads

1 credit point for equipping metering facilities to monitor and collect energy consumption data for landlord’s electrical loads.

(b) Metering Provisions for Landlord’s Individual Electrical Loads

1 to 2 credit point(s) for equipping metering facilities to monitor and collect energy consumption data for 2 or 4 numbers of the following electrical loads of landlord’s controlled systems:

1) Chiller;
2) Chiller plant;
3) Cooling tower plant;
4) Consumer substation of district cooling system and associated water side system components;
5) Air side equipment;
6) Unitary/ VRV system (For building without chiller plant and not served by district cooling system);
7) Mechanical ventilation system (rated power ≥2.5kW);
8) Lighting installation;
9) Lift and escalator systems;
10) Plumbing and drainage systems;
11) Plug load/ receptable load/ small power.

(c) Performance Auditing

Maximum 3 credit points for equipping performance monitoring systems to monitor and collect operating performance data for the following landlord’s controlled systems:

<table>
<tr><th></th><th>Landlord’s Controlled System</th></tr>
<tr><td>1</td><td>For building served by air-cooled/ water-cooled chiller plant system:
a) Chiller;
b) Chiller plant;
c) Cooling tower plant.

Alternatively,

For building served by district cooling system:
a) Consumer side chilled water pumps.</td></tr>
<tr><td>2</td><td>Air side equipment</td></tr>
<tr><td>3</td><td>Mechanical ventilation system (rated power ≥2.5kW)</td></tr>
</table>

<table>
<tr><th>Credit Point(s)</th><th>Landlord’s Controlled System</th></tr>
<tr><td>1</td><td>Any one (1) landlord’s controlled system</td></tr>
<tr><td>2</td><td>Any two (2) landlord’s controlled systems</td></tr>
<tr><td>3</td><td>All three (3) landlord’s controlled systems</td></tr>
</table>
</td><td>6</td></tr>
</table>

<table>
<tr><th></th><th>Credit Head</th><th>Credit Requirement</th><th>Credit Point(s)</th></tr>
<tr><td>EU-01-05</td><td>Energy Performance Certificate</td><td>
Option 1: For buildings with single user,

<u>Route 1: EUI under the Energy Performance Certificate of the Zero-Carbon-Ready Building Certification scheme by HKGBC:</u>

2 to 8 credit points when the project achieves the below rating:

<table>
<tr><th>Credit Points</th><th>Rating under the Energy Performance Certificate</th></tr>
<tr><td>2</td><td>Low</td></tr>
<tr><td>4</td><td>Extra Low</td></tr>
<tr><td>6</td><td>Super Low</td></tr>
<tr><td>8</td><td>Zero-Carbon-Ready</td></tr>
</table>

Alternatively,

<u>Route 2: Percentage Reduction under the Energy Performance Certificate of the Zero-Carbon-Ready Building Certification scheme by HKGBC:</u>

1 to 4 credit point(s) when the project achieves the below rating:

<table>
<tr><th>Credit Point(s)</th><th>Rating under the Energy Performance Certificate</th></tr>
<tr><td>1</td><td>Level 1 improvement</td></tr>
<tr><td>2</td><td>Level 2 improvement</td></tr>
<tr><td>3</td><td>Level 3 improvement</td></tr>
<tr><td>4</td><td>Level 4 improvement</td></tr>
</table>

Option 2: For buildings with tenant spaces,

<u>Route 1: EUI under the Energy Performance Certificate of the Zero-Carbon-Ready Building Certification scheme by HKGBC:</u>

(a) 2 to 8 credit points when the landlord’s controlled area of the project achieves the below rating:

<table>
<tr><th>Credit Point(s)</th><th>Rating under Energy Performance Certificate for Landlord’s Controlled Area</th></tr>
<tr><td>2</td><td>Low</td></tr>
<tr><td>4</td><td>Extra Low</td></tr>
<tr><td>6</td><td>Super Low</td></tr>
<tr><td>8</td><td>Zero-Carbon-Ready</td></tr>
</table>
</td><td>8 (For buildings with single user)/ 12 (For buildings with tenant spaces)</td></tr>
</table>

	Credit Head	Credit Requirement	Credit Point(s)

(b) 1 to 4 credit point(s) when the whole building's energy consumption of the project achieves the below rating:

Credit Point(s)	Rating under the Energy Performance Certificate for Whole Building
1	Low
2	Extra Low
3	Super Low
4	Zero-Carbon-Ready

Alternatively,

Route 2: Percentage Reduction under the Energy Performance Certificate of the Zero-Carbon-Ready Building Certification scheme by HKGBC:

(a) 1 to 4 credit point(s) when the landlord's controlled area of the project achieves the below rating:

Credit Point(s)	Rating under the Energy Performance Certificate for Landlord's Controlled Area
1	Level 1 improvement
2	Level 2 improvement
3	Level 3 improvement
4	Level 4 improvement

(b) 1 to 4 credit point(s) when the whole building's energy consumption of the project achieves the below rating:

Credit Point(s)	Rating under the Energy Performance Certificate for Whole Building
1	Level 1 improvement
2	Level 2 improvement
3	Level 3 improvement
4	Level 4 improvement

EU-02-01 Renewable and Alternative Energy Systems

(a) On-site Renewable Energy Application 15

1 to 10 credit point(s) for using on-site renewable energy systems to offset annual building energy consumption of landlord's controlled area.

Credit Point(s)	Percentage of Annual Building Energy Consumption of Landlord's Controlled Area
1	0.2%
2	0.4%
3	0.6%
4	0.8%
5	1.0%
6	1.2%
7	1.4%
8	1.6%
9	1.8%
10	2.0%

	Credit Head	Credit Requirement	Credit Point(s)

(b) Off-site Green Power

1 to 5 credit point(s) for purchasing Energy Attribute Certificate (EAC) and/ or establishing Power Purchase Agreement (PPA) to offset annual landlord energy consumption.

For purchasing the EAC,

Credit Point(s)	Percentage of Annual Building Energy Consumption of Landlord's Controlled Area
1	10%
2	20%
3	40%
4	70%
5	100%

Alternatively,

For establishing PPA,

Credit Point(s)	Percentage of Annual Building Energy Consumption of Landlord's Controlled Area
1	5%
2	10%
3	20%
4	35%
5	50%

EU-04-03 Energy Analysis

(a) Building Energy Consumption — 12 (for buildings with central A/C system); 9 (for buildings with de-centralised A/C system only)

1 credit point for providing total building energy consumption for landlord area for the past 12 months.

(b) Energy Breakdown for air-conditioning system

Option 1: For buildings with central A/C system

(1) 1 to 3 credit point(s) for providing energy consumption breakdown of water-side equipment for landlord's controlled area for the past 12 / 24 / 36 months for building served by air-cooled/ water-cooled air-conditioning system:

a. Chiller plant;
b. Chiller;
c. Cooling tower plant (if applicable).

Alternatively,

1 to 3 credit point(s) for providing energy consumption of consumer side chilled water pumps for the past 12 / 24 / 36 months for building served by district cooling system.

	Credit Head	Credit Requirement	Credit Point(s)
		(2) 1 to 3 credit point(s) for providing energy consumption of air-side equipment (i.e. primary air unit, air handling units, etc.) for landlord area for the past 12 / 24 / 36 months. <u>Option 2: For buildings with de-centralised A/C system only</u> 1 to 3 credit point(s) for providing energy consumption of unitary/ VRV system for landlord area for the past 12 / 24 / 36 months. **(c) Energy Breakdown for other system** 1 to 3 credit point(s) for providing energy consumption breakdown of any two of the following systems for landlord's controlled area for the past 12 / 24 / 36 months: a. Lighting system; b. Mechanical ventilation system; c. Lift and escalator systems; d. Plumbing and drainage systems. **(d) Analysis of Building Energy Consumption** 1 credit point for conducting annual review and analysis of energy consumption. **(e) Carbon Audit** 1 credit point for conducting carbon audit to measure all Greenhouse Gas emissions in Scopes 1 and 2, plus water and paper use under Scope 3, and at least one additional category under Scope 3, in accordance with The Greenhouse Gas Protocol.	
EU-04-04	Retro-commissioning (RCx)	**(a) Planning Stage** 1 credit point to develop retro-commissioning plan for systems. **(b) Investigation Stage** 1 credit point to identify and select energy saving opportunities.	11

Credit Head	Credit Requirement	Credit Point(s)

(c) Implementation Stage

Maximum 6 credit points for implementing the identified energy saving opportunities and conducting measurement and verification, preparing measurement and verification report and developing a retro-commissioning final report for the following applicable systems:

Credit Point	Active System(s)
1	Chilled water plant (For buildings served by chiller plant system) or Consumer side chilled water pumps (For buildings served by district cooling system)
1	Heat rejection plant
1	Air-side equipment of air conditioning system
1	Central hot water pump
1	Electrical system (including lighting system)
1	Lift and escalator installation

Credit Point	Passive System(s)
1	Façade system
1	Building roof

1 credit point for implementing identified energy saving opportunities for three (3) or more systems.

(d) Ongoing Commissioning Plan

1 credit point to develop an ongoing commissioning plan.

(e) Ongoing Commissioning Implementation

1 credit point to carry out ongoing commissioning in accordance with ongoing commissioning plan.

	Credit Head	Credit Requirement	Credit Point(s)
7	**Water Use (WU)**		**26**
WU-01-01	Use of Water Efficient Flow Devices	1 to 2 credit point(s) when 80% or 100% of all installed water taps and shower heads for bathing (if any) are certified with Water Efficiency Labelling Scheme (WELS) Grade 1 or equipped with WELS Grade 1 flow controllers.	2
WU-01-02	Water Efficient Irrigation	**(a) Smart Irrigation** 1 credit point for demonstrating the use of smart irrigation technology/ system for irrigation. **(b) Water Consumption Reduction by Irrigation Water** 1 credit point for demonstrating at least 10% of reduction in fresh water consumption for irrigation in the landlord-controlled area over the past 36 months.	2
WU-01-04	Water Leakage Detection	1 credit point for installing water leakage detection system(s) in all municipal potable water tank and pump rooms.	1
WU-02-01	Effluent Discharge to Foul Sewers	**(a) Water Closets** 1 credit point for demonstrating all installed water closets are dual flush with Water Efficiency Labelling Scheme (WELS) Grade 1. **(b) Urinals** 1 credit point for demonstrating all urinals are sensor types with Water Efficiency Labelling Scheme (WELS) Grade 1.	2
WU-03-01	Water Recycling	**(a) Water Recycling System(s) – Feasibility** 1 credit point for conducting feasibility study to evaluate the potential of installing water recycling system(s). **(b) Water Recycling System(s) – Implementation** 1 credit point for the application of water recycling system(s). **(c) Water Consumption Reduction by Recycled Water** 1 to 2 credit point(s) for demonstrating the annual amount of rainwater harvesting, grey and/ or black water recycling is at least 2.5% or 5% of the total annual fresh water consumption.	4

<table>
<tr><th></th><th>Credit Head</th><th>Credit Requirement</th><th>Credit Point(s)</th></tr>
<tr><td>WU-04-01</td><td>Smart Water Metering</td><td>(a) Smart Water Metering – Feasibility

1 credit point for conducting feasibility study of installing smart water meter(s) to monitor the total fresh water consumption for the building.

(b) Smart Water Metering – Implementation

1 credit point for demonstrating the provision of smart water meter(s) to monitor the total fresh water consumption for the building.</td><td>2</td></tr>
<tr><td>WU-04-02</td><td>Fresh Water Consumption Monitoring and Reduction</td><td>(a) Fresh Water Consumption - Landlord-Controlled Area

1 credit point for providing total fresh water consumption record for the past 36 months for the landlord-controlled area.

(b) Fresh Water Consumption - Whole Building

1 credit point for extending the fresh water consumption records to cover the whole building for the past 36 months.

(c) Self-Improvement

1 to 8 credit point(s) for demonstrating a net percentage on fresh water consumption reduction in landlord-controlled area over the past 36 months.

<table><tr><th>Credit Point(s)</th><th>Net Percentage on Fresh water Consumption Reduction per Year</th></tr><tr><td>1</td><td>2%</td></tr><tr><td>2</td><td>4%</td></tr><tr><td>3</td><td>5%</td></tr><tr><td>4</td><td>6%</td></tr><tr><td>5</td><td>7%</td></tr><tr><td>6</td><td>8%</td></tr><tr><td>7</td><td>9%</td></tr><tr><td>8</td><td>≥ 10%</td></tr></table>
(d) Continuous Reduction Trend

1 credit point for demonstrating a continuous reduction trend on the annual landlord fresh water consumption over the past 36 months.</td><td>11</td></tr>
</table>

	Credit Head	Credit Requirement	Credit Point(s)
WU-04-04	Quality and Safety of Water Supply	**(a) Water Supply System Safety Inspection** 1 credit point for conducting routine inspection in accordance with the Guidelines for Drinking Water Safety Plans for Buildings in Hong Kong. ***Alternatively,*** 1 credit point for achieving Blue or above certificate under Quality Water Supply Scheme for Buildings – Fresh Water (Management System). **(b) Water Audit** 1 credit point for conducting a water audit and maintain a water use inventory.	2

<table>
<tr><th></th><th>Credit Head</th><th>Credit Requirement</th><th>Credit Point(s)</th></tr>
<tr><td>8</td><td colspan="2">Health and Wellbeing (HWB)</td><td>28</td></tr>
<tr><td>HWB-01-01</td><td>Healthy and Active Living</td><td>1 credit point for providing at least two (2) of the following healthy and active living features.

<table><tr><th colspan="2">Healthy and active living features</th></tr><tr><td>Provide information boards and/ or signage about facilities and services related to physical activities at communal areas</td><td>Staircase for building users is accessible to all occupied floors</td></tr><tr><td>Provide one (1) shower and locker room facility at communal areas</td><td>Provide activity spaces that promote physical activity for building users at communal areas</td></tr><tr><td>Provide easily accessible water dispensers for tenants and visitors throughout the building</td><td>Provide secure, sheltered, and accessible bicycle storage</td></tr><tr><td colspan="2">Others to be proposed by Applicant</td></tr></table></td><td>1</td></tr>
<tr><td>HWB-01-02</td><td>Biophilic Design</td><td>1 credit point for providing at least three (3) of the following biophilic design features/ strategies in the communal areas of the building.

<table><tr><th colspan="3">List of amenities for biophilic design features/ strategies</th></tr><tr><td>Provision of indoor plants (e.g. potted plants, plant walls)</td><td>Incorporate water elements (e.g. water features, fountain)</td><td>Utilise natural lighting (e.g. skylights, large windows)</td></tr><tr><td>Use of natural materials (e.g. wood, bamboo, rattan or cork)</td><td>Mimicking images of nature</td><td>Establish visual connections to nature (e.g. views of natural environment within/ outside assessment boundary)</td></tr><tr><td colspan="3">Others to be proposed by the Applicant</td></tr></table></td><td>1</td></tr>
<tr><td>HWB-01-03</td><td>Physical Activity and Mental Health Programme</td><td>1 credit point for organising physical activity and/ or mental health programme for the building users on annual basis.</td><td>1</td></tr>
<tr><td>HWB-02-01</td><td>Inclusive Design</td><td>(a) Universal Accessibility

1 to 2 credit point(s) for providing at least five (5)/ ten (10) applicable enhanced provisions as stipulated in the “Recommended Design Requirements” of the latest version of Design Manual - Barrier Free Access issued by Buildings Department.</td><td>3</td></tr>
</table>

<table>
<tr><th></th><th>Credit Head</th><th>Credit Requirement</th><th>Credit Point(s)</th></tr>
<tr><td></td><td></td><td>(b) Family Friendly Facilities

1 credit point for providing at least three (3) family friendly facilities in the communal areas of the building.

<table>
<tr><th colspan="2">List of family friendly features</th></tr>
<tr><td>Dedicated play areas for children with shaded seating areas for care-takers</td><td>At least one washroom (excluding accessible toilets) is equipped with a child protection seat with a safety belt</td></tr>
<tr><td>At least one standalone family washroom</td><td>At least one babycare room for the public</td></tr>
<tr><td>At least one lactation room for staff</td><td>Others to be proposed by the Applicant</td></tr>
</table></td><td></td></tr>
<tr><td>HWB-02-02</td><td>Amenities for Operation and Maintenance</td><td>1 to 2 credit point(s) for providing at least three (3)/ six (6) of the following amenities/ features.

<table>
<tr><th colspan="3">List of amenities for operation and maintenance</th></tr>
<tr><td>Aerial working platform</td><td>Cat ladder</td><td>Central control room</td></tr>
<tr><td>Gondola</td><td>Central Control and Monitoring System (CCMS) or Building Management System (BMS)</td><td>Guard room</td></tr>
<tr><td>Maintenance platform for building services installations (e.g. wire mesh platform for chillers/ cooling towers)</td><td>Maintenance workshop for facility management (shall refer to a room designated for carrying out maintenance activities and repairing works. The maintenance workshop shall be equipped with worktable, repairing tools and any other equipment/ facilities for fulfilling the function of the space)</td><td>Moveable working platform</td></tr>
<tr><td colspan="3">Others to be proposed by the Applicant</td></tr>
</table></td><td>2</td></tr>
<tr><td>HWB-03-01</td><td>Ventilation Performance</td><td>(a) Minimum Ventilation (Calculation)

1 credit point for demonstrating that the design outdoor air flow rate exceeds the minimum outdoor air required by ANSI/ASHRAE Standard 62.1-2022.

(b) Minimum Ventilation (Measurement)

1 credit point for conducting measurement to demonstrate the minimum outdoor air has been achieved.</td><td>2</td></tr>
</table>

<table>
<tr><th></th><th>Credit Head</th><th>Credit Requirement</th><th>Credit Point(s)</th></tr>
<tr><td>HWB-03-03</td><td>Indoor Acoustic Environment</td><td>(a) Background Noise Level

1 credit point for demonstrating background noise levels within the prescribed criteria.

(b) Reverberation Time

1 credit point for demonstrating that the reverberation time in the applicable areas meets the prescribed criteria of given types of space.

(c) Noise Isolation

1 credit point for demonstrating airborne noise isolation between spaces fulfils the prescribed criteria.</td><td>3</td></tr>
<tr><td>HWB-03-05</td><td>Continuous IAQ Monitoring</td><td>(a) Provision of IAQ Sensor

1 to 2 credit point(s) for installing an IAQ sensor for every 500m^2 and at least one (1) per floor to measure at least four (4)/ six (6) of the following parameters in a normally occupied or common space within the assessment boundary:

<table><tr><th colspan="3">List of Parameters</th></tr><tr><td>$PM_{2.5}$</td><td>PM_{10}</td><td>Carbon dioxide</td></tr><tr><td>Total VOCs</td><td>Nitrogen dioxide</td><td>Ozone</td></tr><tr><td>Carbon monoxide</td><td>Formaldehyde</td><td>Radon</td></tr></table>
(b) Response Mechanism

1 credit point for buildings with a response mechanism setting out the mitigation measures, when the monitored parameters fail to meet the Good Class requirements of the certification scheme of the Environmental Protection Department.

(c) Real-time IAQ Data Disclosure

1 credit point for publishing the data from such continuous monitoring from selected locations in the building, in real time to its building users.</td><td>4</td></tr>
<tr><td>HWB-03-06</td><td>Thermal Comfort Monitoring</td><td>(a) Temperature and Humidity Control

1 credit point for demonstrating the temperature and the relative humidity meet the prescribed criteria in the communal areas with air conditioning.

(b) Continuous Monitoring

1 credit point for installing sensors for continuous monitoring.</td><td>2</td></tr>
</table>

	Credit Head	Credit Requirement	Credit Point(s)
HWB-03-07	Acceptable Lighting Performance	**(a) Lighting Performance in Normally Occupied Spaces** 1 credit point for demonstrating the illuminance level, unified glare rating limit and uniformity in normally occupied spaces meet the prescribed area. **(b) Lighting Performance in Not Normally Occupied Spaces** 1 credit point for demonstrating the illuminance level and unified glare rating limit in not normally occupied spaces meet the prescribed criteria.	2
HWB-03-08	Daylight	1 credit point for achieving a glazing-to-floor ratio of at least 10% for a minimum of 80% of the total internal floor area of normally occupied spaces.	1

	Credit Head	Credit Requirement	Credit Point(s)
HWB-03-10	Water Quality Survey and Access to Drinking Water	**(a) Water Quality Survey** 1 credit point for demonstrating that the quality of drinking water meets WSD's latest guideline [1].	2

Parameter(s)	Criteria
Chemical and Physical	
Turbidity	≤ 3.0 NTU
Colour	≤ 5 Hazen Unit
pH at 25°C	≥ 6.5 and ≤ 9.5
Free Residual Chlorine	> 0 mg/L and ≤ 1.5 mg/L
Conductivity at 25°C	≤ 500 µS/cm
Metals	
Lead	≤ 10 µg/L
Chromium	≤ 50 µg/L
Nickel	≤ 70 µg/L
Cadmium	≤ 3 µg/L
Copper	≤ 2000 µg/L
Antimony	≤ 20 µg/L
Bacteriological	
Heterotrophic Plate Count	≤ 20 cfu/mL
E. Coli	0 cfu/100 mL

The water quality survey shall be conducted by a HOKLAS accredited laboratory and water sampling shall follow the latest WSD's water sampling protocol.

The minimum sampling locations and frequency shall be as follows:

a. All potable water tank(s) on yearly basis;
b. Farthest point of each distribution route which is for drinking purpose on yearly basis;
c. Drinking purpose means that the potable water serving the F&B, kitchen, and pantry areas is intended solely for drinking purposes, excluding the potable water for lavatories;
d. All water dispensers on quarterly basis.

(b) Access to Drinking Water

1 credit point for providing at least one water dispenser within assessment boundary which is accessible to the public.

<table>
<tr><th></th><th>Credit Head</th><th>Credit Requirement</th><th>Credit Point(s)</th></tr>
<tr><td>HWB-03-11</td><td>Air Filtration and Purification Treatment</td><td>(a) Particle Filtration

1 credit point for installing air filters with MERV rating of 12 in all landlord’s controlled fresh air intake system serving normally occupied spaces as defined under Section 9.2 of the Appendices.

(b) Air Purification Treatment

1 credit point for providing an air purification technique in the centralised mechanical ventilation system (i.e. ventilation fan/ air handling unit with air ducting serving multiple spaces) or a standalone air purification device for the localised mechanical ventilation system (i.e. ventilation fan serving a single space) in all landlord’s controlled normally occupied spaces as defined under Section 9.2 of the Appendices.</td><td>2</td></tr>
<tr><td>HWB-04-02</td><td>Health Protection</td><td>1 to 2 credit point(s) for providing at least three (3)/ six (6) of the following health protection measures/ features.

<table><tr><th colspan="3">List of health protection measures/ features</th></tr><tr><td>Blood pressure meter</td><td>Oximeter</td><td>Face mask</td></tr><tr><td>Disinfectant wipe</td><td>AED</td><td>First aid kit</td></tr><tr><td>Hand-held thermometer</td><td>Clinic room</td><td>Automatic disinfection station</td></tr><tr><td>Hand washing stations (other than those in washroom)</td><td>Contactless lift button for at least 50% of lift</td><td>Contactless door release button for at least 50% of the main doors of entrances/ exits</td></tr><tr><td colspan="3">Others to be proposed by the Applicant</td></tr></table></td><td>2</td></tr>
</table>

	Credit Head	Credit Requirement	Credit Point(s)
9	**Innovations and Additions (IA)**		**10**
IA-01-01	Innovations and Additions	Maximum 10 credit points for IA.	10

2. Management

Effective management of building operations and maintenance is a key factor in enhancing the environmental performance of buildings, especially existing ones. The 'Management' category assesses the overarching management system, including policies, procedures, staffing, resources, and the involvement of building users, to ensure buildings operate at their maximum sustainable potential.

The following Credit Heads are not applicable under EB v3.0:

Credit Code	Credit Head
MAN-00-01	Green Purchasing Plan
MAN-01-01	EHS and Energy Management System
MAN-03-02	Building and Site Operation and Maintenance
MAN-03-03	Building Services Operation and Maintenance
MAN-04-02	Green Cleaning
MAN-04-03	User Guidance
MAN-04-04	Occupational Health and Safety (OHS)

2 Management

MAN-01 EHS and Energy Management

MAN-01-02 Building Environmental Excellence

Objective

Recognise the effort of achieving previous BEAM Plus certifications and/ or similar awards organised by other organisations.

Credit point(s) Attainable

5

Credit Requirement

(a) Complimentary Certification

1 to 2 credit point(s) for the building being certified with a final certification rating by any of the following BEAM Plus Assessment Tools:

BEAM Plus Assessment Tools	Bronze or Silver Rating	Gold or Platinum Rating
New Buildings (NB)	1	2
Existing Buildings (EB) (Comprehensive Scheme)		
The certification shall remain valid within 6 months prior to the date of the first assessment submission. If the Applicant is making an initial submission on 1 January 2025, they shall ensure that the certificate is still valid on 1 July 2024 to fulfill the credit requirement.		

(b) Environmental Excellence Certificate

Maximum 3 credit points can be achieved, with 1 credit point awarded for each environmental recognition obtained. The certificate shall cover all Applicant-controlled areas within the assessment boundary.

1. IAQ Certification Scheme (whole building);
2. Quality Water Supply Scheme for Buildings – Flushing Water;
3. Wastewi$e Certificate under The Hong Kong Green Organisation Certification (HKGOC);
4. Energywi$e Certificate under HKGOC;
5. IAQwi$e Certificate under HKGOC;
6. Carbon Reduction Certificate;
7. Hong Kong Awards for Environmental Excellence (HKAEE) – Property Management Sector Award;
8. ISO 14001 Certificate;
9. ISO 50001 Certificate;
10. Other green building related awards/ certification schemes/ campaigns which are not listed above.

Assessment

(a) Complimentary Certification

1. Provide supporting documentation showing the attainment of BEAM Plus NB/ EB (Comprehensive Scheme) certification.

2. The certification shall remain valid within 6 months prior to the date of the first assessment submission.

(b) Environmental Excellence Certificate

1. Provide supporting documentation showing the attainment of the certificate(s).

2. The certification(s) shall remain valid within 6 months prior to the date of the first assessment submission.

3. The document shall clearly indicate the following certification information for validity verification:

   a. Expiry date; or
   b. Issuance date; or
   c. List of certification participants.

4. The certification(s) shall be issued by a recognised association.

5. Any submitted certificate must fully encompass the entire assessment boundary.

6. The Applicant may propose other green building related awards/ certification schemes/ campaigns which are not listed in part (b) of Credit Requirement and each will be considered by its own merits. However, awards/ certification schemes/ campaigns incorporated in other credits e.g. Compliance Method 2 by certificate under Quality Water Supply Scheme for Buildings – Fresh Water (Management System) in WU-04-04a and alternative path by certificate of participation for the building being awarded with a Diamond/ Platinum Award under "Charter on External Lighting in SS-02-01 will not be accepted to avoid double counting.

7. The other green building-related awards, certification schemes, or campaigns not listed above may also be considered, provided they are obtained through demonstrable efforts by the Applicant toward environmental or sustainability initiatives. Certificates or awards that are merely achieved by registration and payment, without substantive actions or contributions, will not be accepted.

Submittals

(a) Complimentary Certification

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MAN-01-02a_00	EB submission form for MAN-01-02a	√	√
MAN-01-02a_01	Supporting documentation showing: i) The attainment of BEAM Plus NB/ EB (Comprehensive Scheme) certification.	√	√

(b) Environmental Excellence Certificate

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MAN-01-02b_00	EB submission form for MAN-01-02b	√	√
MAN-01-02b_01	Supporting documentation showing: i) The attainment of the certificate(s). ii) The expiration date or issuance date or list of certification participants of the certificate. iii) The certificate(s) to be issued by a recognised association	√	√

Remarks

(a) Additional Information

BEAM Plus Project Directory & Statistics. Hong Kong Green Building Council
[ONLINE]
https://www.hkgbc.org.hk/eng/beam-plus/beam-plus-dir-stat/index.jsp
[Accessed Jun 2025]

(b) Related Credit Head(s)

None

2 Management **MAN-02 ESG Disclosure**

MAN-02-01 Environmental, Social and Governance (ESG) Disclosure

Objective Encourage the building owner/ management company to have ESG reporting and disclose their sustainability performance to the public.

Credit point(s) Attainable 2

Credit Requirement

(a) ESG Committee

1 credit point for establishing a committee to oversee the building ESG issues.

(b) Policies on ESG Issues

1 credit point if the building has adopted at least five (5) different policies on ESG issues.

Assessment

(a) ESG Committee

1. A Committee shall be formed by building-in-charge/ team lead/ supervisory staff or their representative(s) from the building management team to oversee building ESG issues.

2. The Committee can be building level or corporate level.

3. Provide a list of the committee members indicating their names and positions.

4. Provide a copy of Terms of Reference of the Committee. Confidential/ sensitive information can be hidden.

5. Terms of Reference shall include at least:
   a. Membership;
   b. Meeting attendance;
   c. Meeting frequency;
   d. Duties of the Committee;
   e. Requirements for the time limit on the issuance of meeting minutes of the ESG Committee to all committee members;
   f. Requirements for the frequency of reporting to the board;
   g. Periodical review of Terms of Reference.

(b) Policies on ESG Issues

1. Provide at least five (5) different policies on ESG issues. At least one (1) policy shall be covered for each aspect.

2. **Environmental**
   a. Emissions
   b. Use of Resources
   c. The Environment and Natural Resources
   d. Climate Change

   Social
   a. Employment
   b. Health and Safety
   c. Development and Training
   d. Labour Standards

e. Supply Chain Management
f. Product Responsibility
g. Anti-corruption
h. Community Investment

Governance
a. Board Diversity
b. Whistleblowing

3. Unless the project is a government building or the policies have been publicly disclosed, the policies shall be endorsed by building-in-charge/ team lead from the building management team or the top management of building owner/ building management company.

Submittals

(a) ESG Committee

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MAN-02-01a_00	EB submission form for MAN-02-01a	√	√
MAN-02-01a_01	A list of the committee members indicating their names and positions	√	√
MAN-02-01a_02	A copy of Terms of Reference of the Committee	√	√

(b) Policies on ESG Issues

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MAN-02-01b_00	EB submission form for MAN-02-01b	√	√
MAN-02-01b_01	Endorsement on the five (5) policies on different issues (if applicable)	√	√

Remarks

(a) Additional Information

GRESB, 2023 Real Estate Standard and Reference Guide. [ONLINE]
https://documents.gresb.com/generated_files/real_estate/2023/real_estate/reference_guide/complete.html#management-policies
[Accessed Jun 2025]

HKEX, Environmental, Social and Governance Reporting Guide. [ONLINE]
https://en-rules.hkex.com.hk/sites/default/files/net_file_store/HKEX4476_3841_VER18584.pdf
[Accessed Jun 2025]

(b) Related Credit Head(s)
None

2 Management **MAN-02 ESG Disclosure**

MAN-02-02 Net-zero Transition Plan

Objective

Encourage the building management to implement systematic environmental management system and achieve net-zero by 2050.

Credit point(s) Attainable

7

Credit Requirement

(a) Near-term Decarbonisation Target (Scopes 1 and 2)

1 credit point for establishing near-term absolute Scopes 1 and 2 GHG emissions reduction target.

(b) Near-term Decarbonisation Target (Scope 3)

1 credit point for establishing near-term Scope 3 GHG emissions reduction target.

(c) Near-term Decarbonisation Target (Validation)

1 credit point if the near-term decarbonisation target is validated by Science Based Targets initiative (SBTi).

(d) Long-term Decarbonisation Target

1 credit point for establishing long-term decarbonisation target.

(e) Long-term Decarbonisation Target (Validation)

1 credit point if the long-term decarbonisation target is validated by Science Based Targets initiative (SBTi).

(f) Net Zero Commitment

1 credit point for the building management's commitment to achieving net zero by 2050.

(g) Net Zero Commitment Disclosure

1 credit point will be awarded if the building owner discloses its net-zero transition plan and targets to the public.

Assessment

(a) Near-term Decarbonisation Target (Scopes 1 and 2)

1. The decarbonisation target shall be applied to the building owner/ building management company and shall cover the individual building project/each building project in the building portfolio.

2. Provide GHG emissions reduction target of scopes 1 and 2 emissions in near-term (by 2035 latest). The target can be building level or corporate level.

3. Unless the project is a government building or the target has been publicly disclosed, the target shall be endorsed by the top management of the building owner/ building management company.

4. It is acceptable to adopt the timeframe for the near-term GHG emissions reduction target for scope 1 and 2 as stipulated in the national policy, based on the assessed building's geographical location. The Applicant shall provide supporting documentation for this. If such documentation is not available, the target year of 2035 latest shall be followed.

(b) Near-term Decarbonisation Target (Scope 3)

1. The decarbonisation target shall be applied to the building owner/ building management company and shall cover the individual building project/each building project in the building portfolio.

2. Provide GHG emissions reduction target of scope 3 emissions in near-term (by 2035 latest). This target can be applied either at the building level or the corporate level. It is not necessary to address all categories of Scope 3 emissions. The Applicant may select category(ies) that is/ are most relevant to their operations.

3. Unless the project is a government building or the target has been publicly disclosed, the target shall be endorsed by the top management of the building owner/ building management company.

4. It is acceptable to adopt the timeframe for the near-term GHG emissions reduction target for scope 3 as stipulated in the national policy, based on the assessed building's geographical location. The Applicant shall provide supporting documentation for this. If such documentation is not available, the target year of 2035 latest shall be followed.

(c) Near-term Decarbonisation Target (Validation)

1. Provide supporting to demonstrate the near-term (by 2035 latest) net-zero target is validated by SBTi.

(d) Long-term Decarbonisation Target

1. The decarbonisation target shall be applied to the building owner/ building management company and shall cover the individual building project/ each building project in the building portfolio.

2. Provide GHG emissions reduction target of scopes 1, 2 and 3 emissions in long-term (by 2050). The target can be building level or corporate level.

3. Unless the project is a government building or the target has been publicly disclosed, the target shall be endorsed by the top management of the building owner/ building management company.

4. It is acceptable to adopt the timeframe for the long-term GHG emissions reduction target for scopes 1, 2 and 3 as stipulated in the national policy, based on the assessed building's geographical location. The Applicant shall provide supporting documentation for this. If such documentation is not available, the target year of 2050 shall be followed.

(e) Long-term Decarbonisation Target (Validation)

1. Provide supporting to demonstrate the long-term (by 2050) decarbonisation target is validated by SBTi.

(f) Net Zero Commitment

1. Provide a building management's commitment statement for the building to achieving net zero by 2050.

2. Unless the project is a government building or the statement has been publicly disclosed, the statement shall be endorsed by the top management of the building owner/ building management company.

3. It is acceptable to adopt the timeframe for the net zero target as stipulated in the national policy, based on the assessed building's geographical location. The Applicant shall provide supporting documentation for this. If such documentation is not available, the target year of 2050 shall be followed.

(g) Net Zero Commitment Disclosure

1. Provide evidence showing net-zero transition plan and targets are disclosed to the public.

Submittals

(a) Near-term Decarbonisation Target (Scopes 1 and 2)

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MAN-02-02a_00	EB submission form for MAN-02-02a	√	√
MAN-02-02a_01	Reduction targets for Scope 1 and Scope 2 emissions (with endorsement if applicable)	√	√
MAN-02-02a_02	Evidence showing timeframe for the near-term GHG emissions reduction target for scopes 1 and 2 as stipulated in the national policy, based on the assessed building's geographical location (if applicable)	√	√

(b) Near-term Decarbonisation Target (Scope 3)

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MAN-02-02b_00	EB submission form for MAN-02-02b	√	√
MAN-02-02b_01	Reduction target for Scope 3 emissions (with endorsement if applicable)	√	√
MAN-02-02b_02	Evidence showing timeframe for the near-term GHG emissions reduction target for scope 3 as stipulated in the national policy, based on the assessed building's geographical location (if applicable)	√	√

(c) Near-term Decarbonisation Target (Validation)

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MAN-02-02c_00	EB submission form for MAN-02-02c	√	√
MAN-02-02c_01	Records showing that the target has been submitted to SBTi for review.	√	-
MAN-02-02c_02	Records showing that the target has been validated by SBTi.	-	√

(d) Long-term Decarbonisation Target

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MAN-02-02d_00	EB submission form for MAN-02-02d	√	√
MAN-02-02d_01	Long-term decarbonisation target (with endorsement if applicable)	√	√
MAN-02-02d_02	Evidence showing timeframe for the long-term decarbonisation target as stipulated in the national policy, based on the assessed building's geographical location (if applicable)	√	√

(e) Long-term Decarbonisation Target (Validation)

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MAN-02-02e_00	EB submission form for MAN-02-02e	√	√
MAN-02-02e_01	Records showing that the target has been submitted to SBTi for review.	√	-
MAN-02-02e_02	Records showing that the target has been validated by SBTi.	-	√

(f) Net Zero Commitment

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MAN-02-02f_00	EB submission form for MAN-02-02f	√	√
MAN-02-02f_01	Net zero target (with endorsement if applicable)	√	√
MAN-02-02f_02	Evidence showing timeframe for the net zero target as stipulated in the national policy, based on the assessed building's geographical location (if applicable)	√	√

(g) Net Zero Commitment Disclosure

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MAN-02-02g_00	EB submission form for MAN-02-02g	√	√
MAN-02-02g_01	Net-zero transition plan and targets	√	√
MAN-02-02g_02	Evidence showing net-zero transition plan and targets are disclosed to the public	-	√

Remarks

(a) Additional Information

Science-based targets, corporate net-zero tool.
[ONLINE]
https://sciencebasedtargets.org/resources/?tab=develop
[Accessed Jun 2025]

(b) Related Credit Head(s)

None

2 Management **MAN-02 ESG Disclosure**

MAN-02-03 Resilience Strategy

Objective

Encourages consideration of an asset's exposure to a range of climate-related risks, such as identifying flood risks and implementing mitigation measures where required.

Credit point(s) Attainable 3

Credit Requirement

(a) Climate-related Physical Risks and Opportunities

1 credit point for detailing the climate related physical risks and opportunities identified, the methodology used for the assessment and the key metrics where applicable.

(b) Transition Risks and Opportunities

1 credit point for detailing the transition risks and opportunities identified, the methodology used for the assessment and the key metrics where applicable (Metrics shall include energy, water, land use and waste management where relevant and applicable).

(c) Evaluation of Climate Resilience

1 credit point for conducting climate-related scenario analysis to evaluate their climate resilience in the face of extreme weather events.

Assessment

(a) Climate Related Physical Risks and Opportunities

1. Conduct a project specific climate change risk and adaptation assessment, aligned to the principles outlined by the International Sustainability Standards Board (ISSB), which published the International Financial Reporting Standards (IFRS) S2 Climate-related Disclosures.

2. The assessment shall follow the requirement under IFRS S2, which distinguishes climate-related risks in respect to physical risks (event-driven or acute risks; longer-term shifts or chronic risks).

3. Event-driven or acute risks shall refer to storms, floods, drought or heatwaves, which are increasing in severity and frequency.

4. Longer-term shifts or chronic risks shall refer to changes in precipitation and temperature which could lead to sea level rise, reduced water availability, biodiversity loss and changes in soil productivity.

5. Unless the project is a government building or the assessment report has been publicly disclosed, the assessment report shall be endorsed by building-in-charge/ team lead of building management team or the top management of building owner/ building management company.

(b) Transition Risks and Opportunities

1. Conduct a project specific climate change risk and adaptation assessment, aligned to the principles outlined by the International Sustainability Standards Board (ISSB), which published the International Financial Reporting Standards (IFRS) S2 Climate-related Disclosures.

2. The assessment shall follow the requirement under IFRS S2, which distinguishes climate-related risks in respect to Transition risks (those associated with moving to a lower-carbon economy).

3. Transition Risks shall refer to the risks that arise from efforts to transition to a lower-carbon economy. Transition risks include policy, legal, technological, market and reputational risks.

4. Unless the project is a government building or the assessment report has been publicly disclosed, the assessment report shall be endorsed by building-in-charge/ team lead of building management team or the top management of building owner/ building management company.

(c) Evaluation of Climate Resilience

1. Conduct a project specific climate change risk and adaptation assessment, aligned to the principles outlined by the International Sustainability Standards Board (ISSB), which published the International Financial Reporting Standards (IFRS) S2 Climate-related Disclosures.

2. The assessment shall follow the requirement under IFRS S2, which distinguishes climate-related risks in respect to physical risks (event-driven or acute risks; longer-term shifts or chronic risks).

3. The climate-related scenario analysis shall follow the previously adopted Taskforce for Climate Related Financial Disclosures (TCFD) guidance that sets out types of scenario analysis, including quantitative, partially quantitative and qualitative.

4. Unless the project is a government building or the assessment report has been publicly disclosed, the assessment report shall be endorsed by building-in-charge/ team lead of building management team or the top management of building owner/ building management company.

Submittals

(a) Climate Related Physical Risks and Opportunities

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MAN-02-03a_00	EB submission form for MAN-02-03a	√	√
MAN-02-03a_01	An assessment report for climate related physical risks and opportunities (with endorsement if applicable)	-	√

(b) Transition Risks and Opportunities

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MAN-02-03b_00	EB submission form for MAN-02-03b	√	√
MAN-02-03b_01	An assessment report for transition risks and opportunities (with endorsement if applicable)	-	√

(c) Evaluation of Climate Resilience

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MAN-02-03c_00	EB submission form for MAN-02-03c	√	√
MAN-02-03c_01	An assessment report for climate resilience (with endorsement if applicable)	-	√

Remarks

(a) Additional Information

The IFRS Foundation, IFRS S2 Climate-related Disclosures. [ONLINE]
https://www.ifrs.org/issued-standards/ifrs-sustainability-standards-navigator/ifrs-s2-climate-related-disclosures.html/content/dam/ifrs/publications/html-standards-issb/53nglish/2023/issued/issbs2/
[Accessed Jun 2025]

(b) Related Credit Head(s)

None

2 Management **MAN-03 Operation and Maintenance**

MAN-03-01 Staff Training and Resources

Objective

Ensure the staff training and technical resources are adequate for the Management, Operation and Maintenance (MO&M) of the individual building project/each building project in the building portfolio.

Credit point(s) Attainable 3

Credit Requirement

(a) BEAM Accredited Personnel

1 credit point for building-in-charge/ team lead has accredited with BEAM Pro qualification for EB v3.0.

(b) Professional Qualified Personnel

1 credit point if the building-in-charge/ team lead under (a) above holds a professional qualification for the facilities management sector.

(c) Staff Training

1 credit point for providing adequate and periodic training for the staff responsible for the MO&M of the individual building project/ each building project in the building portfolio.

Assessment

(a) BEAM Accredited Personnel

1. Provide BEAM Professional certificate to show that building-in-charge/ team lead of building management team of the building is a BEAM Professional with EB v3.0 credential at the time of first assessment submission;

2. Organisation chart to demonstrate the line of authority of the building-in-charge/ team lead of building management team.

(b) Professional Qualified Personnel

1. Provide an undertaking letter from the top management of building owner/ building management company confirming that the person or persons identified under (a) above has been assigned as the building-in-charge/ team lead of the building within 12 months prior to the time of first assessment submission. License number of building-in-charge/ team lead from the building management team of the building shall be indicated in the undertaking letter.

2. The professional qualification shall be issued by a recognised association. For example, a property management practitioner (Tier 1) license under the Property Management Services Ordinance (Cap.626).

3. Other professional qualifications not listed above may also be considered, provided they enhance professional standards in facilities management to optimise property assets. However, qualifications obtained solely through registration and payment, without substantive contributions or actions, will not be accepted.

4. Provide supporting documentation showing the attainment of the professional qualification.

5. The professional qualification shall be valid at the at the time of first assessment submission.

6. The document shall clearly indicate the following professional qualification information for validity verification:

   a. Expiry date; or
   b. Issuance date; or
   c. List of certification participants.

7. Organisation chart to demonstrate the line of authority of the building-in-charge/ team lead of building management team.

(c) Staff Training

1. Provide summary table of training courses and hours for the building-in-charge/ team lead of building management team and other staff and corresponding training records for the staff members responsible for MO&M within 12 months prior to the time of first assessment submission.

2. Organisation chart showing the name of the building-in-charge/ team lead of building management team and other staff.

3. The topics of the training are not regulated but the training shall be related to MO&M or policies on ESG issues under credit head MAN-02-01b. The minimum training requirements are 15 hours and 6 hours per year for the building-in-charge and other staff respectively.

4. The training courses may be conducted internally or by external providers.

5. Training requirements are tied to the job position, not to the specific individual who holds it.

6. Only staff members of the Building Management Company listed in the organisation chart shall be included in the assessment, while staff members of sub-contractors shall be excluded from the assessment.

Submittals

(a) BEAM Accredited Personnel

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MAN-03-01a_00	EB submission form for MAN-03-01a	√	√
MAN-03-01a_01	Undertaking letter from the top management of building owner/ building management company	√	√
MAN-03-01a_02	BEAM Professional certificate	√	√
MAN-03-01a_03	Organisation chart	√	√

(b) Professional Qualified Personnel

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MAN-03-01b_00	EB submission form for MAN-03-01b	√	√
MAN-03-01b_01	Undertaking letter from the top management of building owner/ building management company	√	√
MAN-03-01b_02	Supporting documentation showing: i) The attainment of the professional qualification. ii) The expiration date or issuance date or list of certification participants of the professional qualification. iii) The professional qualification was issued by a recognised association	√	√
MAN-03-01b_03	Organisation chart	√	√

(c) Staff Training

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MAN-03-01c_00	EB submission form for MAN-03-01c	√	√
MAN-03-01c_01	Summary table and corresponding training records	√	√
MAN-03-01c_02	Organisation chart	√	√

Remarks

(a) Additional Information

Property Management Services Authority, register of licensees (online version).
[ONLINE]
https://eapplication.pmsa.org.hk/registers/#m-practitioners
[Accessed Jun 2025]

Hong Kong Green Building Council publishes the latest registers of BEAM Professionals and BEAM Affiliates on its website.
[ONLINE]
https://app.powerbi.com/view?r=eyJrIjoiYjUxMDUwMWMtNWIzOS00YmQxLTgxYTYtMDZkMjczNDE1N2ZhIiwidCI6ImQwMTUyOGY5LTQ3NDItNGJjYS05MDVmLWU3ZjIxZTJhNmM5MiIsImMiOjEwfQ%3D%3D
[Accessed Jun 2025]

(b) Related Credit Head(s)

None

2 Management **MAN-03 Operation and Maintenance**

MAN-03-04 Smart Facility Management

Objective Promote the adoption of best practices and innovative technologies for continuous improvement in E&M asset management.

Credit point(s) Attainable 6

Credit Requirement

(a) Good Practices for Operation and Maintenance Service

1 to 2 credit point(s) for implementing at least five (5)/ ten (10) applicable good practices as stipulated in Best Practices for Operation and Maintenance Service published by EMSD. These practices can be selected from Best Practices Booklets and Handbooks on HVAC Installations, Electrical Installations or Lift and Escalator Installations.

(b) Best Practices for Operation and Maintenance Service

1 to 2 credit point(s) for implementing at least five (5)/ ten (10) applicable best practices as stipulated in Best Practices for Operation and Maintenance Service published by EMSD. These practices can be selected from Best Practices Booklets and Handbooks on HVAC Installations, Electrical Installations or Lift and Escalator Installations.

(c) Digitalised Operation

1 credit point for adopting digitalised facility management system for operation.

(d) Digitalised Maintenance

1 credit point for adopting digitalised facility management system for maintenance.

Assessment

(a) Good Practices for Operation and Maintenance Service

1. Provide a summary detailing applicable good practices as stipulated in Best Practices for Operation and Maintenance Service of HVAC, Electrical and Lift and Escalator installations.

2. Where best practices are implemented, each best practice applied will be considered as meeting the requirement for one (1) good practice under this section.

3. The same best practice may be counted towards both the best practices and good practices requirements.

(b) Best Practices for Operation and Maintenance Service

1. Provide a summary detailing applicable best practices as stipulated in Best Practices for Operation and Maintenance Service of HVAC, Electrical and Lift and Escalator installations.

2. The same best practice may be counted towards both the best practices and good practices requirements.

(c) Digitalised Operation

1. Provide screenshots of the digitalised facility management system, which covers the following:

    a. Inventory & supply management;
    b. Work order management;
    c. Asset tracking;
    d. Capital planning & forecasting;
    e. Maintenance requests;
    f. Schedule requests for preventive maintenance;
    g. Work order management;
    h. Inspection and maintenance records management.

2. Digitalised facility management system shall be a single platform with the following features as a minimum:

    a. Utilisation of information from sensory devices (e.g. leakage detection);
    b. Centralised the management and tracking of all records. Building management team can plan, control, supervise technical staff, report issues, schedule maintenance, and assign work orders via mobile app or on a desktop.

(d) Digitalised Maintenance

1. Provide screenshots of the digitalised facility management system, which covers the following:

    a. Maintenance requests;
    b. Schedule requests for preventive maintenance;
    c. Work order management;
    d. Inspection and maintenance records management.

2. Digitalised facility management system shall be a single platform with the following features as a minimum:

    a. Utilisation of information from sensory devices (e.g. leakage detection);
    b. Centralised the management and tracking of all records. Building management team can plan, control, supervise technical staff, report issues, schedule maintenance, and assign work orders via mobile app or on a desktop.

Submittals

(a) Good Practices for Operation and Maintenance Service

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MAN-03-04a_00	EB submission form for MAN-03-04a	√	√
MAN-03-04a_01	Summary table listing the applicable good/ best practices, and their locations (if applicable)	√	√
MAN-03-04a_02	Drawings showing the practices (if applicable)	√	√
MAN-03-04a_03	Report showing justifications and details for each practice	√	√

(b) Best Practices for Operation and Maintenance Service

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MAN-03-04b_00	EB submission form for MAN-03-04b	√	√
MAN-03-04b_01	Summary table listing the applicable best practices, and their locations (if applicable)	√	√
MAN-03-04b_02	Drawings showing the practices (if applicable)	√	√
MAN-03-04b_03	Report showing justifications and details for each practice	√	√

(c) Digitalised Operation

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MAN-03-04c_00	EB submission form for MAN-03-04c	√	√
MAN-03-04c_01	Screenshots of the digitalised facility management system for digitalised operation	√	√

(d) Digitalised Maintenance

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MAN-03-04d_00	EB submission form for MAN-03-04d	√	√
MAN-03-04d_01	Screenshots of the digitalised facility management system for digitalised maintenance	√	√

Remarks

(a) Additional Information

Electrical and Mechanical Services Department – Best Practices for Operation and Maintenance Service
[ONLINE]
https://bestpractice.emsd.gov.hk/en/
[Accessed Jun 2025]

(b) Related Credit Head(s)

None

2 Management **MAN-03 Operation and Maintenance**

MAN-03-05 BIM Integration

Objective

Promote the use of BIM for asset management and facility management to support a green and intelligent building approach.

Credit point(s) Attainable

3

Credit Requirement

(a) Maintenance of BIM Model

1 credit point for maintaining BIM model including as-built fixtures, finishes and equipment data.

(b) Use of BIM Model (Asset Management)

1 credit point for using BIM model for asset management.

(c) Use of BIM Model (Facility Management)

1 credit point for using BIM model for facility management.

Assessment

(a) Maintenance of BIM Model

1. Provide screenshots of the asset information/ properties of BIM model to demonstrate that the following documents are already incorporated into the model:
   a. Fixtures;
   b. Finishes;
   c. Equipment data.

(b) Use of BIM Model (Asset Management)

1. Provide a narrative that demonstrate the quantified environmental benefit by using BIM for asset management to support green and intelligent building approach:
   a. Drawing Generation;
   b. As-Built Model and Asset Information Model;
   c. Maintenance Scheduling;
   d. Space Management and Tracking;
   e. Asset Management.

(c) Use of BIM Model (Facility Management)

1. Provide a narrative that demonstrate the quantified environmental benefit by using BIM for facility management to support green and intelligent building approach:
   a. Drawing Generation;
   b. As-Built Model and Asset Information Model;
   c. Maintenance Scheduling;
   d. Space Management and Tracking;
   e. Asset Management.

Submittals

(a) Maintenance of BIM Model

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MAN-03-05a_00	EB submission form for MAN-03-05a	√	√
MAN-03-05a_01	Screenshots of the asset information/ properties of BIM model	√	√

(b) Use of BIM Model (Asset Management)

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MAN-03-05b_00	EB submission form for MAN-03-05b	√	√
MAN-03-05b_01	A narrative, with calculation of environmental benefit and relevant supporting information, for the use of BIM for asset management	√	√

(c) Use of BIM Model (Facility Management)

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MAN-03-05c_00	EB submission form for MAN-03-05c	√	√
MAN-03-05c_01	A narrative, with calculation of environmental benefit and relevant supporting information, for the use of BIM for facility management	√	√

Remarks

(a) Additional Information

Electrical and Mechanical Services Department – Building Information Modelling – Asset Management (BIM-AM)
[ONLINE]
https://www.emsd.gov.hk/en/engineering_services/project_management_consultancy/highlights_of_work/bim_am/
[Accessed Jun 2025]

The Hong Kong Construction Industry Council – CIC BIM Standards.
[ONLINE].
https://www.bim.cic.hk/en/resources/publications?cate=3&keyword=
[Accessed Jun 2025]

The American Institute of Architects (AIA) – The American G202™ – 2013, Project Building Information Modelling Protocol Form
[ONLINE]
https://contractdocs.aia.org/PreviewFiles/Preview_G202-2013%20OmniClass.pdf
[Accessed Jun 2025]

(b) Related Credit Head(s)

None

2 Management **MAN-04 Green and Healthy Management**

MAN-04-01 Green Lease

Objective Encourage landlord-tenant collaboration in agreeing and implementing green goals.

Credit point(s) Attainable 4

Credit Requirement

(a) Green Lease Incentive

1 credit point for including measurable KPIs or sustainability tasks in the green lease.

(b) Green Lease Coverage

1 to 3 credit point(s) will be awarded if at least 5%/ 10%/ 15% of leased areas implement a green lease.

Assessment

(a) Green Lease Incentive

1. Provide a sample of typical tenancy agreement with green lease, at the time of first assessment submission and an undertaking letter from the top management of building owner/ building management company, specifying measurable KPIs or sustainability tasks. Confidential/ sensitive information on the tenancy agreement is not required and could be excluded.

2. Green lease shall incorporate clauses whereby the building owner and the tenant undertake specific responsibilities/ obligations with regards to the sustainable operation/ occupation of a property. For example, energy efficiency, water conservation, waste reduction/ management and sustainable renovation and indoor air quality management.

(b) Green Lease Coverage

1. Provide calculation of green lease coverage (%) by below equation:

$$\textbf{Green Lease Coverage}\ (\%) = \left(\frac{\sum \textbf{Leased Area With Green Lease}}{\textbf{Total Leased Area}}\right) \times \mathbf{100}\%$$

2. Only leased area at the time of first assessment submission shall be included in the calculation.

3. Provide summary of leased area at the time of first assessment submission.

Submittals

(a) Green Lease Incentive

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MAN-04-01a_00	EB submission form for MAN-04-01a	√	√
MAN-04-01a_01	A sample of typical tenancy agreement with green lease and an undertaking letter from the top management of building owner/ building management company	√	√

(b) Green Lease Coverage

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MAN-04-01b_00	EB submission form for MAN-04-01b	√	√
MAN-04-01b_01	Calculation of green lease coverage	√	√
MAN-04-01b_02	Summary of leased area	√	√

Remarks

(a) Additional Information

Hong Kong Green building Council Limited – Green Tenancy Driver for Office Buildings
[ONLINE]
https://www.hkgbc.org.hk/eng/engagement/guidebooks/green-tenancy-driver/index.jsp
[Accessed Jun 2025]

(b) Related Credit Head(s)

None

2 Management **MAN-04 Green and Healthy Management**

MAN-04-05 Tenant Engagement Programme(s)

Objective

Encourage the building and its tenants to cooperate in good faith to improve sustainability performance.

Credit point(s) Attainable

5

Credit Requirement

(a) Capacity Building Programme(s)

1 credit point for organising capacity building programme(s) to the tenants for at least 10% of leased area.

(b) Carbon Audit to Tenants

1 credit point for conducting carbon audit for tenants covering at least 5% of the leased area to help identify opportunities for decarbonisation.

(c) Decarbonisation Targets for Tenants

1 credit point for assisting tenants in establishing decarbonisation targets based on the findings of the carbon audit.

(d) Award for Recognition

1 credit point for organising award for recognition of excellence in sustainability performance of tenants.

(e) Carbon Related Pledge

1 credit point for implementing sustainability related pledge, with measurable KPIs or sustainability tasks for at least 10% of leased area.

Assessment

(a) Capacity Building Programme(s)

1. Provide a narrative outlining the details of capacity building programme(s), including name, date, content, attendance record of tenant and record photographs.

2. The content of capacity building programme(s) shall be related to the enhancement of tenants' sustainability capabilities.

3. The capacity building programme(s) shall be organised within 6 months prior to the time of first assessment submission.

4. Provide the calculation of capacity building programme(s) coverage (%) by using the equation below:

$$\textbf{Capacity Building Programme(s) Coverage}\ (\%) = \left(\frac{\sum \textbf{Leased Area Taking Part in Capacity Building Programme}\ (s)}{\textbf{Total Leased Area}}\right) \times 100\%$$

5. To be included in the numerator of the above equation, a leased area must have at least three (3) representatives participate in the capacity building programme(s).

6. Provide a summary of leased area within the past 12 months at the time of first assessment submission.

7. Same tenant(s) joining different capacity building programmes cannot be double counted.

(b) Carbon Audit to Tenants

1. Provide the calculation of carbon audit coverage (%) using the equation below:

$$\textbf{Carbon Audit Coverage}\ (\%) = \left(\frac{\sum \textbf{Leased Area With Carbon Audit}}{\textbf{Total Leased Area}}\right) \times \mathbf{100}\%$$

2. Provide a summary of leased area within the past 12 months at the time of first assessment submission.

3. Provide a copy of carbon audit report in accordance with the Greenhouse Gas Protocol.

4. The carbon audit report shall meet the following requirements:

   a. Conducted within the past 12 months at the time of first assessment submission;
   b. Endorsed by a certified carbon auditor;
   c. Emissions in Scopes 1 and 2 are included;
   d. Water (if applicable) and paper use are included.

(c) Decarbonisation Targets for Tenants

1. Provide carbon related reduction percentage target of Scopes 1 and 2 emissions, water (if applicable) and paper use in near-term (by 2035 latest) and long-term (by 2050).

(d) Award for Recognition

1. Provide a detailed narrative on the award that recognises excellence in sustainability performance among tenants, including the name of the award, the date it is awarded, and an explanation of how this recognition can enhance the sustainability performance of the tenants.

2. The content of award for recognition shall be related to the enhancement of tenants' sustainability capabilities.

3. The award for recognition shall be organised within 12 months prior to the time of first assessment submission.

(e) Carbon Related Pledge

1. Provide a narrative outlining the details of sustainability related pledge, including name, date, measurable KPIs or sustainability tasks and a list of signatory record.

2. The pledge shall be organised within 12 months prior to the time of first assessment submission.

3. Provide the calculation of pledge coverage (%) using the equation below:

$$\textbf{Pledge Coverage}\ (\%) = \left(\frac{\sum \textbf{Leased Area Signing The Pledge}}{\textbf{Total Leased Area}}\right) \times \mathbf{100}\%$$

4. Provide a summary of leased area within the past 12 months at the time of first assessment submission.

Submittals

(a) Capacity Building Programme(s)

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MAN-04-05a_00	EB submission form for MAN-04-05a	√	√
MAN-04-05a_01	A narrative outlining the details of capacity building programme(s)	√	√
MAN-04-05a_02	Calculation of capacity building programme(s) coverage	-	√
MAN-04-05a_03	Summary of leased area within the past 12 months at the time of first assessment submission	-	√

(b) Carbon Audit to Tenants

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MAN-04-05b_00	EB submission form for MAN-04-05b	√	√
MAN-04-05b_01	Calculation of carbon audit coverage	-	√
MAN-04-05b_02	Summary of leased area within the past 12 months at the time of first assessment submission	-	√
MAN-04-05b_03	A copy of carbon audit report	√	√

(c) Decarbonisation Targets for Tenants

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MAN-04-05c_00	EB submission form for MAN-04-05c	√	√
MAN-04-05c_01	Endorsed carbon related reduction percentage target of Scopes 1 and 2 emissions in near-term (by 2035) and long-term (by 2050)	√	√

(d) Award for Recognition

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MAN-04-05d_00	EB submission form for MAN-04-05d	√	√
MAN-04-05d_01	A narrative outlining the details of award for recognition of excellence in sustainability performance of tenant	√	√

(e) Carbon Related Pledge

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MAN-04-05e_00	EB submission form for MAN-04-05e	√	√
MAN-04-05e_01	A narrative outlining the details of sustainability related pledge	√	√
MAN-04-05e_02	Calculation of pledge coverage	-	√
MAN-04-05e_03	Summary of leased area within the past 12 months at the time of first assessment submission	-	√

Remarks

(a) Additional Information

None

(b) Related Credit Head(s)

None

3. Sustainable Site

Site location is important with regard to adequacy of local amenities and public transport provisions, reduction of travel needs and reliance on private vehicles. There is often an opportunity to enhance the quality of buildings through more thoughtful ‘greening’ and other features. The impacts on neighbouring developments and various discharges and emissions from the site can be significant throughout a building’s lifetime.

The following Credit Heads are not applicable under EB v3.0:

Credit Code	Credit Head
SS-01-02	Neighbourhood Amenities
SS-01-03	Building Design for Sustainable Urbanism
SS-01-04	Neighbourhood Daylight Access
SS-03-02	Immediate Neighbourhood Wind Environment
SS-03-03	Outdoor Thermal Comfort
SS-04-01	Stormwater Management

3 Sustainable Site **SS-01 Pollution Prevention and Control**

SS-01-01 Promotion of Public Transportation

Objective Promote public transportation.

Credit point(s) Attainable 1

Credit Requirement 1 credit point for the availability of convenient pedestrian access to mainstream public transport.

Alternatively,

1 credit point for achieving Accessibility Index of 15 or more for all building types of a development.

Assessment

1. Provide evidence such as screen capture of a web-based maps showing the unencumbered walking distance is within 500m measured from the building main entrance to the nearby mass transit station.

2. Mass transit includes underground subway systems, railways, light rail systems and trams.

Alternatively,

1. Indicate the distances shown alongside unhampered walking routes within a walking distance of 1,000m from the site main entrance(s) to each public transport stop or the main entrance of each station in vicinity on an A3-sized scaled drawing.

2. Provide evidence of service frequencies of the public transport.

3. Calculate the Accessibility Index (AI) for All building types of a development.

    a. Use service frequency data at peak periods for the calculation of waiting time.

        i. The Applicant shall propose any hour on a weekday as the “peak hour” for the calculation of AI. In view of different building natures (e.g. non-residential/ non-commercial building types such as stadium, museum, etc.), the “peak hour” may be considered as any hour on a weekend with justification. The service frequency data of the identified public transport shall be selected at the same “peak hour”.

        ii. Considering the same proposed “peak hour’, the shortest headway (in minutes) from service frequency data could be adopted for each of the identified public transports. For example, given that the service frequency of public transport is 15-20 minutes within the “peak hour”, the lower bound (i.e. 15 minutes) could be adopted in the AI calculation.

    b. Adopt a walking speed of 80m per minute for the calculation of walk time.

4. For a site served by dedicated shuttle service vehicles for the development and to be considered under the AI method, provide the following:

    a. Summary of services provisions by the service provider confirming below shall be notified to building users:

        i. Routes and stops of the shuttle services providing connection links to the public transport,

        ii. Capacity of the shuttle service vehicles,

        iii. Locations of the shuttle service drop-off/ pick-up points, and

        iv. Operating frequency of the services.

    b. Justification of the adequacy of the service.

    c. An undertaking letter from the top management of building owner/ building management company for the provision of the shuttle service for a minimum of 5 years. A minimum of 1 year rolling contract in place with the service provider shall be submitted.

Submittals

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
SS-01-01_00	EB submission form for SS-01-01	√	√
SS-01-01_01	Summary report of public transport	√	√
SS-01-01_02	Scaled drawing on an A3-sized sheet indicating the distances alongside unhampered walking routes from site entrance to stops/ stations of public transport services	√	√
Alternative path by demonstration with Accessibility Index			
SS-01-01_03	Evidence of service frequencies of public transport at the peak hour	√	√
SS-01-01_04	Calculation for Accessibility Index	√	√
SS-01-01_05	Scaled building layout plans for drop-off/ pick-up point(s) of shuttle service vehicles	√	√
SS-01-01_06	Summary of shuttle service provision	√	√
SS-01-01_07	Justification for the adequacy of services	√	√
SS-01-01_08	An undertaking letter from the top management of building owner/ building management company for the provision of the shuttle service for a minimum of 5 years	√	√
SS-01-01_09	Rolling contract (for a minimum of 1 year) in place with the service provider	√	√

Remarks

(a) Additional Information

Public Transport Accessibility Levels, Transport for London [ONLINE]
https://data.london.gov.uk/dataset/public-transport-accessibility-levels
[Accessed Jun 2025]

(b) Related Credit Head(s)

None

3 Sustainable Site **SS-01 Pollution Prevention and Control**

SS-01-05 Noise Control for Building Equipment

Objective Implement measures to minimise noise from building services equipment affecting neighbours.

Credit point(s) Attainable 1

Credit Requirement 1 credit point for demonstrating the level of the intruding noise at the façade of the potential Noise Sensitive Receivers (NSRs) is in compliance with the criteria stipulated in the Technical Memorandum for the Assessment of Noise from Places Other than Domestic Premises, Public Places or Construction Sites.

Assessment

1. Conduct a noise assessment in accordance with the Technical Memorandum.

2. Demonstrate the intruding noise level at the façade of existing and potential (if applicable) NSRs comply with the criteria stipulated in the Technical Memorandum.

3. Provide a noise prediction/ assessment report with detailed analysis, appropriate calculations and/ or measurements to demonstrate compliance. The report shall address the following criteria:

    3.1. **Background Noise Measurement:** Provide a background noise measurement report with detailed monitoring records to support the Acceptable Noise Level (ANL) requirements of daytime, evening time and nighttime.

    3.2. **Identification of NSRs:** Identify both the existing and potential NSRs within 300 meters of the project site, measured from the nearest point of the assessment boundary.

        3.2.1. Noise sensitive receivers shall follow the Technical Memorandum.

        3.2.2. Only buildings external to the site boundary are assessed.

        3.2.3. On the basis of promoting good environmental design assessment, the statutory plans of Town Planning Ordinance shall be examined to identify the potential NSRs based on the planned land use.

        3.2.4. For vacant lands with no verified use, it shall be assumed that it will become an NSR.

    3.3. **Assessment location:** Assessment shall be made at 1m from the façade on the noise sensitive receiver. The compliance could be demonstrated by calculations, measurements, or a combination of both.

    3.4. **Measurement Methods:** If on-site measurement is opted for, measure the intruding noise directly at the nearest location(s) of the representative noise sensitive receivers.

3.4.1. If access to the NSRs is not available, use one of the following:
(1) Measure at a nearby location with calculation adjustment.
(2) Measure the sound power level at the intruding noise source, follow by a prediction of the noise levels at the NSRs using standard noise propagation equation.

3.5. **Noise Sources:** All major noise generating equipment in place other than domestic units in a residential building of public/ private housing development and government quarters shall be assessed.

3.5.1. For areas served by central air-conditioning and ventilation systems, the major noise sources include air-cooled chillers, water cooling towers, air-cooled heat pumps, and axial and centrifugal fans (≥2.5kW each).

3.5.2. For areas served by de-centralised air-conditioning and ventilation systems, the major noise sources include outdoor air-conditioning units (with rated cooling capacity >7.1kW) and ventilating fans (i.e. axial and centrifugal fans ≥2.5kW each).

3.5.3. Only equipment provided by the developer/ owner is assessed.

3.5.4. Noise from domestic units (e.g., residential buildings in public/private housing developments or government quarters) is not subject to assessment under the Technical Memorandum.

3.6. **Noise Level Requirements**: All major fixed noise sources shall be located and designed so that when assessed in accordance with the Technical Memorandum.

3.6.1. The level of the intruding noise at 1m from the façade of the nearest sensitive receiver shall be at least 5 dB(A) below the appropriate ANL shown in Table 2 of the Technical Memorandum.

3.6.2. In the case of the background being 5 dB(A) lower than the ANL, the intruding noise shall not exceed the background noise level, in accordance with paragraph 4.2.13, Chapter 9 of the Hong Kong Planning Standards and Guidelines.

3.6.3. Applicants are required to justify the selected Area Sensitivity Rating (ASR).

3.7. The noise prediction/ assessment report should at least include the following information:

3.7.1. Description of NSRs.

3.7.2. Identification of ASRs and ANLs with justifications and background noise level for each NSR to support the noise criteria.

3.7.3. Identification of major fixed noise sources.

3.7.4. Assessment methodology.

3.7.5. Noise calculation and/ or measurement results.

3.7.6. Equipment schedule(s) and layout plan(s) of noise generating equipment with clear indication(s) showing the major fixed noise source provided by the project developer/ owner.

3.7.7. Supporting documents for noise attenuation considered in the calculation, such as drawings with indication and justification for barrier/ screening correction, or technical data (e.g. datasheet, design drawings) showing the information of acoustic treatment, etc. (if applicable).

3.8. **Report Endorsement:** The acoustic calculation and/ or measurement report shall be endorsed by one of the following:

3.8.1. Corporate Member of Hong Kong Institute of Acoustics.

3.8.2. Corporate/ certified/ full member of other international acoustic institution.

3.8.3. Member of HKIE (Building Services, Mechanical or Environmental discipline) with relevant experience in Acoustic/ Vibration Design.

Submittals

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
SS-01-05_00	EB submission form for SS-01-05	√	√
SS-01-05_01	Summary table listing the nearest NSRs, building equipment sound level and quantities	√	√
SS-01-05_02	Location plan indicating the distance between NSRs and noise sources	√	√
SS-01-05_03	Equipment catalogues showing the sound power level	√	√
SS-01-05_04	Endorsed calculation or measurement report	-	√
SS-01-05_05	CV of the professional	-	√

Remarks

(a) Additional Information

Environmental Protection Department – Technical Memorandum for the Assessment of Noise from Places Other than Domestic Premises, Public Places or Construction Sites
[ONLINE]
https://www.epd.gov.hk/epd/sites/default/files/epd/english/environmentinhk/noise/guide_ref/files/tm_nondomestic.pdf
[Accessed Jun 2025]

Hong Kong Planning Standards and Guidelines, Chapter 9 Environment
[ONLINE]
https://www.pland.gov.hk/file/tech_doc/hkpsg/full/pdf/ch9.pdf
[Accessed Jun 2025]

(b) Related Credit Head(s)

None

3 Sustainable Site **SS-02 Urban Biodiversity**

SS-02-01 Lighting Pollution Mitigation

Objective Minimise light pollution caused by external lighting.

Credit point(s) Attainable 2

Credit Requirement 1 to 2 credit point(s) for switching off landlord's controlled external lightings from 23:00 to 07:00 or 22:00 to 07:00.

Alternatively,

1 to 2 credit point(s) for the building being awarded with a Platinum or Diamond Award under "Charter on External Lighting";

or

2 credit points for the absence of landlord's controlled external lighting.

Assessment

1. Provide an external lighting management policy endorsed by top management of the building owner/ management company.

2. Provide layouts/ building services drawings showing the locations of the external lightings under landlord's control.

3. Provide an operation schedule demonstrating the external lightings under landlord's control are switched off at the designated period.

4. Provide photo records of external lightings under landlord's control demonstrating the:

    4.1. Switch-on state (i.e. before 22:00 or 23:00);
    4.2. Switch-off state (i.e. after 22:00 or 23:00).

Alternatively,

1. Provide valid certificate of participation for the building being awarded with a Diamond/ Platinum Award Under "Charter on External Lighting";

    or

2. Provide layouts/ building services drawings showing the absence of external lightings under landlord's control.

Submittals

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
SS-02-01_00	EB submission form for SS-02-01	√	√
SS-02-01_01	External lighting management policy endorsed by top management (if there is external lighting)	√	√
SS-02-01_02	Layouts/ building services drawings	√	√
SS-02-01_03	External lighting operation schedule (if there is external lighting)	√	√
SS-02-01_04	Photo records of all landlord's controlled external lighting in both switch-on and switch-off state (if there is external lighting)	-	√
SS-02-01_05	Valid certificate of Diamond/ Platinum Award under "Charter on External Lighting" (if applicable)	√	√

Remarks

(a) Additional Information

Task Force on External Lighting. Document for Engaging Stakeholders and the Public
[ONLINE]
https://www.eeb.gov.hk/sites/default/files/en/node3521/TFEL_Report_Eng.pdf
[Accessed Jun 2025]

(b) Related Credit Head(s)

None

3 Sustainable Site **SS-02 Urban Biodiversity**

SS-02-02 Site Biodiversity

Objective Enhance the biodiversity of the site.

Credit point(s) Attainable 1

Credit Requirement 1 credit point for implementing measures to enhance the biodiversity of the site.

Assessment

1. Provide a summary to illustrate the following measures are implemented:

    1.1. Increase diversity and complexity of planting

        1.1.1. Provide planting plans that illustrate:
            a. Plant species type and characteristics (tree/ shrub/ herb/ climber);
            b. Nativeness of the species (native/ exotic);
            c. Quantity and location of the plants.

        1.1.2. Demonstrate the planting scheme incorporated all elements below:

            a. Diverse plant species which reference to 10-20-30 rule for planting as stipulated in chapter 9 Complementary Vegetation Community Mix of Street Tree Selection Guide by the Development Bureau.

            b. Use >30% in number of plants module by native or adaptive species.

    1.2. Wildlife-friendly building features

        1.2.1. Demonstrate wildlife-friendly building features on design drawings that reduce bird collision on windows (e.g. use pattern on glass/ façade/ shades).

Submittals

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
SS-02-02_00	EB submission form for SS-02-02	√	√
SS-02-02_01	Biodiversity enhancement report	-	√

Remarks

(a) Additional Information

Development Bureau. Street Tree Selection Guide “Chapter 9 – Complementary Vegetation Community Mix”
[ONLINE]
https://www.greening.gov.hk/filemanager/greening/en/content_118/Chpt_9.pdf
[Accessed Jun 2025]

Development Bureau. Pictorial Guide to Plant Resources for Skyrise Greenery in Hong Kong, Greening, Landscape & Tree Management Section
[ONLINE]
https://www.greening.gov.hk/en/greening-landscape/right-plant-right-place/skyrise-greenery/pictorial-guide-to-plant-resources-for-skyrise-gre/index.html
[Accessed Jun 2025]

Designing for Biodiversity: A Technical Guide for New and Existing Buildings. Second Edition. RIBA Publishing, London. UK

(b) Related Credit Head(s)

None

3 Sustainable Site **SS-03 Heat Island Reduction**

SS-03-01 Urban Heat Island Mitigation Measures

Objective Adopt various measures to mitigate urban heat island effect.

Credit point(s) Attainable 1

Credit Requirement 1 credit point for demonstrating the implementation of adequate measures to mitigate the urban heat island effect within the project.

Assessment

1. Provide a calculation to demonstrate the use of any combination of the strategies for the non-roof and roof area to meet the following requirement:

$$\frac{\text{Area of non-roof with strategies}}{0.5} + \frac{\text{Area of high reflectance roof}}{0.75} + \frac{\text{Area of vegetated roof with strategies}}{0.5} \geqslant \text{Total non-roof area} + \text{Total roof area}$$

Where:

Roof Area: Horizontal surfaces that are exposed from an aerial view, located above 15 meters measured from ground level.

Non-roof Area: Horizontal surfaces that are exposed from an aerial view, located below 15 meters measured from ground level.

List of strategies for non-roof area		
Greenery	Shading device	Blue spaces
Paving materials with solar reflectance (SR) of 0.33		
Other strategies proposed by the Applicant		

List of strategy for high reflectance roof
Roof Materials with Solar Reflectance Index (SRI) of 78 or above

List of strategies for vegetated roof	
Greenery	Roof farming
Other strategies proposed by the Applicant	

2. Provide layout drawings to illustrate the locations and areas of the proposed strategies in supporting the calculation.

   2.1. All greenery areas shall be measured based on the soil areas as shown on the drawings.

   2.2. Greenery in movable pots shall not be accounted.

   2.3. Reduction factor is not necessary for water feature.

   2.4. All roof farming areas shall be measured horizontally based on the soil areas as shown on the drawing.

2.5. Areas occupied by mechanical equipment may be excluded from the roof area and non-roof area calculation at the Applicant's discretion.

3. Provide supporting sample photo records (at least 1 photo for each of the applicable strategies).

4. Provide catalogue or laboratory test reports showing the SR/ SRI value of the material.

5. If other strategies are proposed by the Applicant, a detailed justification must be provided on how these strategies could meet the objectives of this credit head.

Submittals

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
SS-03-01_00	EB submission form for SS-03-01	√	√
SS-03-01_01	Narrative of the strategies used with calculation	√	√
SS-03-01_02	Layout drawing	√	√
SS-03-01_03	Photo records of the strategies	-	√
SS-03-01_04	Catalogue or laboratory test reports of SR of paving materials (if applicable)	√	√
SS-03-01_05	Catalogue or laboratory test reports of SRI of roof materials (if applicable)	√	√

Remarks

(a) Additional Information

Organic Farming, Agriculture, Fisheries and Conservation Department
[ONLINE]
https://www.afcd.gov.hk/english/agriculture/agr_orgfarm/agr_orgfarm.html
[Accessed Jun 2025]

Greening, Landscape and Tree Management Section, Development Bureau
[ONLINE]
http://www.greening.gov.hk/en/home/index.html
[Accessed Jun 2025]

(b) Related Credit Head(s)

None

3 Sustainable Site **SS-04 Building-scale Climate Adaptation Measures**

SS-04-02 Building-scale Climate Adaptation Measures

Objective Enable the building to have a better adaptation to extreme climate events.

Credit point(s) Attainable 4

Credit Requirement Maximum 4 credit points for incorporating one (1) to four (4) best practices as listed below into the building's climate adaptation plan:

i) Heat waves;
ii) Typhoon;
iii) Lightning;
iv) Heavy precipitations;
v) Flooding;
vi) Landslide;
vii) Others.

Assessment

1. Provide an adaptation plan with respect to the concerned aspect(s) listed in credit requirement for the project building. The plan shall include the severity of the aspect and the potential impact of the aspect to the project building.

2. Include corresponding solution(s) in the plan in response to the concerned aspect and elaborate how the solution(s) could enhance the building's resilience to extreme climate events.

3. The adaption plan shall include the following:

   3.1. Description of the identified aspect, including its severity and potential impact;

   3.2. Proposed solution(s) in response to the aspect;

   3.3. Drawings of the solution(s);

   3.4. Photo records of the solution(s).

4. The Applicant shall refer to the European Union's publication: Building-scale Climate Adaptation Measures Best Practice Guidance for the assessment and solutions. Any other best practice guidelines shall be submitted with the assessment report for substantiation if used.

Submittals

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
SS-04-02_00	EB submission form for SS-04-02	√	√
SS-04-02_01	Adaptation plan	√	√

Remarks

(a) Additional Information

Building-scale Climate Adaptation Measures Best Practice Guidance, European Union
[ONLINE]
https://op.europa.eu/en/publication-detail/-/publication/b175c9cb-cc5b-11ed-a05c-01aa75ed71a1/language-en
[Accessed Jun 2025]

(b) Related Credit Head(s)

None

3 Sustainable Site **SS-05 Neighbourhood Integration**

SS-05-01 Neighbourhood Integration

Objective Integrate the project building with the neighbourhood community.

Credit point(s) Attainable 2

Credit Requirement

(a) Community Engagement

1 credit point for providing at least two (2) of the following items:

i) On-site venues or public spaces for community engagement;
ii) A permanent onsite display or digital platform promoting local amenities, such as facilities and services available in a nearby area that enhance the quality of life for building users;
iii) At least two (2) volunteer activities for community engagement attended by employees of the building management team annually;
iv) At least four (4) community engagement events available to the public free of charge annually;
v) Other features proposed by the Applicant.

(b) Community Space

1 credit point for providing at least two (2) of the following designated communal spaces/ strategies to building occupants:

i) Publicly accessible on-site resting spaces equipped with seating areas, available at no charge;
ii) Outdoor garden with natural and restorative elements, such as trees, plants, water features, etc.;
iii) No smoking is allowed for outdoor communal spaces except designated smoking area located at least 7.5m away from all entrances and fresh air intake;
iv) A regularly organised on-site market offering locally sourced food;
v) Canopy with a minimum width of 2m, serving as a protected zone against wind-driven rain/ sunlight at outdoor/ semi-outdoor communal area;
vi) Other features proposed by the Applicant.

Assessment

(a) Community Engagement

1. Provide a report detailing the community engagement items provided in this project.

2. The report shall include the following for each item:

   2.1. A description of the item provided;
   2.2. Drawing(s) or photo record(s) of provisions for community engagement;
   2.3. Attendance record and record photographs of activities / programme for community engagement.

3. If other features are proposed by the Applicant, an elaboration of how the features could meet the objective of this credit shall be justified.

(b) Community Space

1. Provide a report detailing the community space items provided in this project.

2. The report shall include the following for each item:

   2.1. A description of the items provided;
   2.2. Drawing(s) or photo record(s).

3. If other features are proposed by the Applicant, an elaboration of how the features could meet the objective of this credit shall be justified.

Submittals

(a) Community Engagement

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
SS-05-01a_00	EB submission form for SS-05-01a	√	√
SS-05-01a_01	Report for community engagement	√	√

(b) Community Space

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
SS-05-01b_00	EB submission form for SS-05-01b	√	√
SS-05-01b_01	Report for community space	√	√

Remarks

(a) Additional Information

Hong Kong Planning Standards and Guidelines. Chapter 3: Community Facilities, Planning Department
[ONLINE]
https://www.pland.gov.hk/file/tech_doc/hkpsg/full/pdf/ch3.pdf
[Accessed: Jun 2025]

Hong Kong Planning Standards and Guidelines. Chapter 4: Recreation, Open Space and Greening, Planning Department
[ONLINE]
https://www.pland.gov.hk/file/tech_doc/hkpsg/full/pdf/ch4.pdf
[Accessed Jun 2025]

(b) Related Credit Head(s)

None

3 Sustainable Site **SS-05 Neighbourhood Integration**

SS-05-02 Active Commuting Support

Objective Promote active commuting.

Credit point(s) Attainable 1

Credit Requirement 1 credit point for providing at least two (2) of the following facilities in supporting active commuting:

List of facilities	
Regular occupants' access to showers	Regular occupants' access to lockers
Designated spaces of cycling parking for regular occupants	Designated areas for bicycle washing & maintenance
Other features proposed by the Applicant	

Assessment

1. Provide a report detailing the active community support items provided in this project.

2. The report shall include summary table of items provided and drawing, photo records and information of each item.

3. Cycling parking facilities shall comply with the requirements in Section 6 – Cycling of Internal Transport Facilities presented in the Chapter 8 of HKPSG or Transport Department's requirements.

4. For non-residential projects or non-residential portion of mixed-use projects, 1 shower and/ or locker shall be provided for the first 100 regular building occupants (excluding occasional visitors) and one additional shower facility for every additional 150 regular building occupants.

5. If other features are proposed by the Applicant, an elaboration of how the features could meet the objective of this credit shall be justified.

Submittals

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
SS-05-02_00	EB submission form for SS-05-02	√	√
SS-05-02_01	Report for active community support	√	√

Remarks

(a) Additional Information

Hong Kong Planning Standards and Guidelines. Chapter 8: Internal Transport Facilities, Planning Department
[ONLINE]
https://www.pland.gov.hk/file/tech_doc/hkpsg/full/pdf/ch8.pdf
[Accessed Jun 2025]

(b) Related Credit Head(s)

None

3 Sustainable Site **SS-06 Low Carbon Commuting**

SS-06-01 EV Charging Facilities

Objective Promote the use of electric vehicles.

Credit point(s) Attainable 4

Credit Requirement

(a) Medium EV Charging Facilities
1 to 2 credit point(s) for providing medium chargers (output power ≥ 7kW) for at least 2.5% or 5.0% of all parking spaces for private cars, motorcycles and light good vehicles.

(b) Quick EV Charging Facilities
1 credit point for providing at least two (2) quick chargers (output power ≥ 50kW) in the carpark.

(c) Fast EV Charging Facilities
1 credit point for providing at least one (1) fast charger (output power ≥ 100kW) in the parking spaces designated for coaches, light buses or and medium/ heavy goods vehicles.

Assessment

(a) Medium EV Charging Facilities

1. Provide a summary report for the calculation of the percentage of medium chargers provided with respect to all parking spaces.
2. Provide schematic drawings and photos of the medium chargers .
3. Provide the catalogues of the medium chargers installed.

(b) Quick EV Charging Facilities

1. Provide a summary report for the numbers of quick chargers provided.
2. Provide schematic drawings and photos of the quick chargers.
3. Provide the catalogues of the quick chargers installed.

(c) Fast EV Charging Facilities

1. Provide a summary report for the numbers of fast chargers provided.
2. Provide schematic drawings and photos of the fast chargers.
3. Provide the catalogues of the fast chargers installed.

Submittals

(a) Medium EV Charging Facilities

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
SS-06-01a_00	EB submission form for SS-06-01a	√	√
SS-06-01a_01	Summary report of the medium chargers	√	√
SS-06-01a_02	Schematic drawings for the medium chargers	√	√
SS-06-01a_03	Photo records of the medium chargers	-	√
SS-06-01a_04	Catalogues of the medium chargers	√	√

(b) Quick EV Charging Facilities

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
SS-06-01b_00	EB submission form for SS-06-01b	√	√
SS-06-01b_01	Summary report of the quick chargers	√	√
SS-06-01b_02	Schematic drawings for the quick chargers	√	√
SS-06-01b_03	Photo records of the quick chargers	-	√
SS-06-01b_04	Catalogues of the quick chargers	√	√

(c) Fast EV Charging Facilities

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
SS-06-01c_00	EB submission form for SS-06-01c	√	√
SS-06-01c_01	Summary report of the fast chargers	√	√
SS-06-01c_02	Schematic drawings for the fast chargers	√	√
SS-06-01c_03	Photo records of the fast chargers	-	√
SS-06-01c_04	Catalogues of the fast chargers	√	√

Remarks

(a) Additional Information

Promotion of Electric Vehicles, Environmental Protection Department [ONLINE]
https://www.epd.gov.hk/epd/english/environmentinhk/air/promotion_ev/promotion_ev.html
[Accessed Jun 2025]

(b) Related Credit Head(s)

None

4. Materials and Waste

The amount and types of materials used, as well as the waste generated in the operation, maintenance, and fitting-out of buildings, represent a significant use of natural resources. Opportunities exist to reduce environmental impacts through interior design methods and the choice of materials and products, in terms of extracted raw materials, emissions, and embodied energy. Enhancing the circularity of the building through sustainable practices not only minimises waste but also promotes the reuse and recycling of materials, contributing to a more sustainable lifecycle. Discussion on waste management is more critical than ever. It is important to encourage stakeholders to recognise the importance of waste management for existing buildings.

The following Credit Heads are not applicable under EB v3.0:

Credit Code	Credit Head
MW-00-01	Minimum Waste Handling Facilities
MW-01-01	Building Re-use
MW-01-02	Modular and Standardised Design
MW-01-03	Prefabrication
MW-01-04	Design for Durability and Resilience
MW-02-01	Sustainable Forest Products
MW-02-02	Recycled Materials
MW-02-04	Regional Materials
MW-03-01	Adaptability and Deconstruction
MW-03-03	No Bottled Water
MW-04-01	Best Practice on Material Usage

4 Materials and Waste **MW-02 Selection of Materials**

MW-02-03 Ozone Depleting Substances

Objective

Reduce the release of harmful ozone-depleting substances into the atmosphere.

Credit point(s) Attainable

1

Credit Requirement

Option 1: Low-Impact Refrigerants

1 credit point for demonstrating all the equipment using refrigerants with Global Warming Potential (GWP) fulfils the prescribed criteria.

Option 2: Calculation of Refrigerants Impact

1 credit point for demonstrating all the equipment using refrigerants with a combined Ozone Depletion Potential (ODP) and GWP value less than or equal to the threshold.

Option 3: Refrigerants Management

1 credit point for demonstrating a phased down programme for existing equipment with refrigerants GWP value > the prescribed criteria.

Assessment

1. Small air-conditioning units, defined as those containing less than 0.23 kg of refrigerant, and other equipment, such as standard refrigerators, small water coolers and any other cooling equipment that contains less than 0.23 kg of refrigerant, can be excluded from this assessment.

2. Provide sample photo record(s) for each type of equipment using refrigerants.

3. Provide equipment catalogue(s) or technical sheet(s) to demonstrate the refrigerant type of all the equipment.

4. It is acceptable to adopt the maximum GWP value as stipulated in the national policy, based on the assessed building's geographical location. The Applicant shall provide supporting documentation for this. If such documentation is not available, prescribed criteria of GWP value shall be followed.

Option 1: Low-Impact Refrigerants

1. Provide summary table listing the equipment using refrigerants, equipment type, model number, refrigerant type, GWP value and quantity.

2. Demonstrate GWP value of all refrigerants fulfils the below criteria:

Equipment	GWP Value
Window air-conditioner, unitary, split, packaged air-conditioner, heat pump	≤ 750
Air-cooled chiller	≤ 750
Water-cooled chiller	≤ 150

Option 2: Calculation of Refrigerants Impact

1. Provide summary table listing the equipment using refrigerants, equipment type, model number, refrigerant type, GWP value, ODP value and quantity.

2. Demonstrate the equipment using refrigerants shall fulfil the following equation which determines a maximum threshold for the combined contributions to ozone depletion and global warming (if applicable):

$$LCGWP + LCODP \times 10^5 \leq 13$$

LCGWP = Lifecycle Global Warming Potential (kg CO_2 /kW-Yr)
= [GWPr x (Lr x Life + Mr) x Rc] / Life

LCODP = Lifecycle Ozone Depletion Potential (kg CFC 11 /kW-Yr)
= [ODPr x (Lr x Life + Mr) x Rc] / Life

GWPr = Global Warming Potential of Refrigerant
ODPr = Ozone Depletion Potential of Refrigerant (0 to 0.2kg CFC 11/kg r)
Lr Refrigerant Leakage Rate (0.5% to 2%; default of 2% unless otherwise demonstrated)
Mr = End-of-life Refrigerant Loss (2% to 10%, default of 10% unless otherwise demonstrated)
Rc = Refrigerant Charge
Life = Equipment Life (default based on equipment type as listed in table below, unless otherwise demonstrated)

Equipment	Default Equipment Life
Window air-conditioner	10 years
Unitary, split, packaged air-conditioner, heat pump	15 years
Air-cooled chiller	20 years
Water-cooled chiller	25 years

3. For systems with different types of equipment, a weighted average of all the air-conditioning and refrigeration equipment shall be calculated using the following equation:

$$\frac{\sum(LCGWP + LCODP \times 10^5) \times Q_{unit}}{Q_{total}} \leq 13$$

Q_{unit} = Gross ARI rated cooling capacity of an individual air-conditioning or refrigeration unit (kW)
Q_{total}= Total fross ARI rated cooling capacity of all air-conditioning or refrigeration unit (kW)

Option 3: Refrigerants Management

1. Provide a phased down plan endorsed by building-in-charge/ team lead of building management team or the top management of building owner/ building management company for detailing the following as a minimum (if applicable):

   1.1 Objectives;

   1.2 List of equipment with refrigerants, with details of equipment type, model number, refrigerant type, GWP value and quantity;

   1.3 Phased down schedule (tentative programme with commitment to phased down relevant equipment within 10 years and identify potential new refrigerant with GWP value lower than the existing).

Submittals

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MW-02-03_00	EB submission form for MW-02-03	√	√
MW-02-03_01	Equipment catalogue(s) or technical sheet(s)	-	√
MW-02-03_02	Sample photo record(s) for each type of the equipment using refrigerants	-	√
MW-02-03_03	Evidence showing the maximum GWP Value as stipulated in the national policy, based on the assessed building's geographical location (if applicable)	√	√
Option 1: Low-Impact Refrigerants			
MW-02-03_04	Summary table of equipment using refrigerants to demonstrate the GWP values fulfils the criteria	√	√
Option 2: Calculation of Refrigerants Impact			
MW-02-03_05	Summary table of equipment using refrigerant to support the calculation of combined contributions to ozone depletion and global warming	√	√
MW-02-03_06	Calculation of all equipment using refrigerants for the combined contributions to ozone depletion and global warming potentials	√	√
Option 3: Refrigerants Management			
MW-02-03_07	Endorsed phased down plan of refrigerant replacement for existing equipment	√	√

Remarks

(a) Additional Information

Environmental Protection Department. A Concise Guide to the Ozone Layer Protection Ordinance
[ONLINE]
https://www.epd.gov.hk/epd/sites/default/files/epd/ 93 nglish/environmentinhk/air/ozone_layer_protection/files/cgto-eng_201702.pdf
[Accessed Jun 2025]

Environmental Protection Department. A Concise Guide to the Ozone Layer Protection (Controlled Refrigerants) Regulation
[ONLINE]
https://www.epd.gov.hk/epd/sites/default/files/epd/ 93 nglish/environmentinhk/air/ozone_layer_protection/files/CGT-eng_201702.pdf
[Accessed Jun 2025]

Environmental Protection Department. Ozone Layer Protection
[ONLINE]
https://www.epd.gov.hk/epd/english/environmentinhk/air/ozone_layer_protection/wn6_info_olp_ue_c.html
[Accessed Jun 2025]

Environmental Protection Department. Guidelines to Account for and Report on Greenhouse Gas Emissions and Removals for Buildings (Commercial, Residential or Institutional Purposes) in Hong Kong
[ONLINE]
https://www.epd.gov.hk/epd/sites/default/files/epd/gn_pdf/GN2014P097-2014c-e.pdf
[Accessed Jun 2025]

Electrical and Mechanical Services Department, Refrigerant Newsletters 20th Issue
[ONLINE]
https://www.emsd.gov.hk/frsafety/filemanager/tc/content_1393/Refrigerant_Newsletter_20th.pdf
[Accessed Jun 2025]

USGBC. LEED v4.1 for Building Operation and Maintenance.

(b) Related Credit Head(s)

None

4 Materials and Waste **MW-02 Selection of Materials**

MW-02-05 Use of Green Products

Objective Encourage the use of certified green products during renovation/ major retrofitting works that have low environmental impacts.

Credit point(s) Attainable 6

Credit Requirement

(a) Green Building Components

1 to 3 credit point(s) shall be awarded when renovations use certified green building components equivalent to 10%, 20% or 30% of the total building components cost. The products shall be certified under CIC Green Product Certification or other internationally recognised standards.

Types of building components are shown below:

Building Components			
Panel Board	Ceramic Tile	Adhesive & Sealant	Stone
Paint & Coating	Pavement Block	Thermal Insulation	Ready-mixed Concrete
Glazing	Plant-based Fibre Composite	Block for Internal Partition	Other products proposed by the Applicant

(b) Green Building Services Systems

1 to 3 credit point(s) shall be awarded when major retrofitting works use certified green building services systems equivalent to 10%, 20% or 30% of the total building services systems cost. The products shall be certified under CIC Green Product Certification or other internationally recognised standards.

Types of building services systems are shown below:

Building Services Systems			
Thermal Insulations	VRF Split Type System	Cooling Tower	Air-handling Unit
Fan Coil Unit	Chiller	Water Pump	Cable & Wire
Lighting (LED lighting, Compact Fluorescent Lamp Bulb, Electronic Ballast)		Other products proposed by the Applicant	

Assessment

(a) Green Building Components

1. Only renovated building components that are completed within the past 12 months at the time of first submission shall be assessed.

2. Provide the percentage calculation of all the items including certified green building products.

$$\frac{\sum Renovated\ Green\ Building\ Component\ (\$)}{\sum Renovated\ Building\ Component\ (\$)} \text{ x } 100\%$$

3. Include a summary table listing the types of renovated building components, product name/ model, manufacturer, certification body, calculation and reference source. The summary table shall be endorsed by building-in-charge/ team lead of building management team or the top management of building owner/ building management company.

4. Provide layout with demarcation of the renovated area and highlighting all renovated building components.

5. Provide supporting document (e.g. catalogues, technical data sheets) and/ or certificates of the green building products.

6. Provide photo records showing each of the green building products.

7. For any green products, which have been certified under other internationally recognised schemes, the Applicant shall refer to the list of worldwide recognised Green Building Product Certifications and Standards under HKGBC's Eco-Product Directory (https://epdir.hkgbc.org.hk/isubpagex.php?serial=31) or provide the product's technical information with justification for BSL's consideration.

(b) Green Building Services Systems

1. Only additional/ replaced building services systems in major retrofitting works completed within the past 12 months at the time of first submission shall be assessed. The Applicant shall make reference to Buildings Energy Efficiency Ordinance (Cap. 610) for the definition of major retrofitting works.

2. Provide the percentage calculation of all items including certified green building services systems.

$$\frac{\sum Retrofitted\ Green\ Building\ Services\ Systems\ (\$)}{\sum Retrofitted\ Building\ Services\ Systems\ (\$)} \text{ x } 100\%$$

3. Include a summary table listing the type of retrofitted building services systems, product name/ model, manufacturer, certification body, calculation and reference source. The summary table shall be endorsed by building-in-charge/ team lead of building management team or the top management of building owner/ building management company.

4. Provide layout plan with demarcation of the retrofitted area and highlighting all retrofitted building services system(s).

5. Provide supporting document (e.g. catalogue, technical data sheet) and/ or certificate(s) of the green building services systems.

6. Provide photo record(s) showing the provision(s).

   For any green products, which have been certified under other internationally recognised schemes, the Applicant shall refer to the list of worldwide recognised Green Building Product Certifications and Standards under HKGBC's Eco-Product Directory (https://epdir.hkgbc.org.hk/isubpagex.php?serial=31) or provide the product's technical information with justification for BSL's consideration.

Submittals

(a) Green Building Components

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MW-02-05a_00	EB submission form for MW-02-05a	√	√
MW-02-05a_01	Endorsed summary table listing the type of renovated building components, product name/ model, manufacturer, certification body, percentage calculation and reference source	√	√
MW-02-05a_02	Layout drawing(s) showing the provision(s)	√	√
MW-02-05a_03	Photo record(s) showing the provision(s)	-	√
MW-02-05a_04	Supporting document and/ or certificate(s) of the green building product(s)	√	√

(b) Green Building Services Systems

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MW-02-05b_00	EB submission form for MW-02-05b	√	√
MW-02-05b_01	Endorsed summary table listing the type of retrofitted building services systems, product name/ model, manufacturer, certification body, percentage calculation and reference source	√	√
MW-02-05b_02	Layout drawing(s) showing the provision(s)	√	√
MW-02-05b_03	Photo record(s) showing the provision(s)	-	√
MW-02-05b_04	Supporting document and/ or certificate(s) of the green building services product(s)	√	√

Remarks

(a) Additional Information

CIC Green Product Certification
[ONLINE]
http://cicgpc.hkgbc.org.hk
[Accessed Jun 2025]
HKGBC's Eco-Product Directory
[ONLINE]
https://epdir.hkgbc.org.hk/isubpagex.php?serial=31
[Accessed Jun 2025]

Environment and Ecology Bureau – Green Specifications [ONLINE]
https://www.eeb.gov.hk/en/susdev/green_procure/green_spec.html
[Accessed Jun 2025]

(b) Related Credit Head(s)

None

4 Materials and Waste **MW-02 Selection of Materials**

MW-02-06 Life Cycle Costing

Objective Encourage the use of life cycle costing to facilitate investigation of potential design options, specifications, operation and maintenance.

Credit point(s) Attainable 1

Credit Requirement 1 credit point for conducting life cycle costing analysis for active systems when undertaking major retrofitting works.

Assessment

1. The Applicant shall make reference to Buildings Energy Efficiency Ordinance (Cap. 610) for the definition of major retrofitting works. Only major retrofitting works that have been commenced or completed within the past 12 months at the time of first assessment submission or are scheduled to be commenced or completed within the next 12 months following that date shall be assessed.

2. Conduct life cycle costing analysis with design options for all of the following active systems (if presented in the retrofitting scope) when undertaking major retrofitting works:

   2.1 Hot water system;
   2.2 Interior lighting system;
   2.3 Air-conditioning system;
   2.4 Lift & escalators;
   2.5 Plumbing and drainage systems;
   2.6 Electrical system.

3. The life cycle costing analysis can be non-discounted and shall include the following costs:

   3.1 Acquisition (supply and installation costs);
   3.2 Operation (utilities);
   3.3 Maintenance (replacements, planned maintenance and management costs).

   While developing design options, the applicant shall consider different configurations and specifications, for example, initial costs, number of equipment units involved, equipment efficiency and lifespan, etc.

4. Indicate cost of each design option of active system over 20, 30, 40 and 50 years and highlight which design option will have the lowest life cycle cost at the 50th year.

5. Prepare a life cycle costing report including all the assumptions made and the results of life cycle costing.

6. Substantiate the costs with catalogues, suppliers' recommendations or quotation. Cost approximations suggested by Quantitative Surveyor are also accepted. No professional life cycle software is required for this study.

7. The life cycle costing report shall include at least the below items:

   7.1 Executive summary;
   7.2 Project description with retrofitting scope;
   7.3 System options to be considered;
   7.4 Life cycle costing and analysis;
   7.5 Conclusion.

Submittals

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MW-02-06_00	EB submission form for MW-02-06	√	√
MW-02-06_01	Life cycle costing report	√	√

Remarks

(a) Additional Information

ISO 15686-5:2008 Buildings & constructed assets – Service life planning – Part 5: Life cycle costing

(b) Related Credit Head(s)

None

4 Materials and Waste **MW-03 Waste Reduction**

MW-03-02 Enhanced Waste Handling Facilities

Objective

Reduce pressure on landfill sites by promoting recycling of waste materials, fostering sustainable recycling habits, and raising public awareness through convenient and reliable recycling facilities.

Credit point(s) Attainable

6

Credit Requirement

(a) Recyclables Collection

1 to 2 credit point(s) for demonstrating the provisions of collection services or on-site recycling facilities/ designated storage area of any three (3)/ five (5) of the following waste streams:

Waste Streams		
Rechargeable Batteries	Regulated Electrical Equipment (REE)	Beverage Cartons
Fluorescent Lamps and Tubes	Restaurant Waste (Used Cooking Oils, Grease Trap Waste)	Small Electrical Appliances (cookers, toasters, ovens, irons, hair-dryers, phones, etc.)
Dried/ Canned Food	Food Waste	Paper/ Carboard, Metal and Plastics
Glass	Seasonal items (e.g. red pocket, mooncake box, clothes)	
Other recyclables may be proposed at the discretion of the Applicant		

(b) Recycling Performance

1 to 3 credit point(s) for demonstrating the annual recycling percentage by weight over the past 12 months meeting the prescribed requirements.

Credit Point(s)	Annual Recycling Percentage
1	10%
2	15%
3	20% or above

(c) Recycling Transparency and Disclosure

1 credit point will be awarded for premises that publicly disclose their recycling performance data on a quarterly basis.

Assessment

(a) Recyclables Collection

1. Provide on request recycling services or at least one recycling facility/ designated storage area for each recyclable stream.

2. If recycling facility/ designated storage area for each recyclable stream is provided, same type of recycling facilities in multiple

locations can only be counted once. The size of the recycling facilities, collection frequency are not regulated.

3. If on-request recycling services are proposed by the Applicant, at least one public signage or notice shall be provided to notify the building users about the provision of services. If a recycling facility/ designated storage area is provided, the recycling facilities shall be placed in a location that is accessible to all building users.

4. Provide sample receipts from recyclers/ photos showing collection of recyclables by recyclers of each applicable waste stream.

5. On-site food waste processing can be treated as recyclable collection, provided that the by-products from the processes can be used for other usage.

(b) Recycling Performance

1. Provide waste flow table detailing the monthly waste generation and recycling for each waste stream for the past 12 months. The waste flow table shall be endorsed by building-in-charge/ team lead of building management team or the top management of building owner/ building management company.

2. Calculate the annual recycling percentage:

$$\frac{\text{Recycled Waste } (\text{m}^3 \text{ or } kg)}{\text{Total Recycled Waste} + \text{Total Waste to Landfill } (\text{m}^3 \text{ or } kg)} \text{ x } 100\%$$

(c) Recycling Transparency and Disclosure

1. The recycling performance data of the building shall be disclosed to the public (e.g., via notice boards within the premises or digital links) on a quarterly basis.

2. Provide at least two (2) photos or screenshots of digital links with date demonstrating the public disclosure of recycling performance.

Submittals

(a) Recyclables Collection

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MW-03-02a_00	EB submission form for MW-03-02a	√	√
MW-03-02a_01	Drawings showing the locations of the recycling facility/ designated storage area	√	√
MW-03-02a_02	Photo records showing the provision of recycling facility/ designated storage area and/ or evidence of on request recycling services	-	√
MW-03-02a_03	Sample receipts from recyclers/ photos showing collection of recyclables by recyclers of each applicable waste stream/ photos showing application of on-site food waste processing and the use of by-products from the processes	-	√
MW-03-02a_04	Justifications for by-products from food waste processing can be used for other usage and accessible by all building users (if applicable)	√	√

(b) Recycling Performance

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MW-03-02b_00	EB submission form for MW-03-02b	√	√
MW-03-02b_01^	Endorsed waste flow table	√	√
MW-03-02b_02	Calculation on annual recycling percentage	√	√

(c) Recycling Transparency and Disclosure

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MW-03-02c_00	EB submission form for MW-03-02b	√	√
MW-03-02c_01	Photos or screenshots of digital links demonstrating the public disclosure	-	√

Remarks

(a) Additional Information

None

(b) Related Credit Head(s)

MW-03-05 Waste Reduction Performance

4 Materials and Waste **MW-03 Waste Reduction**

MW-03-04 Action to Waste Reduction

Objective Encourage best practices for the management of waste, including minimising, sorting, recycling and disposal of waste.

Credit point(s) Attainable 3

Credit Requirement

(a) Waste Management Plan

1 credit point for developing and implementing Waste Management Plan (WMP) for building operations.

(b) Waste Stream Audit

1 credit point for conducting waste stream audit.

(c) Enhanced Waste Management Practices

1 credit point for developing and/ or implementing actions to improve recycling performance.

Assessment

(a) Waste Management Plan

1. Provide a WMP endorsed by top management of Building Owner/ Building Management Company, including the following content as minimum:

    1.1. Objectives;
    1.2. Responsibility;
    1.3. Waste minimisation programme;
    1.4. Waste recycle/ reuse programme;
    1.5. Waste data collection system;
    1.6. Influence on building users (e.g. training/ workshop/ campaign);
    1.7. Resource allocation;
    1.8. Training for staff;
    1.9. Reporting to top management.

2. Provide records such as monthly reports or photo records showing the WMP was properly implemented.

(b) Waste Stream Audit

1. Provide a waste audit report that identifies the types and quantities of waste that are expected regularly (from day to day use) etc. The audit shall determine the amounts of materials that have potential for reducing or recycling. Site survey and recommendations are required.

2. The waste stream audit shall be conducted within the past 12 months at the time of first submission.

3. The waste audit report shall be endorsed by a professional member of a recognised institution specialising in waste management.

(c) Enhanced Waste Management Practices

1. Demonstrate that actions are developed (e.g., implementation programme, action plan) and/ or implemented to improve recycling performance (e.g. photo record) based on the findings of the waste stream audit.

Submittals

(a) Waste Management Plan

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MW-03-04a_00	EB submission form for MW-03-04a	√	√
MW-03-04a_01	Endorsed WMP	√	√
MW-03-04a_02	Implementation records of WMP	-	√

(b) Waste Stream Audit

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MW-03-04b_00	EB submission form for MW-03-04b	√	√
MW-03-04b_01	Endorsed Waste Audit Report	√	√
MW-03-04b_01	Professional Membership Certificate of the waste audit report endorser	√	√

(c) Enhanced Waste Management Practices

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MW-03-04c_00	EB submission form for MW-03-04c	√	√
MW-03-04c_01	Action plan/ implementation records for recycling performance improvement	√	√

Remarks

(a) Additional Information

Environmental Protection Department – Green Office and Property Management – Waste Reduction and Recycling Information Booklet [ONLINE]
https://www.wastereduction.gov.hk/sites/default/files/resources_centre/Green_Office_and_Property_Management-Waste_Reduction_and_Recycling_Information_Booklet.pdf
[Accessed Jun 2025]
Environmental Protection Department – Waste Reduction Programme – Waste Reduction and Recycling Charter [ONLINE]
https://www.wastereduction.gov.hk/en-hk/waste-reduction-programme/waste-reduction-and-recycling-charter
[Accessed Jun 2025]

(b) Related Credit Head(s)

None

4 Materials and Waste **MW-03 Waste Reduction**

MW-03-05 Waste Reduction Performance

Objective Promote waste reduction and advocate the continual improvement for waste management

Credit point(s) Attainable 6

Credit Requirement

(a) Reduction at Source

1 to 5 credit point(s) for demonstrating an annual waste reduction by weight for the past 12 months meeting the prescribed requirements. Baseline year can be any year in the past 36 months.

Credit Point(s)	Annual Waste Reduction Percentage
1	2%
2	4%
3	6%
4	8%
5	10% or above

(b) Continuous Improvement

1 credit point for demonstrating a continuous reduction trend of waste generation over the past 36 months.

Assessment

(a) Reduction at Source

1. Provide waste flow table detailing the monthly waste disposed to landfill for the past 12 months and the baseline year. The waste flow table shall be endorsed by building-in-charge/ team lead of building management team or the top management of building owner/ building management company.

2. Calculate the annual waste reduction percentage.

$$\left(1-\frac{\text{Current year annual waste disposed to landfill } (\text{m}^3 \text{ or } kg)}{\text{Baseline year annual waste disposed to landfill } (\text{m}^3 \text{ or } kg)}\right) \times 100\%$$

(b) Continuous Improvement

1. Provide waste flow table detailing the monthly waste disposed to landfill for the past 36 months. The waste flow table shall be endorsed by building-in-charge/ team lead of building management team or the top management of building owner/ building management company.

2. Calculate the annual waste disposed to landfill for the past 36 months and demonstrate there are continuous waste reduction for each year, i.e.

   i) Waste disposed to landfill for past 1st to 12th month
   ii) < Past 13th to 24th month
   iii) < Past 25th to 36th month

Submittals

(a) Reduction at Source

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MW-03-05a_00	EB submission form for MW-03-05a	√	√
MW-03-05a_01^	Endorsed waste flow table	√	√
MW-03-05a_02	Calculation on annual waste reduction percentage	√	√

(b) Continuous Improvement

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MW-03-05b_00	EB submission form for MW-03-05b	√	√
MW-03-05b_01	Endorsed waste flow table	√	√
MW-03-05b_02	Calculation on annual waste reduction for the past 36 months	√	√

Remarks

(a) Additional Information

None

(b) Related Credit Head(s)

MW-03-02 Enhanced Waste Handling Facilities

4 Materials and Waste **MW-04 Best Practice on Material Usage**

MW-04-02 Green Purchasing Practices

Objective Encourage adoption of green purchasing practices to reduce environmental impacts of product used.

Credit point(s) Attainable 6

Credit Requirement Maximum 6 credit points for purchasing environmentally friendly or certified products for one (1) to six (6) types of consumable or durable goods in the past 12 months.

Credit Point(s)	Percentage of Environmentally Friendly or Certified Item for each type of consumable or durable goods
1	60%
2	80%

Types of consumables and durable goods are shown below:

Consumable	
Packaging materials	Paper for printing and photocopying
Paper products other than for printing and photocopying	Plastic and rubber products
Printing and publishing supplies	Stationery and office supplies
Other consumable may be proposed at the discretion of the Applicant	
Durable Goods	
Computer equipment and products	Electrical appliances
Light fittings	Furniture
Containers and collection bins for water/ recyclables	Office equipment
Other durable goods may be proposed at the discretion of the Applicant	

Assessment

1. Provide the percentage calculation (by mass/ cost/ volume/ number of pieces) of each type of environmentally friendly/ certified products.

   For each type of selected consumables and/ or durable goods:

$$\frac{\text{Environmentally friendly or certified products}}{\text{Total of product purchased in the past 12 months}} \text{ x } 100\%$$

2. Provide a summary table listing the product type, manufacturer, quantities, and environmental attributes. The summary table shall be endorsed by building-in-charge/ team lead of building management team or the top management of building owner/ building management company.

3. Provide documents (e.g. product catalogue) to substantiate the environmental attributes.

4. Provide photo records for the environmentally friendly/ certified products.

5. The Applicant shall make reference to the Green Specifications published by Environmental Protection Department (EPD) [1] for environmentally friendly products. Other international green purchasing guideline such as Sustainable Procurement Criteria published by Swedish Competition Authority [2] and Green Purchasing Guidelines published by GPN Japan [3] are also acceptable.

Submittals

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
MW-04-02_00	EB submission form for MW-04-02	√	√
MW-04-02_01	Percentage calculation of environmentally friendly/ certified products	√	√
MW-04-02_02	Endorsed summary of environmentally friendly/ certified products	√	√
MW-04-02_03	Supporting documents showing the environmental attributes	√	√
MW-04-02_04	Photo records of the environmentally friendly/ certified products	-	√

Remarks

(a) Additional Information

[1] Environment and Ecology Bureau – Green Specifications [ONLINE]
https://www.eeb.gov.hk/en/susdev/green_procure/green_spec.html
[Accessed Jun 2025]

[2] Swedish Competition Authority – Find Sustainability Criteria [ONLINE]
https://www.upphandlingsmyndigheten.se/en/criteria/
[Accessed Jun 2025]

[3] GPN Japan – Green Purchasing Guidelines
[ONLINE]
https://www.gpn.jp/english/index.html
[Accessed Jun 2025]

(b) Related Credit Head(s)

None

5. Energy Use

An objective of EB v3.0 is to encourage thorough evaluation of the performance of building and services system designs, and to promote greater investments in measures that will improve the energy performance of existing buildings. This aims to reduce energy consumption, associated environmental impacts, and summer peak electricity demand.

The assessment of the building and engineering systems is based on performance as much as possible. However, credit points are also awarded for features that have demonstrated contributions to energy efficiency and conservation. Additionally, credit points are granted when management, operation, and maintenance practices are implemented to achieve continual improvements in energy performance.

The following Credit Heads are not applicable under EB v3.0:

Credit Code	Credit Head
EU-01-01	Low Carbon Passive Design
EU-03-01	Air-Conditioning Units
EU-03-02	Clothes Drying Facilities
EU-03-03	Energy Efficient Appliances
EU-03-04	Cooling System Efficiency
EU-03-05	Air Management System
EU-04-01	Best Practice on Energy Use
EU-04-02	Energy Management
EU-05-01	Energy Benchmarking and System Improvement
EU-05-02	Enhancements

5 Energy Use EU-00 Basic Requirement

EU-00-01 Minimum Energy Performance

Objective

Encourage the project building operator to monitor and review the energy performance of the building services installation through energy audit.

Credit point(s) Attainable

1

Credit Requirement

1 credit point for conducting energy audit in accordance with the requirements stipulated in the Code of Practice for Building Energy Audit issued by Electrical and Mechanical Services Department, HKSAR Government.

Assessment

1. Provide an energy audit report confirming that an energy audit has been completed in accordance with the requirements stipulated in the Code of Practice for Building Energy Audit issued by Electrical and Mechanical Services Department, HKSAR Government.

2. The energy audit report shall meet the following requirements:

   2.1. Conducted within past 5 years from the date of submission;

   2.2. Endorsed by a Registered Energy Assessor (REA) with REA registration number stated in the report;

   2.3. Include all elements as stipulated in the Code of Practice for Building Energy Audit issued by Electrical and Mechanical Services Department, HKSAR Government.

3. It is acceptable to adopt the energy audit requirements as stipulated in the national policy, based on the assessed building's geographical location. The Applicant shall provide supporting documentation for this. If such documentation is not available, requirements stipulated in the Code of Practice for Building Energy Audit issued by Electrical and Mechanical Services Department, HKSAR Government shall be followed.

Submittals

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
EU-00-01_00	EB submission form for EU-00-01	√	√
EU-00-01_01	REA endorsed energy audit report	√	√
EU-00-01_02	Evidence showing energy audit requirements as stipulated in the national policy, based on the assessed building's geographical location (if applicable)	√	√

Remarks

(a) Additional Information

Electrical and Mechanical Services Department, Code of Practice for Building Energy Audit 2024 Edition (EAC 2024)
[ONLINE]
https://www.emsd.gov.hk/beeo/en/pee/EAC_2024_ENG.pdf
[Accessed Jun 2025]

(b) Related Credit Head(s)

None

5 Energy Use **EU-01 Energy Use Reduction and Control**

EU-01-02 Reduction of CO_2 Emissions

Objective Reduce the building energy consumption and consequent carbon emissions to support net zero carbon.

Credit point(s) Attainable 19

Credit Requirement

(a) Benchmarking

1 credit point for conducting benchmarking by EMSD Benchmarking Tool "Energy Consumption Indicators and Benchmark" or Energy Star Portfolio Manager for the energy performance of the landlord's controlled area of the project.

(b) Benchmarking Ranking

1 to 4 credit point(s) when the energy performance of the landlord's controlled area of the project achieves the below percentile under EMSD Benchmarking Tool "Energy Consumption Indicators and Benchmark".

Credit Point(s)	Percentile under EMSD Benchmarking Tool
1	40th
2	30th
3	20th
4	10th

Alternatively,

1 to 4 credit point(s) when the energy performance of the landlord's controlled area of the project achieves the benchmarking results obtained from Energy Star Portfolio Manager.

Credit Point(s)	Percentage of Reduction of Project Energy Use Intensity (EUI) Compared with Median Weather Normalised Source EUI Obtained from Energy Star Portfolio Manager
1	EUI Improvement ≤ 10%
2	10% < EUI Improvement ≤ 30%
3	30% < EUI Improvement ≤ 50%
4	EUI Improvement > 50%

(c) Self-improvement of Energy Utilisation Index

1 to 13 credit point(s) when the annual energy utilisation index (EUI) is reduced in a percentage below compared with that of the past 5 years.

For (1) Benchmarking result ≥ 30th Percentile under EMSD Benchmarking or (2) Percentage of Reduction of Project Source EUI under Energy Star Portfolio Manager ≤ 30% or (3) project only attempting EU-01-02(a):

Credit Point(s)	Percentage of reduction in Annual EUI
1	≥ 2%
2	≥ 3%
3	≥ 5%
4	≥ 7%
5	≥ 10%
6	≥ 13%
7	≥ 17%
8	≥ 21%
9	≥ 25%
10	≥ 29%
11	≥ 34%
12	≥ 39%
13	≥ 45%

For (1) Benchmarking result of 20th Percentile under EMSD Benchmarking / (2) Percentage of Reduction of Project Source EUI under Energy Star Portfolio Manager > 30% and ≤ 50%:

Credit Point(s)	Percentage of reduction in Annual EUI
1	≥ 1%
2	≥ 2%
3	≥ 3%
4	≥ 4%
5	≥ 5%
6	≥ 7%
7	≥ 9%
8	≥ 11%
9	≥ 13%
10	≥ 15%
11	≥ 17%
12	≥ 20%
13	≥ 23%

For (1) Benchmarking result of 10th Percentile under EMSD Benchmarking / (2) Percentage of Reduction of Project Source EUI under Energy Star Portfolio Manager > 50%:

Credit Point(s)	Percentage of reduction in Annual EUI
1	≥ 0.5%
2	≥ 1%
3	≥ 2%
4	≥ 3%
5	≥ 4%
6	≥ 5%
7	≥ 6%
8	≥ 7%
9	≥ 8%
10	≥ 9%
11	≥ 10%
12	≥ 11%
13	≥ 12%

(d) Continuous Energy Consumption Reduction Trend

1 credit point when landlord's energy consumption has continuously decreased over the past 3 years.

Assessment

(a) Benchmarking

1. Conduct benchmarking by EMSD Benchmarking Tool "Energy Consumption Indicators and Benchmark" or Energy Star Portfolio Manager for the project building.

2. The data used for the benchmarking shall be within the past 12 months from the date of submission.

3. Provide screenshot of input and benchmarking result obtained from EMSD or Energy Star Portfolio Manager.

(b) Benchmarking Ranking

1. Provide screenshot of input and benchmarking result obtained from EMSD or Energy Star Portfolio Manager.

2. Provide evidence for each input of benchmarking.

(c) Self-improvement of Energy Utilisation Index

1. Provide summary table with supporting documents such as electricity bills, metering records for the energy consumption of past 1st to 12th months (assessment period) and any 12 months of past 13th to 60th months (baseline period).

2. Provide calculation for the percentage of reduction of energy utilisation index of the landlord's controlled area of the assessment period compared with that of baseline period.

(d) Continuous Energy Consumption Reduction Trend

1. Provide annual comparison of energy consumption demonstrating continuous reduction over a period of 3 years.

Submittals

(a) Benchmarking

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
EU-01-02a_00	EB submission form for EU-01-02a	√	√
EU-01-02a_01	Screenshot showing the input parameters for EMSD benchmarking tool/ Energy Star Portfolio Manager	√	√
EU-01-02a_02	Result from EMSD Benchmarking Tool/ Energy Star Portfolio Manager	√	√

(b) Benchmarking Ranking

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
EU-01-02b_00	EB submission form for EU-01-02b	√	√
EU-01-02b_01	Screenshot showing the input parameters for EMSD benchmarking tool/ Energy Star Portfolio Manager	√	√
EU-01-02b_02	Result from EMSD Benchmarking Tool/ Energy Star Portfolio Manager	√	√
EU-01-02b_03	Supporting documents of each input parameter	√	√

(c) Self-improvement of Energy Utilisation Index

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
EU-01-02c_00	EB submission form for EU-01-02c	√	√
EU-01-02c_01	Summary table of energy consumption of baseline and assessment period	√	√
EU-01-02c_02	Calculation of percentage of reduction of EUI	√	√
EU-01-02c_03	Electricity consumption records of baseline and assessment period	√	√
EU-01-02c_04	Evidence of Internal Floor Area (IFA) for EUI calculation	√	√

(d) Continuous Energy Consumption Reduction Trend

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
EU-01-02d_00	EB submission form for EU-01-02d	√	√
EU-01-02d_01	Calculation of annual reduction of energy consumption	√	√
EU-01-02d_02	Energy consumption records of the past 36 months	√	√

Remarks

(a) Additional Information

Electrical and Mechanical Services Department. Energy Consumption Indicators & Benchmarking Tools
[ONLINE]

https://ecib.emsd.gov.hk/index.php/en/
[Accessed Jun 2025]

Energy Star. Portfolio Manager Quick Start Guide
[ONLINE]
https://www.energystar.gov/sites/default/files/2025-01/Portfolio%20Manager%20Quick%20Start%20Guide_December%202024.pdf
[Accessed Jun 2025]

(b) Related Credit Head(s)

None

5 Energy Use **EU-01 Energy Use Reduction and Control**

EU-01-03 Peak Electricity Demand Reduction

Objective Enhance efficiency of energy generation and distribution through demand side management and achieve peak demand reduction.

Credit point(s) Attainable 2

Credit Requirement

(a) Development of Peak Demand Management Plan

1 credit point for developing a Peak Demand Management Plan.

(b) Execution of Peak Demand Management Plan

1 credit point for executing the Peak Demand Management Plan.

Assessment

(a) Development of Peak Demand Management Plan

1. Develop Peak Demand Management (PDM) Plan with the contents below:

   1.1 Identification of condition(s) requiring peak demand response, including but not limited to extreme weather (e.g. ambient temperature is higher than 33 ^{o}C);
   1.2 Potential for demand response participation;
   1.3 Strategies for reducing peak demand;
   1.4 Procedures and responses to execute the program measures for adjustment of operation of building systems in response to the potential event(s);
   1.5 Description of end-use systems that will be affected, such as HVAC or lighting, etc., on a stand-alone or integrated basis, during participation in demand response events.

2. The plan shall be endorsed by building-in-charge/ team lead of building management team or the top management of building owner/ building management company.

(b) Execution of Peak Demand Management Plan

1. Provide the implementation records of peak demand response strategies as stipulated in the PDM Plan.

2. Provide a calculation of the peak demand reduction of the event period compared with the baseline peak demand to demonstrate that the peak demand is reduced by adopting peak demand response strategies.

3. The baseline peak demand is defined as the average hourly load of the event period of the three highest-load days in the 10 preceding non-event days.

4. Peak demand response shall be made in the form of pre-programmed measures. Reduction made by directly turning off end-use system(s) is not eligible for credit attainment.

5. As an alternative to the above four (4) assessment criteria under EU-01-03b, it is acceptable to implement peak demand response strategies in response to the peak demand

management event scheduled under the PDM Program by the local power company, based on the assessed building's geographical location. The applicant shall only provide evidence showing that the project has joined the PDM Program administered by the local power company and an official record issued by the local power company demonstrating the peak demand reduction during the event period.

Submittals

(a) Development of Peak Demand Management Plan

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
EU-01-03a_00	EB submission form for EU-01-03a	√	√
EU-01-03a_01	Peak Demand Management Plan endorsed by building-in-charge/ team lead of building management team or the top management	√	√

(b) Execution of Peak Demand Management Plan

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
EU-01-03b_00	EB submission form for EU-01-03b	√	√
EU-01-03b_01	Peak Demand Management Plan endorsed by building-in-charge/ team lead of building management team or the top management	√	√
EU-01-03b_02	Implementation records of peak demand response strategies	-	√
EU-01-03b_03	Calculation of peak demand reduction of PDM event(s)	-	√
EU-01-03b_04	Metering records of the hourly load of the event period on event day and the 10 preceding non-event days	-	√
EU-01-03b_05	Evidence showing that the project has joined the PDM Program by the local power company (if applicable)	√	√
EU-01-03b_06	Official record issued by local power company demonstrating the peak demand reduction during the event period in accordance with PDM Program (if applicable)	-	√

Remarks

(a) Additional Information

CLP Power Hong Kong Limited, Peak Demand Management [ONLINE]

https://www.clp.com.hk/en/business/low-carbon-solutions/energy-management/peak-demand-management
[Accessed Jun 2025]

(b) Related Credit Head(s)

None

5 Energy Use **EU-01 Energy Use Reduction and Control**

EU-01-04 Metering and Monitoring

Objective Ensure building operators to measure, monitor the performance of building engineering systems, facilitate auditing works and develop improvement plans for the systems.

Credit point(s) Attainable 6

Credit Requirement

(a) Metering Provisions for Landlord's Electrical Loads

1 credit point for equipping metering facilities to monitor and collect energy consumption data for landlord's electrical loads.

(b) Metering Provisions for Landlord's Individual Electrical Loads

1 to 2 credit point(s) for equipping metering facilities to monitor and collect energy consumption data for 2 or 4 numbers of the following electrical loads of landlord's controlled systems:

1) Chiller;
2) Chiller plant;
3) Cooling tower plant;
4) Consumer side chilled water pumps (For building served by district cooling system);
5) Air side equipment;
6) Unitary/ VRV system (For building without chiller plant and not served by district cooling system);
7) Mechanical ventilation system (rated power ≥2.5kW);
8) Lighting installation;
9) Lift and escalator systems;
10) Plumbing and drainage systems;
11) Plug load/ receptable load/ small power.

(c) Performance Auditing

Maximum 3 credit points for equipping performance monitoring systems to monitor and collect operating performance data for the following landlord's controlled systems:

	Landlord's Controlled System
1	For building served by air-cooled/ water-cooled chiller plant system: a) Chiller; b) Chiller plant; c) Cooling tower plant. ***Alternatively,*** For building served by district cooling system: a) Consumer side chilled water pumps.
2	Air side equipment
3	Mechanical ventilation system (rated power ≥2.5kW)

Credit Point(s)	Landlord's Controlled System
1	Any one (1) landlord's controlled system
2	Any two (2) landlord's controlled systems
3	All three (3) landlord's controlled systems

Assessment

(a) Metering Provisions for Landlord's Electrical Loads

1. Provide metering facilities to collect building level energy consumption for landlord's controlled area.

(b) Metering Provisions for Landlord's Individual Electrical Loads

1. Provide metering facilities for the following individual installation in landlord's controlled area, where present in the project:

    1.1. Energy consumption of each chiller,
    1.2. Energy consumption of chiller plant;
    1.3. Energy consumption of cooling tower plant;
    1.4. Energy consumption of consumer side chilled water pumps (For building served by district cooling system);
    1.5. Energy consumption of each equipment in HVAC air-side system (i.e. air handling unit, and primary air unit).

2. Provide metering facilities for collecting energy consumption data of the following installations in landlord's controlled area, where present in the project, allowing one single meter for each type of installation:

    2.1. Energy consumption of Unitary/ VRV system (For building without chiller plant and not served by district cooling system);
    2.2. Energy consumption of mechanical ventilation system (rated power ≥2.5kW);
    2.3. Energy consumption of lighting system;
    2.4. Energy consumption of lift and escalator system;
    2.5. Energy consumption of plumbing and drainage system;
    2.6. Energy consumption of plug load/ receptable load/ small power.

(c) Performance Auditing

1. Provide performance auditing monitoring system for the following systems in landlord's controlled area:

	Landlord's Controlled System
1.1	For building served by air-cooled/ water-cooled chiller plant system: 1.1.1. Chiller; 1.1.2. Chiller plant; 1.1.3. Cooling tower plant. ***Alternatively,*** For building served by district cooling system: 1.1.1. Consumer side chilled water pumps.
1.2	Air side equipment
1.3	Mechanical ventilation system (rated power ≥2.5kW)

2. Performance auditing monitoring system covers operating characteristics as summarised as below:

System (if applicable)	Monitoring Parameter
Chiller	- Chilled water supply & return water temperature (°C) - Chilled water flow rate (m^3/s) - Cooling capacity (kW)
Chiller Plant	- Chilled water supply & return water temperature (°C) - Chilled water flow rate (m^3/s) - Cooling capacity (kW)
Cooling tower plant	- Condensing water supply & return water temperature (°C) - Condensing water flow rate (m^3/s), for variable speed condensing water system only. - Ambient temperature (°C) - Relative humidity (%)
Consumer side chilled water pumps (For building served by district cooling system)	- Chilled water supply & return water temperature (°C) - Chilled water flow rate (m^3/s)
Air side equipment - Primary air/ air handling units	- Supply and return air temperature (°C) - Fresh air temperature (°C) - Fan speed (rpm) / fan motor frequency (Hz) - Return air CO_2 concentration (ppm or mg/m^3), for demand control system only
Mechanical ventilation system - Carpark ventilation - Mechanical ventilation (≥2.5kW each)	- CO/ Nox concentration level, if applicable - Fan speed (rpm) / fan motor frequency (Hz)

3. Monitoring record of the operating performance by means of BMS or handwritten record is acceptable. The monitoring records shall be maintained on a daily basis at minimum.

Submittals

(a) Metering Provisions for Landlord's Electrical Loads

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
EU-01-04a_00	EB submission form for EU-01-04a	√	√
EU-01-04a_01	Electrical schematics highlighting the metering locations	√	√
EU-01-04a_02	Summary table of metering showing the electrical loads monitored	√	√
EU-01-04a_03	Schematic drawings and point schedule of BMS	√	√
EU-01-04a_04	Catalogue(s) of metering facilities/ BMS	√	√

EU-01-04a_05	Sample photos of metering system	-	√
EU-01-04a_06	Sample weekly record of the collected energy consumption data of past 12 months	-	√

(b) Metering Provisions for Landlord's Individual Electrical Loads

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
EU-01-04b_00	EB submission form for EU-01-04b	√	√
EU-01-04b_01	Electrical schematics highlighting the metering locations	√	√
EU-01-04b_02	Summary table of metering showing the electrical loads monitored	√	√
EU-01-04b_03	Schematic drawings and point schedule of BMS	√	√
EU-01-04b_04	Catalogue(s) of metering facilities/ BMS	√	√
EU-01-04b_05	Sample photos of metering system	-	√
EU-01-04b_06	Sample weekly record of the collected energy consumption data of past 12 months	-	√

(c) Performance Auditing

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
EU-01-04c_00	EB submission form for EU-01-04c	√	√
EU-01-04c_01	Schematic drawings and point schedule of BMS, for system monitored by BMS only.	√	√
EU-01-04c_02	Catalogues of monitoring facilities/ BMS, for system monitored by BMS only.	√	√
EU-01-04c_03	Sample weekly record of monitoring facilities showing the logging of operating performance data of past 12 months	-	√

Remarks

(a) Additional Information

None

(b) Related Credit Head(s)

EU-04-03 Energy Analysis

5 Energy Use **EU-01 Energy Use Reduction and Control**

EU-01-05 Energy Performance Certificate

Objective Promote HKGBC's Zero-Carbon-Ready Building Certification to support Hong Kong's Climate Action Plan 2050.

Credit point(s) Attainable 8 (For buildings with single user)
12 (For buildings with tenant spaces)

Credit Requirement **Option 1: For buildings with single user,**

Route 1: EUI under the Energy Performance Certificate of the Zero-Carbon-Ready Building Certification scheme by HKGBC:

2 to 8 credit points when the project achieves the below rating:

Credit Point(s)	Rating under the Energy Performance Certificate
2	Low
4	Extra Low
6	Super Low
8	Zero-Carbon-Ready

Alternatively,

Route 2: Percentage Reduction under the Energy Performance Certificate of the Zero-Carbon-Ready Building Certification scheme by HKGBC:

1 to 4 credit point(s) when the project achieves the below rating:

Credit Point(s)	Rating under the Energy Performance Certificate
1	Level 1 improvement
2	Level 2 improvement
3	Level 3 improvement
4	Level 4 improvement

Option 2: For buildings with tenant spaces,

Route 1: EUI under the Energy Performance Certificate of the Zero-Carbon-Ready Building Certification scheme by HKGBC:

(a) 2 to 8 credit points when the landlord's controlled area of the project achieves the below rating:

Credit Point(s)	Rating under the Energy Performance Certificate for Landlord's Controlled Area
2	Low
4	Extra Low
6	Super Low
8	Zero-Carbon-Ready

(b) 1 to 4 credit point(s) when the whole building's energy consumption of the project achieves the below rating:

Credit Point(s)	Rating under the Energy Performance Certificate for Whole Building
1	Low
2	Extra Low
3	Super Low
4	Zero-Carbon-Ready

Alternatively,

Route 2: Percentage Reduction under the Energy Performance Certificate of the Zero-Carbon-Ready Building Certification scheme by HKGBC:

(a) 1 to 4 credit point(s) when the landlord's controlled area of the project achieves the below rating:

Credit Point(s)	Rating under the Energy Performance Certificate for Landlord's Controlled Area
1	Level 1 improvement
2	Level 2 improvement
3	Level 3 improvement
4	Level 4 improvement

(b) 1 to 4 credit point(s) when the whole building's energy consumption of the project achieves the below rating:

Credit Point(s)	Rating under the Energy Performance Certificate for Whole Building
1	Level 1 improvement
2	Level 2 improvement
3	Level 3 improvement
4	Level 4 improvement

Assessment

Option 1: For buildings with single user,

Route 1: EUI under the Energy Performance Certificate of the Zero-Carbon-Ready Building Certification scheme by HKGBC:

1. Apply for the Zero-Carbon-Ready Building Certification and engage an Energy Assessor-ZCRB to conduct an independent assessment.

2. Provide the valid Energy Performance Certificate.

Alternatively,

Route 2: Percentage Reduction under the Energy Performance Certificate of the Zero-Carbon-Ready Building Certification scheme by HKGBC:

1. Apply for the Zero-Carbon-Ready Building Certification and engage an Energy Assessor-ZCRB to conduct an independent assessment.

2. Provide the valid Energy Performance Certificate.

Option 2: For buildings with tenant spaces,

Route 1: EUI under the Energy Performance Certificate of the Zero-Carbon-Ready Building Certification scheme by HKGBC:

1. Apply for the Zero-Carbon-Ready Building Certification and engage an Energy Assessor-ZCRB to conduct an independent assessment for whole building and/or landlord portion.

2. Provide the valid Energy Performance Certificate.

Alternatively,

Route 2: Percentage Reduction under the Energy Performance Certificate of the Zero-Carbon-Ready Building Certification scheme by HKGBC:

1. Apply for the Zero-Carbon-Ready Building Certification and engage an Energy Assessor-ZCRB to conduct an independent assessment for whole building and/or landlord portion.

2. Provide the valid Energy Performance Certificate.

Submittals

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
EU-01-05_00	EB submission form for EU-01-05	√	√
Option 1: For buildings with single user			
Route 1: EUI under the Energy Performance Certificate of the Zero-Carbon-Ready Building Certification scheme by HKGBC			
EU-01-05_01	Valid Energy Performance Certificate issued by HKGBC	-	√
Route 2: Percentage Reduction under the Energy Performance Certificate of the Zero-Carbon-Ready Building Certification scheme by HKGBC			
EU-01-05_02	Valid Energy Performance Certificate issued by HKGBC	-	√
Option 2: For buildings with tenant spaces			
Route 1: EUI under the Energy Performance Certificate of the Zero-Carbon-Ready Building Certification scheme by HKGBC			
EU-01-05_03	Valid Energy Performance Certificate issued by HKGBC	-	√
Route 2: Percentage Reduction under the Energy Performance Certificate of the Zero-Carbon-Ready Building Certification scheme by HKGBC			
EU-01-05_04	Valid Energy Performance Certificate issued by HKGBC	-	√

Remarks

(a) Additional Information

Hong Kong Green Building Council Limited. Zero-Carbon-Ready Building Certification Scheme
[ONLINE]
https://zcrbc.hkgbc.org.hk/
[Accessed Jun 2025]

(b) Related Credit Head(s)

None

5 Energy Use **EU-02 Renewable and Alternative Energy Generation**

EU-02-01 Renewable and Alternative Energy Systems

Objective Encourage the wider application of renewable energy sources in buildings.

Credit point(s) Attainable 15

Credit Requirement

(a) On-site Renewable Energy Application

1 to 10 credit point(s) for using on-site renewable energy systems to offset annual building energy consumption of landlord's controlled area.

Credit Point(s)	Percentage of Annual Building Energy Consumption of Landlord's Controlled Area
1	0.2%
2	0.4%
3	0.6%
4	0.8%
5	1.0%
6	1.2%
7	1.4%
8	1.6%
9	1.8%
10	2.0%

(b) Off-site Green Power

1 to 5 credit point(s) for purchasing Energy Attribute Certificate (EAC) and/ or establishing Power Purchase Agreement (PPA) to offset annual landlord energy consumption.

For purchasing the EAC,

Credit Point(s)	Percentage of Annual Building Energy Consumption of Landlord's Controlled Area
1	10%
2	20%
3	40%
4	70%
5	100%

Alternatively,

For establishing PPA,

Credit Point(s)	Percentage of Annual Building Energy Consumption of Landlord's Controlled Area
1	5%
2	10%
3	20%
4	35%
5	50%

Assessment

(a) On-site Renewable Energy Application

1. Calculate the percentage of annual energy generation obtained from the on-site renewable energy source(s) with the annual landlord energy consumption.

$$\frac{\text{Annual energy generated by on-site renewable energy systems (kWh)}}{\text{Annual landlord energy consumption (kWh)}} \times 100\%$$

2. To demonstrate the amount of energy generation from renewable energy sources, endorsed design brief shall be provided for Provisional Assessment, while measurement and/ or actual energy generation record shall be provided for Final Assessment;

3. The design brief shall be endorsed by the top management of building owner/ building management company.

4. Provide organisation chart to demonstrate the line of authority of the building-in-charge/ team lead of building management team.

5. Provide electricity bills as energy generation record if the project applied for Feed-in Tariff Scheme;

6. Provide monthly meter record of renewable energy system if the project does not apply for Feed-in Tariff Scheme;

7. The calculation shall be referenced to the energy generation/ consumption in past 12 months from the date of submission.

(b) Off-site Green Power

For purchasing the EAC,

1. Calculate the percentage of annual energy purchased from EAC (either renewable energy certificate (REC) or green electricity certificate (GEC)) with the annual landlord energy consumption.

$$\frac{\text{Renewable energy purchased from the Authority (kWh)}}{\text{Annual landlord energy consumption (kWh)}} \times 100\%$$

2. The calculation shall be referenced to the energy consumption in past 12 months from the date of submission.

3. Minimum tenor of EAC purchasing contract shall be 3 years as a long-term commitment to net-zero ready operations.

4. Provide undertaking letter from the top management of building owner/ building management company showing the commitment of purchasing EAC for consecutive 3 years in minimum, if EAC purchasing contract is not available.

5. Provide undertaking letter from top management of building owner/ building management company detailing the breakdown of purchased renewable energy for the project building if the purchased EAC caters to multiple buildings owned by the same building owner.

6. Provide organisation chart to demonstrate the line of authority of the building-in-charge/ team lead of building management team.

Alternatively,

For establishing PPA,

1. Calculate the percentage of annual energy purchased from PPA with the annual landlord energy consumption.

$$\frac{\text{Renewable energy purchased from the Authority (kWh)}}{\text{Annual landlord energy consumption (kWh)}} \times 100\%$$

2. The calculation shall be referenced to the energy consumption in past 12 months from the date of submission.

3. Minimum tenor of PPA contract shall be 3 years as a long-term commitment to net-zero ready operations.

4. Provide undertaking letter from the top management of building owner/ building management company detailing the breakdown of purchased renewable energy for the project building if the PPA caters to multiple buildings owned by the same building owner.

5. Provide organisation chart to demonstrate the line of authority of the building-in-charge/ team lead of building management team.

Submittals

(a) On-site Renewable Energy Application

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
EU-02-01a_00	EB submission form for EU-02-01a	√	√
EU-02-01a_01	Calculation for percentage of annual on-site renewable energy generation and annual electricity consumption of past 12 months	√	√
EU-02-01a_02	Endorsed design brief showing annual energy generation by each on-site renewable energy system	√	-
EU-02-01a_03	Organisation chart	√	-
EU-02-01a_04	Electrical bills and/ or metering records for annual on-site renewable energy generation and annual electricity consumption	-	√

EU-02-01a_05	Manufacturer specification/ catalogue of the renewable energy system(s)	√	√
EU-02-01a_06	As-built drawings of the renewable energy system(s)	√	√
EU-02-01a_07	On-site photos of the renewable energy system(s)	-	√

(b) Off-site Green Power

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
EU-02-01b_00	EB submission form for EU-02-01b	√	√
EU-02-01b_01	Calculation for percentage of renewable energy by purchased EAC and annual electricity consumption	√	√
EU-02-01b_02	EAC issued by the Authority	-	√
EU-02-01b_03	Duly Signed EAC purchasing contract [or] Undertaking letter from the top management of building owner/ building management company for EAC purchasing commitment	-	√
EU-02-01b_04	Electrical bills and/ or metering records for annual electricity consumption	-	√
EU-02-01b-05	Undertaking letter from the top management of building owner/ building management company detailing the breakdown of purchased renewable energy (For project where the purchased EAC caters to multiple buildings)	-	√
EU-02-01b_06	Organisation chart	-	√
Alternative path			
EU-02-01b_07	Calculation for percentage of renewable energy purchased by PPA and annual electricity consumption	√	√
EU-02-01b_08	Duly Signed PPA	-	√
EU-02-01b_09	Electrical bills and/ or metering records for annual electricity consumption	-	√
EU-02-01b-10	Undertaking letter from the top management of building owner/ building management company detailing the breakdown of purchased renewable energy (For project where PPA caters to multiple buildings)	-	√
EU-02-01b_11	Organisation chart	-	√

Remarks

(a) Additional Information

None

(b) Related Credit Head(s)

None

5 Energy Use **EU-04 Energy Management and Analysis**

EU-04-03 Energy Analysis

Objective

Encourage building operators to make good use of the monitoring facilities to review the energy and/ or carbon performance of the building in regular basis.

Credit point(s) Attainable

12 (for buildings with central A/C system);
9 (for buildings with de-centralised A/C system only)

Credit Requirement

(a) Building Energy Consumption

1 credit point for providing total building energy consumption for landlord area for the past 12 months.

(b) Energy Breakdown for air-conditioning system

Option 1: For buildings with central A/C system

(1) 1 to 3 credit point(s) for providing energy consumption breakdown of water-side equipment for landlord's controlled area for the past 12 / 24 / 36 months for building served by air-cooled/ water-cooled air-conditioning system:

a. Chiller plant;
b. Chiller;
c. Cooling tower plant (if applicable).

Alternatively,

1 to 3 credit point(s) for providing energy consumption of consumer side chilled water pumps for the past 12 / 24 / 36 months for building served by district cooling system.

(2) 1 to 3 credit point(s) for providing energy consumption of air-side equipment (i.e. primary air unit, air handling units, etc.) for landlord area for the past 12 / 24 / 36 months.

Option 2: For buildings with de-centralised A/C system only

1 to 3 credit point(s) for providing energy consumption of unitary/ VRV system for landlord area for the past 12 / 24 / 36 months.

(c) Energy Breakdown for other system

1 to 3 credit point(s) for providing energy consumption breakdown of any two of the following systems for landlord's controlled area for the past 12 / 24 / 36 months:

a. Lighting system;
b. Mechanical ventilation system;
c. Lift and escalator systems;
d. Plumbing and drainage systems.

(d) Analysis of Building Energy Consumption

1 credit point for conducting annual review and analysis of energy consumption.

(e) Carbon Audit

1 credit point for conducting carbon audit to measure all Greenhouse Gas emissions in Scopes 1 and 2, plus water and paper use under Scope 3, and at least one additional category under Scope 3, in accordance with The Greenhouse Gas Protocol.

Assessment

(a) Building Energy Consumption

1. Provide energy consumption records for landlord's controlled area for the past 12 months.

2. Provide a summary table of monthly energy consumption for the past 12 months.

(b) Energy Breakdown for air-conditioning system

1. Provide energy consumption records for different electrical loads for past 12 / 24 / 36 months:

   Option 1: For buildings with central A/C system
   (1) Water-side A/C system
      a. Chiller (only applicable for buildings served by air-cooled/ water-cooled air-conditioning system)
      b. Chiller plant (only applicable for buildings served by air-cooled/ water-cooled air-conditioning system)
      c. Cooling tower plant (only applicable for buildings with water-cooled air-conditioning system)
      d. Consumer side chilled water pumps (only applicable for building served by district cooling system)

   (2) Air-side A/C system
      a. Primary air unit
      b. Air handling unit

   Option 2: For buildings with de-centralised A/C system only
   a. Unitary/ VRV A/C systems (only applicable for buildings with de-centralised A/C system)

2. Provide a summary table of the monthly energy breakdown for the past 12 / 24 / 36 months.

(c) Energy Breakdown for other system

1. Provide energy consumption records for different electrical loads for past 12 / 24 / 36 months:

   Other systems
   a. Lighting system
   b. Mechanical ventilation system
   c. Lift and escalator systems
   d. Plumbing and drainage systems

2. Provide a summary table of the monthly energy breakdown for the past 12 / 24 / 36 months.

(d) Analysis of Building Energy Consumption

1. Provide report demonstrating energy consumption is reviewed in annual basis. The report shall include:

   1.1. Monthly energy consumption summary table and chart for the past 24 months, up to 6-month from the issue date of report;
   1.2. Analysis of annual energy consumption trend and pattern of different electrical loads attempted in part (b);
   1.3. Recommendation and action plan for improving energy performance of building, if required.

2. The report shall be prepared within 12 months from the date of submission.

(e) Carbon Audit

1. Provide a carbon audit or Greenhouse Gas (GHG) emission audit report in accordance with the Greenhouse Gas Protocol.

2. The carbon audit report shall meet the following requirements:

   2.1. Carbon audit was conducted within 3 years from the date of submission;

   2.2. Endorsed by a qualified person (e.g. Certified Carbon Auditor, or equivalent);

   2.3. Include all emissions in Scopes 1 and 2;

   2.4. GHG emissions due to water use shall consider the electricity used for fresh water and sewage processing;

   2.5. Apart from water and paper use, 1 additional category of any one of the Scope 3 emissions in accordance with the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard shall be included in Scope 3 calculation;

   2.6. Include evidence of competency of qualified person (e.g. certificate of Certified Carbon Auditor).

Submittals

(a) Building Energy Consumption

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
EU-04-03a_00	EB submission form for EU-04-03a	√	√
EU-04-03a_01	Energy consumption data records for landlord's controlled area for the past 12 months from the date of submission	-	√
EU-04-03a_02^	Summary table of monthly energy consumption for landlord's controlled area	-	√

(b) Energy Breakdown for air-conditioning system

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
EU-04-03b_00	EB submission form for EU-04-03b	√	√
EU-04-03b_01	Energy consumption data records of breakdown for electrical loads for the past 12 / 24 / 36 months from the date of submission	-	√
EU-04-03b_02^	Summary table of energy breakdown for electrical loads for landlord's controlled area	-	√

(c) Energy Breakdown for other system

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
EU-04-03c_00	EB submission form for EU-04-03c	√	√
EU-04-03c_01	Energy consumption data records of breakdown for electrical loads for the past 12 / 24 / 36 months from the date of submission	-	√
EU-04-03c_02^	Summary table of energy breakdown for electrical loads for landlord's controlled area	-	√

(d) Analysis of Building Energy Consumption

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
EU-04-03d_00	EB submission form for EU-04-03d	√	√
EU-04-03d_01	Review report of building energy consumption issued within 12 months from the date of submission	-	√

(e) Carbon Audit

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
EU-04-03e_00	EB submission form for EU-04-03e	√	√
EU-04-03e_01	Carbon audit report endorsed by qualified person	√	√

Remarks

(a) Additional Information

Electrical and Mechanical Services Department, Guidelines to Account for and Report on Greenhouse Gas Emissions and Removals for Buildings (Commercial, Residential or Institutional Purposes) in Hong Kong.

The World Business Council for Sustainable Development and Word Resources Institute, The Greenhouse Gas Protocol.

GHG Protocol, Corporate Value Chain (Scope 3) Accounting and Reporting Standard.

(b) Related Credit Head(s)

EU-01-04 Metering and Monitoring

5 Energy Use **EU-04 Energy Management and Analysis**

EU-04-04 Retro-commissioning (RCx)

Objective Promote energy saving through a systematic process to identify operational improvements to enhance building energy efficiency.

Credit point(s) Attainable 11

Credit Requirement

(a) Planning Stage

1 credit point to develop retro-commissioning plan for systems.

(b) Investigation Stage

1 credit point to identify and select energy saving opportunities.

(c) Implementation Stage

Maximum 6 credit points for implementing the identified energy saving opportunities and conducting measurement and verification, preparing measurement and verification report and developing a retro-commissioning final report for the following applicable system(s):

Credit Point	Active System(s)
1	Chilled water plant (For building served by chiller plant system) or Consumer side chilled water pumps (For building served by district cooling system)
1	Heat rejection plant
1	Air-side equipment of air conditioning system
1	Central hot water pump
1	Electrical system (including lighting system)
1	Lift and escalator installation

Credit Point	Passive System(s)
1	Façade system
1	Building roof

1 credit point for implementing identified energy saving opportunities for three (3) or more systems.

(d) Ongoing Commissioning Plan

1 credit point to develop an ongoing commissioning plan.

(e) Ongoing Commissioning Implementation

1 credit point to carry out ongoing commissioning in accordance with ongoing commissioning plan.

Assessment

(a) Planning Stage

1. Develop a RCx plan with the following contents in minimum:

    1.1. General description of the systems identified;
    1.2. Scope of RCx;
    1.3. Description of RCx team with their roles and responsibilities;
    1.4. Master programme of RCx;
    1.5. Observation from the initial walk-through and interview of O&M staff/ building operators;
    1.6. Review of energy performance of the building;
    1.7. Initial analysis of systems below in minimum:
        1.7.1 HVAC system, including water side and air side equipment;
        1.7.2 Lighting system;
        1.7.3 Lift & escalator system;
        1.7.4 Façade system;
        1.7.5 Building roof.
    1.8. Findings in planning stage.

2. The RCx plan shall be endorsed by a RCx Professional.

3. The finalised RCx plan shall be within the past 5 years from the date of submission.

(b) Investigation Stage

1. Provide a RCx investigation report with the following contents in minimum:

    1.1. Detail analysis of systems with the trend logged operational data;
    1.2. Identification of potential energy saving opportunities (ESOs);
    1.3. Proposed measurement and verification (M&V) methods for the proposed ESOs;
    1.4. List of selected ESO(s).

2. The RCx investigation report shall be endorsed by a RCx Professional.

3. The finalised RCx investigation report shall be within the past 5 years from the date of submission.

(c) Implementation Stage

1. Implement the selected ESO(s) identified in investigation stage for at least one of the following system(s):

    1.1. Chilled water plant (For building served by chiller plant system) or consumer side chilled water pumps (For building served by district cooling system);
    1.2. Heat rejection plant;
    1.3. Air-side equipment of air conditioning system;
    1.4. Central hot water pump;
    1.5. Electrical system (including lighting system);
    1.6. Lift and escalator installation;
    1.7. Façade system;
    1.8. Building roof.

2. Provide implementation records of each selected ESO including:

    2.1. Purchase records/ work order of the improvement works, if applicable;
    2.2. On-site photo records;
    2.3. Testing & commissioning records.

3. Perform measurement and verification of energy saving performance as agreed and reported in RCx investigation report for each implemented ESO. The M&V report shall be prepared with the following contents:

    3.1 List of implemented ESO(s);
    3.2 ESO(s) that were planned but not implemented;
    3.3 Changes in implemented ESOs as per original plans;
    3.4 Documentation of facility adjustments;
    3.5 Energy performance or energy improvement results.

4. The implementation record shall be within the past 5 years from the date of submission.

5. Provide a RCx final report with the following contents in minimum:

    5.1. Executive Summary;
    5.2. Current facility requirement;
    5.3. The findings log with descriptions of the implemented measures;
    5.4. Updated savings estimates and actual improvement costs;
    5.5. The Central Control & Monitoring System (CCMS) trending plan and data logger diagnostic/monitoring plan;
    5.6. All completed equipment and system investigation tests and results;
    5.7. Recommended frequency for re-commissioning;
    5.8. Complete documentation of revised or new control sequences, if any;
    5.9. Recommendations for maintaining the new improvements;
    5.10. Training Summary including training materials;
    5.11. A list of capital improvements recommended for further investigation.

6. RCx M&V report and final report shall be endorsed by a RCx Professional.

7. The finalised RCx M&V report and final report shall be within the past 5 years from the date of submission.

(d) Ongoing Commissioning Plan

1. Develop an ongoing commissioning plan with the following contents in minimum:

    1.1. Roles and responsibilities;
    1.2. Policies and procedures for updating building documentation;
    1.3. Requirement for tracking energy and system performance;
    1.4. Collection of operational data for continuous energy use analysis;
    1.5. Recommendation of periodically re-commissioning of the building systems.

2. On-going commissioning plan shall be endorsed by a RCx Professional.

3. The finalised on-going commissioning plan shall be within the past 5 years from the date of submission.

(e) Ongoing Commissioning Implementation

1. Carry out on-going commissioning in accordance with the on-going commissioning plan. The implementation records may include:

1.1 Energy and system performance record and operational data;
1.2 Review/ inspection report of system performance;
1.3 On-site photo records of re-commissioning;
1.4 Rectification records when the energy performance is not satisfactory as per on-going commissioning plan.

Submittals

(a) Planning Stage

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
EU-04-04a_00	EB submission form for EU-04-04a	√	√
EU-04-04a_01	RCx plan endorsed by RCx Professional	√	√
EU-04-04a_02	Certificate of RCx Professional [or] Screenshot of HKGBC RCx Directory	√	√

(b) Investigation Stage

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
EU-04-04b_00	EB submission form for EU-04-04b	√	√
EU-04-04b_01	RCx investigation report endorsed by RCx Professional	-	√
EU-04-04b_02	Certificate of RCx Professional [or] Screenshot of HKGBC RCx Directory	-	√

(c) Implementation Stage

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
EU-04-04c_00	EB submission form for EU-04-04c	√	√
EU-04-04c_01	RCx investigation report endorsed by RCx Professional	-	√
EU-04-04c_02	Implementation records of the energy saving opportunities	-	√

EU-04-04c_03	Measurement and verification records of the implemented energy saving opportunities	-	√
EU-04-04c_04	RCx measurement and verification report endorsed by RCx Professional	-	√
EU-04-04c_05	RCx final report endorsed by RCx Professional	-	√
EU-04-04c_06	Certificate of RCx Professional [or] Screenshot of HKGBC RCx Directory	-	√

(d) Ongoing Commissioning Plan

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
EU-04-04d_00	EB submission form for EU-04-04d	√	√
EU-04-04d_01	On-going commissioning plan endorsed by RCx Professional	√	√
EU-04-04d_02	Certificate of RCx Professional [or] Screenshot of HKGBC RCx Directory	√	√

(e) Ongoing Commissioning Implementation

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
EU-04-04e_00	EB submission form for EU-04-04e	√	√
EU-04-04e_01	On-going commissioning plan endorsed by RCx Professional	√	√
EU-04-04e_02	Records demonstrating implementation in accordance with the on-going commissioning plan	-	√

Remarks

(a) Additional Information

Electrical and Mechanical Services Department. Technical Guidelines on Retro-commissioning
[ONLINE]
https://www.energysaving.gov.hk/filemanager/template/common/pdf/rcx/EMSD-TG-RCx-Main-Content-Eng.pdf
[Accessed Jun 2025]

(b) Related Credit Head(s)

None

6. Water Use

Water is known to be in scarce supply in many parts of the world. Globally, water storage is already a major issue. International cooperation is essential in tackling the global water shortage problem. Sharing best practices, technologies, and resources can help countries facing water scarcity find innovative solutions and work towards sustainable water management.

The following Credit Heads are not applicable under EB v3.0:

Credit Code	Credit Head
WU-00-01	Minimum Water Saving Performance
WU-01-03	Water Efficient Appliances
WU-01-05	Twin Tank System
WU-01-06	Cooling Tower Water
WU-04-03	Water Quality Survey

6 Water Use

WU-01 Water Conservation

WU-01-01 Use of Water Efficient Flow Devices

Objective

Reduce the consumption of fresh water through the application of water saving devices that have proven performance and reliability.

Credit point(s) Attainable

2

Credit Requirement

1 to 2 credit point(s) when 80% or 100% of all installed water taps and shower heads for bathing (if any) are certified with Water Efficiency Labelling Scheme (WELS) Grade 1 or equipped with WELS Grade 1 flow controllers.

Assessment

1. Demonstrate that at least 80% or 100% of all installed water taps and shower heads for bathing (if any) installed at the locations under the control of the landlord are certified with WELS Grade 1 or equipped with WELS Grade 1 flow controllers.

2. Water taps for cleansing and/ or irrigation are excluded from assessment.

Submittals

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
WU-01-01_00	BEAM Plus EB submission form for WU-01-01	√	√
WU-01-01_01	Schedule and/ or calculation of water taps and shower heads for bathing (if any) installed at the locations under the control of the landlord, indicating if the model of water taps and shower heads for bathing are certified with WELS Grade 1 or equipped with WELS Grade 1 flow controllers	√	√
WU-01-01_02	Manufacturer's specification or catalogues of water taps and shower heads for bathing (if any) with WELS certificate [or] Manufacturer's specification or catalogues of flow controllers with WELS certificate	√	√
WU-01-01_03	On-site photographs of the water efficient flow devices	-	√

Remarks

(a) Additional Information

None

(b) Related Credit Head(s)

None

6 Water Use **WU-01 Water Conservation**

WU-01-02 Water Efficient Irrigation

Objective Reduce the reliance on fresh water for irrigation.

Credit point(s) Attainable 2

Credit Requirement

(a) Smart Irrigation

1 credit point for demonstrating the use of smart irrigation technology/ system for irrigation.

(b) Water Consumption Reduction by Irrigation Water

1 credit point for demonstrating at least 10% of reduction in fresh water consumption for irrigation in the landlord-controlled area over the past 36 months.

Assessment

(a) Smart Irrigation

1. Demonstrate that smart irrigation technology/ system is adopted for irrigation of soft landscape area that under the control of the landlord by providing plumbing schematic diagrams and layout drawings to illustrate the irrigation system.

2. The smart irrigation technology/ system shall be capable to determine the irrigation need of the landscape using weather or soil moisture data and automatically adjust the use of irrigation water based on the identified need.

(b) Water Consumption Reduction by Irrigation Water

1. The Applicant shall demonstrate a reduction of 10% in annual usage of fresh water for irrigation, by comparing the water bill/ metering data for irrigation water consumption in landlord-controlled area. The numerator shall be the water consumption for irrigation of the past 12 months, while the denominator could be any years within the past 36 months.

$$\left(1 - \frac{\text{Current year annual landlord irrigation water consumption } (\text{m}^3)}{\text{Baseline year annual landlord irrigation water consumption } (\text{m}^3)}\right) \text{x } 100\%$$

2. The Applicant shall compute the comparison of water consumption using the water bills or metering data. Standard data log sheet endorsed by building-in-charge/ team lead of building management team is also acceptable.

Submittals

(a) Smart Irrigation

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
WU-01-02a_00	EB submission form for WU-01-02a	√	√
WU-01-02a_01	Schematic and layout drawings illustrating the irrigation system	√	√
WU-01-02a_02	Narrative description for smart irrigation technology/ system adopted	√	√
WU-01-02a_03	Specification/ catalogues of the smart irrigation technology/ system	√	√
WU-01-02a_04	On-site photographs of the soft landscape area and smart irrigation technology/ system	-	√

(b) Water Consumption Reduction by Irrigation Water

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
WU-01-02b_00	EB submission form for WU-01-02b	√	√
WU-01-02b_01	Schematic and layout drawings illustrating the irrigation system	√	√
WU-01-02b_02	Calculation for annual irrigation water consumption	√	√
WU-01-02b_03	Water bills/ metering data for annual irrigation water consumption [or] Endorsed data log sheet for annual irrigation water consumption	√	√

Remarks

(a) Additional Information

None

(b) Related Credit Head(s)

WU-03-01 Water Recycling

WU-04-02 Freshwater Consumption Monitoring and Reduction

6 Water Use **WU-01 Water Conservation**

WU-01-04 Water Leakage Detection

Objective Identify water leakage once detected for the arrangement of maintenance work.

Credit point(s) Attainable 1

Credit Requirement 1 credit point for installing water leakage detection system(s) in all municipal potable water tank and pump rooms.

Assessment

1. Demonstrate that water leakage detection system(s) is/ are installed in all municipal potable water tank and pump rooms serving fresh water supply system, flushing water system (if using fresh water for flushing), cleansing water system, irrigation water system, and air conditioning system (e.g. make-up water tanks and pumps for fresh water cooling towers).

2. Water tank and pump rooms serving only non-potable water system or fire services system are not assessed.

3. Water tank and pump rooms which have multiple water tanks and/ or pumps shall have at least one water leakage detection system.

4. The detection system(s) shall be capable to automatically alert the operator or building management team and to identify the room with leakage when leakage occurs.

Submittals

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
WU-01-04_00	EB submission form for WU-01-04	√	√
WU-01-04_01	Plumbing schematic drawing(s) and drawings of water leakage detection systems (e.g. control schematic, BMS drawings) demonstrating that all eligible water tanks and/ or pump room(s) are provided with water leakage detection devices as well as demonstrating the capability of automatically alerting function towards the operator/ security guard to identify the room with water leakage when water leakage occurs	√	√
WU-01-04_02	Equipment catalogues of the water leakage detectors	√	√
WU-01-04_03	On-site photographs of the water leakage detectors	-	√

Remarks

(a) Additional Information

None

(b) Related Credit Head(s)

None

6 Water Use **WU-02 Effluent**

WU-02-01 Effluent Discharge to Foul Sewers

Objective Reduce the volumes of sewage discharged from buildings thereby reducing burdens on municipal sewage supply and treatment facilities.

Credit point(s) Attainable 2

Credit Requirement

(a) Water Closets

1 credit point for demonstrating all water closets are dual flush with Water Efficiency Labelling Scheme (WELS) Grade 1.

(b) Urinals

1 credit point for demonstrating all urinals are sensor types with Water Efficiency Labelling Scheme (WELS) Grade 1.

Assessment

(a) Water Closets

1. Demonstrate that all water closets installed at the locations under the control of the landlord are dual flush with WELS Grade 1.

2. Single flush water closets with WELS Grade 1 are acceptable in accessible toilets.

(b) Urinals

1. Demonstrate that all installed urinals at the locations under the control of the landlord are sensor types with WELS Grade 1.

Submittals

(a) Water Closets

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
WU-02-01a_00	EB submission form for WU-02-01a	√	√
WU-02-01a_01	Schedule of water closets installed at the locations under the control of the landlord	√	√
WU-02-01a_02	Manufacturer's specification or catalogues of water closets with WELS certificate	√	√
WU-02-01a_03	On-site photographs of the water closets	-	√

(b) Urinals

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
WU-02-01b_00	EB submission form for WU-02-01b	√	√
WU-02-01b_01	Schedule of urinals installed at the locations under the control of the landlord	√	√
WU-02-01b_02	Manufacturer's specification or catalogues of urinals with WELS certificate	√	√
WU-02-01b_03	On-site photographs of the urinals	-	√

Remarks

(a) Additional Information

None

(b) Related Credit Head(s)

None

6 Water Use **WU-03 Water Harvesting and Recycling**

WU-03-01 Water Recycling

Objective Encourage the harvesting of rainwater and the recycling of grey water to reduce the consumption of fresh water.

Credit point(s) Attainable 4

Credit Requirement

(a) Water Recycling System(s) – Feasibility

1 credit point for conducting feasibility study to evaluate the potential of installing water recycling system(s).

(b) Water Recycling System(s) – Implementation

1 credit point for the application of water recycling system(s).

(c) Water Consumption Reduction by Recycled Water

1 to 2 credit point(s) for demonstrating the annual amount of rainwater harvesting, grey and/ or black water recycling is at least 2.5% or 5% of the total annual fresh water consumption.

Assessment

(a) Water Recycling System(s) – Feasibility

1. Water Recycling Feasibility Study

Conduct a feasibility study to evaluate the potential of installing water recycling system(s). Note that the feasibility study imposes no obligation for implementation but encourages consideration of recycled water harnessing. The feasibility study report shall include the following:

1.1. Background

1.1.1. Potential catchment of rainwater, grey and/ or black water;
1.1.2. Seasonal variations of collection of rainwater, grey and/ or black water from potential catchment;
1.1.3. Potential use of recycled water;
1.1.4. Relevant quality standards for recycled water.

1.2. Technical considerations of water recycling system(s)
1.2.1. Description of the proposed system(s);
1.2.2. Expected annual yield of recycled water;
1.2.3. Site constraint identified.

1.3. Economics of water recycling system(s)
1.3.1. Upfront installation costs;
1.3.2. Anticipated maintenance cost;
1.3.3. Anticipated cost saving;
1.3.4. Payback period.

1.4. Conclusions

1.4.1. Conclude whether the harnessing of recycled water is feasible for the project;
1.4.2. Recommendation to refine the water recycling system(s) when feasible (if any).

2. Where compliance with part (b) has been demonstrated, the feasibility study under part (a) is not required, and one credit under part (a) shall be achieved.

(b) Water Recycling System(s) – Implementation

1. Demonstrate the application of water recycling system(s) with schematic diagrams and layouts showing the design and provision of recycling system and on-site photos.

(c) Water Consumption Reduction by Recycled Water

1. Demonstrate that the potable water saving by the water recycling system is at least 2.5% or 5% or more of the total annual landlord fresh water consumption. Both numerator and denominator shall be data of the past 12 months.

$$\frac{\text{Annual recycled water consumption } (m^3)}{\text{Total annual landlord fresh water consumption } (m^3)} \text{ x } 100\%$$

2. The Applicant shall compute the annual landlord fresh water consumption in the potable water saving calculation by the water bills or metering data. Standard data log sheet endorsed by building-in-charge/ team lead of building management team is also acceptable.

3. The annual recycled water consumption can be determined by the meter reading of amount of harvested rainwater, recycled grey and/ or black water consumption or by estimation of the annual yield of recycled water.

Submittals

(a) Water Recycling System(s) – Feasibility

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
WU-03-01a_00	EB submission form for WU-03-01a	√	√
WU-03-01a_01	Feasibility study report	√	√

(b) Water Recycling System(s) – Implementation

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
WU-03-01b_00	EB submission form for WU-03-01b	√	√
WU-03-01b_01	Plumbing and/ or drainage schematic and layout drawings of the water recycling system(s)	√	√
WU-03-01b_02	On-site photographs of the water recycling system(s)	√	√

(c) Water Consumption Reduction by Recycled Water

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
WU-03-01c_00	EB submission form for WU-03-01c	√	√
WU-03-01c_01	Plumbing and/ or drainage schematic and layout drawings of the water recycling system(s)	√	√
WU-03-01c_02	Calculation on the potable water saving	√	√
WU-03-01c_03	Water bills/ metering data for total annual fresh water consumption [or] Endorsed standard data log sheet for total annual fresh water consumption	√	√
WU-03-01c_04	Endorsed standard data log sheet for annual recycled water consumption [or] Estimation of the annual yield of recycled water	√	√

Remarks

(a) Additional Information

None

(b) Related Credit Head(s)

WU-01-02 Water Efficient Irrigation

WU-04-02 Freshwater Consumption Monitoring and Reduction

6 Water Use **WU-04 Water Management**

WU-04-01 Smart Water Metering

Objective Enable building operators to measure, monitor and develop measures for improving water consumption performance of the building.

Credit point(s) Attainable 2

Credit Requirement

(a) Smart Water Metering – Feasibility

1 credit point for conducting feasibility study of installing smart water meter(s) to monitor the total fresh water consumption for the building.

(b) Smart Water Metering – Implementation

1 credit point for demonstrating the provision of smart water meter(s) to monitor the total fresh water consumption for the building.

Assessment

(a) Smart Water Metering – Feasibility

1. Feasibility Study of Installing Smart Water(s)

   Conduct a feasibility study to evaluate the potential of installing smart water meter(s). Note that the feasibility study imposes no obligation for implementation but encourages consideration of adoption of smart water meter(s). The feasibility study report shall include the following:

1.1. Background
   1.1.1. Project information;
   1.1.2. Current metering system adopted for the building(s);
   1.1.3. Expected coverage of smart water meter(s).

1.2. Technical considerations of smart water meter(s)
   1.2.1. Description of the proposal;
   1.2.2. Advantage to be obtained by installing the smart water meter(s);
   1.2.3. Technical and/ or site constraint identified.

1.3. Economics of smart water meter(s)
   1.3.1. Upfront installation costs;
   1.3.2. Anticipated maintenance cost;
   1.3.3. Anticipated cost saving;
   1.3.4. Payback period.

1.4. Conclusions
   1.4.1. Conclude whether smart water meter(s) is feasible for the project;
   1.4.2. Recommendation to refine the smart water meter(s) provision when feasible (if any).

2. Where compliance with part (b) has been demonstrated, the feasibility study under part (a) is not required, and one credit under part (a) shall be achieved.

(b) Smart Water Metering – Implementation

1. Demonstrate the provision of smart water meter(s) to monitor and collect monthly total fresh water consumption for the building. Schematic diagrams showing the location of provision and on-site photos shall be provided.

2. The smart water meter(s) shall be able to display metered data, trending of water consumption and relevant parameters, and with data logging capability/ connected to Building Management System (BMS) or any cloud server serving the purpose of monitoring the water consumption performance.

3. The provision of smart water meter(s) shall cover each water sub-system of the building, e.g. general ablution, irrigation, cleansing, water features, air-conditioning, etc. as a minimum.

Submittals

(a) Smart Water Metering – Feasibility

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
WU-04-01a_00	EB submission form for WU-04-01a	√	√
WU-04-01a_01	Feasibility study report	√	√

(b) Smart Water Metering – Implementation

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
WU-04-01b_00	EB submission form for WU-04-01b	√	√
WU-04-01b_01	Catalogue of the smart water meter(s) installed	√	√
WU-04-01b_02	Plumbing schematic drawings showing the provision of smart water meter(s)	√	√
WU-04-01b_03	On-site photographs of the water meters and data logging system	√	√

Remarks

(a) Additional Information

None

(b) Related Credit Head(s)

None

6 Water Use **WU-04 Water Management**

WU-04-02 Fresh Water Consumption Monitoring and Reduction

Objective

Enable building operators to measure and monitor the freshwater consumption of different water sub-systems and develop measures to encourage continuous improvement in reducing fresh water consumption.

Credit point(s) Attainable 11

Credit Requirement

(a) Fresh Water Consumption - Landlord-Controlled Area

1 credit point for providing total fresh water consumption record for the past 36 months for landlord-controlled area.

(b) Fresh Water Consumption - Whole Building

1 credit point for extending the fresh water consumption records to cover the whole building(s) for the past 36 months.

(c) Self-Improvement

1 to 8 credit point(s) for demonstrating a net percentage of fresh water consumption reduction in landlord-controlled area over the past 36 months.

Credit Point(s)	Net percentage of fresh water consumption reduction
1	2%
2	4%
3	5%
4	6%
5	7%
6	8%
7	9%
8	≥ 10%

(d) Continuous Reduction Trend

1 credit point for demonstrating a continuous reduction trend on the annual landlord fresh water consumption over the past 36 months.

Assessment

(a) Fresh Water Consumption - Landlord-Controlled Area

1. Provide fresh water consumption records for landlord-controlled area for the past 36 months.

2. Provide plumbing schematic diagrams or layout drawings illustrating the location of water meters for landlord-controlled area.

3. The Applicant shall present the fresh water consumption records with metering data or water bills. Standard data log sheet endorsed by building-in-charge/ team lead of building

management team is also acceptable.

(b) Fresh Water Consumption - Whole Building

1. Provide fresh water consumption records for the whole building(s) for the past 36 months.

2. Provide plumbing schematic diagrams or layout drawings illustrating the location of water meters for the whole building(s).

3. The Applicant shall present the fresh water consumption records with metering data or water bills. Standard data log sheet endorsed by building-in-charge/ team lead of building management team is also acceptable.

(c) Self-Improvement

1. Compute the net percentage on fresh water consumption reduction by the water bills or metering data. The numerator shall be the water consumption of the past 12 months, while the denominator could be any years within the past 36 months.

$$(1 - \frac{\text{Current year annual landlord fresh water consumption } (\text{m}^3)}{\text{Baseline year annual landlord fresh water consumption } (\text{m}^3)}) \text{ x } 100\%$$

(d) Continuous Reduction Trend

1. Compute the annual percentage of landlord fresh water consumption reduction over the past 36 months and demonstrate a continuous reduction trend for each year.

Submittals

(a) Fresh Water Consumption - Landlord-Controlled Area

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
WU-04-02a_00	EB submission form for WU-04-02a	√	√
WU-04-02a_01	Plumbing schematic diagrams or layout drawings showing the water meters	√	√
WU-04-02a_02^	Fresh water consumption records with metering data or water bills [or] Endorsed standard data log sheet with summary for fresh water consumption	√	√

(b) Fresh Water Consumption - Whole Building

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
WU-04-02b_00	EB submission form for WU-04-02b	√	√
WU-04-02b_01	Plumbing schematic diagrams or layout drawings showing the water meters	√	√
WU-04-02b_02^	Fresh water consumption records with metering data or water bills [or] Endorsed standard data log sheet with summary for fresh water consumption	√	√

(c) Self-Improvement

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
WU-04-02c_00	EB submission form for WU-04-02c	√	√
WU-04-02c_01	Plumbing schematic diagrams or layout drawings showing the water meters	√	√
WU-04-02c_02	Water bills/ metering data with summary for fresh water consumption [or] Endorsed standard data log sheet with summary for fresh water consumption	√	√
WU-04-02c_03	Calculation on net percentage on fresh water consumption reduction	√	√

(d) Continuous Reduction Trend

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
WU-04-02d_00	EB submission form for WU-04-02d	√	√
WU-04-02d_01	Plumbing schematic diagrams or layout drawings showing the water meters	√	√
WU-04-02d_02	Water bills/ metering data with summary for fresh water consumption [or] Endorsed standard data log sheet with summary for fresh water consumption	√	√
WU-04-02d_03	Calculation of annual percentage of landlord fresh water consumption reduction	√	√

Remarks

(a) Additional Information

None

(b) Related Credit Head(s)

WU-01-02 Water Efficient Irrigation

WU-03-01 Water Recycling

6 Water Use **WU-04 Water Management**

WU-04-04 Quality and Safety of Water Supply

Objective

Encourage Building Owner/ Building Management Company to maintain the plumbing systems in good condition to ensure the building users can enjoy good quality of water.

Credit point(s) Attainable

2

Credit Requirement

(a) Water Supply System Safety Inspection

1 credit point for conducting routine inspection in accordance with the Guidelines for Drinking Water Safety Plans for Buildings in Hong Kong.

Alternatively,

1 credit point for achieving Blue or above certificate under Quality Water Supply Scheme for Buildings – Fresh Water (Management System).

(b) Water Audit

1 credit point for conducting a water audit and maintain a water use inventory.

Assessment

(a) Water Supply System Safety Inspection

1. Develop and provide risk assessment summary table and routine water safety checklist for the project building, with reference to Part C to E in Annex I of the Guidelines for Drinking Water Safety Plans for Buildings in Hong Kong [1].

2. Conduct inspection according to the typical frequency identified in the routine water safety checklist, and provide inspection records endorsed by Qualified Person (as per List of Qualified Persons Trained in Water Safety Plan for Buildings by WSD) for the past 12 months.

Alternatively,

1. Provide a copy of Blue or above certificate under Quality Water Supply Scheme for Buildings – Fresh Water (Management System) and the certificate shall be valid at the time of first assessment submission.

(b) Water Audit

1. Provide a water audit report for all areas of water use, but may exclude water consumption by tenants. The report shall include:

    1.1. Water supply system

        1.1.1. General description with building characteristics;

        1.1.2. Water supply flow diagram(s);

        1.1.3. Inspection of equipment, devices and processes

across the site as part of preparing a usage inventory investigation of consumption by major equipment, devices and processes;

1.2. Water Safety

1.2.1. Identification of significant hazards, hazardous events and control measures;

1.2.2. Implementation of corrective actions in response to adverse findings (if any);

1.2.3. Implementation of documentation and records control, such as training, operation and maintenance records, etc.

1.3. Water conservation

1.3.1. Breakdown of usage across the site and site activities, reconciled against total metered water consumption;

1.3.2. Investigation of water usage trends and patterns;

1.3.3. Recommendation and water conservation opportunity (if any).

2. When Water Safety Plan for Buildings (WSPB) is implemented for the project building(s), content as stipulated under section 1.2 could be presented in form of the Drinking Water Safety Plans for Building Audit Checklist as required in the WSPB.

3. The water audit shall be conducted by an external third party or internal staff that not involved in the implementation of the water supply system safety inspection.

4. The audit frequency shall not be lower than once every two years, or the specified frequency in the Water Conservation Plan for the building.

Submittals

(a) Water Supply System Safety Inspection

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
WU-04-04a_00	EB submission form for WU-04-04a	√	√
WU-04-04a_01	Risk assessment summary table	√	√
WU-04-04a_02	Routine Water Safety Checklist	√	√
WU-04-04a_03	Endorsed Inspection records for the past 12 months	√	√
Alternative path			
WU-04-04a_04	Copy of certificate under Quality Water Supply Scheme for Buildings – Fresh Water (Management System)	√	√

(b) Water Audit

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
WU-04-04b_00	EB submission form for WU-04-04b	√	√
WU-04-04b_01	Water audit report	√	√

Remarks

(a) Additional Information

[1] Water Supplies Department. Water Safety Plan for Buildings [ONLINE]
https://www.wsd.gov.hk/en/water-safety/water-safety-in-buildings/index.html
[Accessed Jun 2025]

(b) Related Credit Head(s)

None

7. Health and Wellbeing

This section considers the broader perspectives of sustainable interior spaces as well as the occupants' health and wellbeing. The broader sustainable issues include provisions of hygiene and amenities maintenance provided in the building, which have impact on the quality of working and living environments.

Indoor environmental quality includes indoor air quality and ventilation provisions that safeguard health. Considerations of health and wellbeing also include thermal comfort, lighting, acoustic and noise, impact on wellbeing, comfort and productivity.

The following Credit Heads are not applicable under EB v3.0:

Credit Code	Credit Head
HWB-00-01	Minimum Ventilation Performance
HWB-03-02	Waste Odour Control
HWB-03-04	Indoor Vibration
HWB-03-09	Biological Contamination
HWB-04-01	Touchless Environment

7 Health and Wellbeing HWB-01 Green and Healthy Living

HWB-01-01 Healthy and Active Living

Objective

Improve the living/ working experience and enhance the health of the building users

Credit point(s) Attainable

1

Credit Requirement

1 credit point for providing at least two (2) of the following healthy and active living features.

Healthy and active living features	
Provide information boards and/ or signage about facilities and services related to physical activities at communal areas	Staircase for building users is accessible to all occupied floors
Provide one (1) shower and locker room facility at communal areas	Provide activity spaces that promote physical activity for building users at communal areas
Provide easily accessible water dispensers for tenants and visitors throughout the building	Provide secure, sheltered, and accessible bicycle storage
Others to be proposed by Applicant	

Assessment

1. Prepare a summary table listing the healthy and active living features provided and their locations.

2. All building users shall have access to all provided enhanced provisions.

Submittals

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
HWB-01-01_00	EB submission form for HWB-01-01	√	√
HWB-01-01_01	Summary table listing the healthy and active living measures provided and their locations	√	√
HWB-01-01_02	Photo record(s) of the healthy and active living measures	-	√

Remarks

(a) Additional Information

None

(b) Related Credit Head(s)

None

7 Health and Wellbeing **HWB-01 Green and Healthy Living**

HWB-01-02 Biophilic Design

Objective

Encourage building occupants to have constant interaction with natural surroundings to nurture the innate human-nature connection and to address human psychological need to be around life and life-like processes.

Credit point(s) Attainable

1

Credit Requirement

1 credit point for providing at least three (3) of the following biophilic design features/ strategies in the communal areas of the building.

List of amenities for biophilic design features/ strategies		
Provision of indoor plants (e.g. potted plants, plant walls)	Incorporate water elements (e.g. water features, fountain)	Utilise natural lighting (e.g. skylights, large windows)
Use of natural materials (e.g. wood, bamboo, rattan or cork)	Mimicking images of nature	Establish visual connections to nature (e.g. views of natural environment within/ outside assessment boundary)
Others to be proposed by the Applicant		

Assessment

1. Provide a summary table illustrating the provision of the biophilic design features/ strategies and their locations.

Submittals

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
HWB-01-02_00	EB submission form for HWB-01-02	√	√
HWB-01-02_01	Summary table of the biophilic design features/ strategies adopted and their locations	√	√
HWB-01-02_02	Photo record(s) of the biophilic design features/ strategies adopted	-	√

Remarks

(a) Additional Information

Biophilic Design Case Studies. Terrapin Bright Green
[ONLINE]
https://www.terrapinbrightgreen.com/report/biophilic-design-case-studies/
[Accessed Jun 2025]

(b) Related Credit Head(s)

None

7 Health and Wellbeing **HWB-01 Green and Healthy Living**

HWB-01-03 Physical Activity and Mental Health Programme

Objective Promote physical activity and mental health to the building users.

Credit point(s) Attainable 1

Credit Requirement 1 credit point for organising physical activity and/ or mental health programme for the building users on annual basis.

Assessment

1. Provide a schedule to illustrate the physical activity and/ or mental health programme held in the past 12 months.

2. Physical activity is defined as any movement that engages the body's muscles and requires energy expenditure, including activities such as walking, running, cycling, or sports.

3. A mental health program is a structured initiative designed to promote mental well-being, provide support, and enhance coping strategies through various activities, workshops, or counselling.

Submittals

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
HWB-01-03_00	EB submission form for HWB-01-03	√	√
HWB-01-03_01	Schedule illustrating the physical activity and/ or mental health programme held in the past 12 months	√	√
HWB-01-03_02	Promotional flyer of each organised event	√	√
HWB-01-03_03	Photo(s) of each organised event	√	√

Remarks

(a) Additional Information

As defined by the World Health Organisation, mental health is a state of well-being in which an individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community. Mental health is fundamental to maintaining personal health as well as the functioning of the community. There is no health without mental health.

[1] World Health Organisation. Mental health
[ONLINE]
https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response
[Accessed Jun 2025]

(b) Related Credit Head(s)

None

7 Health and Wellbeing **HWB-02 Human Scaled Living**

HWB-02-01 Inclusive Design

Objective

Encourage user-friendly features in the design of outdoor or semi-outdoor communal and private spaces at different levels of a building.

Credit point(s) Attainable 3

Credit Requirement

(a) Universal Accessibility

1 to 2 credit point(s) for providing at least five (5)/ ten (10) applicable enhanced provisions as stipulated in the "Recommended Design Requirements" of the latest version of Design Manual - Barrier Free Access issued by Buildings Department.

(b) Family Friendly Facilities

1 credit point for providing at least three (3) family friendly facilities in the building.

List of family friendly facilities	
Dedicated play areas for children with shaded seating areas for care-takers	At least one washroom (excluding accessible toilets) is equipped with a child protection seat with a safety belt
At least one standalone family washroom	At least one babycare room for the public
At least one lactation room for staff	Others to be proposed by the Applicant

Assessment

(a) Universal Accessibility

1. Provide a summary table, drawings and photos detailing applicable enhanced provisions as stipulated in the "Recommended Design Requirements" of latest Barrie Free Access Manual.

2. All building users shall have access to all provided enhanced provisions.

(b) Family Friendly Facilities

1. Provide a summary table, drawings and photos detailing the provided family friendly facilities.

2. All building users shall have access to all provided family friendly facilities, except lactation room for staff.

Submittals

(a) Universal Accessibility

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
HWB-02-01a_00	EB submission form for HWB-02-01a	√	√
HWB-02-01a_01	Summary table listing the enhanced provisions and their locations	√	√
HWB-02-01a_02	Drawings and photos of the enhanced provisions	-	√

(b) Family Friendly Facilities

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
HWB-02-01b_00	EB submission form for HWB-02-01b	√	√
HWB-02-01b_01	Summary table listing the family friendly features and their locations	√	√
HWB-02-01b_02	Drawings and photos of the family friendly features	-	√

Remarks

(a) Additional Information

Design Manual - Barrier Free Access 2008 (2024 Edition), Buildings Department
[ONLINE]
https://www.bd.gov.hk/doc/en/resources/codes-and-references/code-and-design-manuals/BFA2008_e.pdf
[Accessed Jun 2025]

PNAP ADV-32 - Provision of Babycare Rooms and Lactation Rooms in Commercial Buildings, Buildings Department
[ONLINE]
https://www.bd.gov.hk/doc/en/resources/codes-and-references/practice-notes-and-circular-letters/pnap/ADV/ADV032.pdf
[Accessed Jun 2025]

(b) Related Credit Head(s)

None

7 Health and Wellbeing **HWB-02 Human Scaled Living**

HWB-02-02 Amenities for Operation and Maintenance

Objective

Facilitate the building maintenance personnel in carrying out operation and maintenance activities in a safe and efficient manner.

Credit point(s) Attainable

2

Credit Requirement

1 to 2 credit point(s) for providing at least three (3)/ six (6) of the following amenities/ features.

List of amenities for operation and maintenance		
Aerial working platform	Cat ladder	Central control room
Gondola	Central Control and Monitoring System (CCMS) or Building Management System (BMS)	Guard room
Maintenance platform for building services installations (e.g. wire mesh platform for chillers/ cooling towers)	Maintenance workshop for facility management (shall refer to a room designated for carrying out maintenance activities and repairing works. The maintenance workshop shall be equipped with worktable, repairing tools and any other equipment/ facilities for fulfilling the function of the space)	Moveable working platform
Others to be proposed by the Applicant		

Assessment

1. Provide a summary table illustrating the provision of the amenities and their locations.

Submittals

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
HWB-02-02_00	EB submission form for HWB-02-02	√	√
HWB-02-02_01	Summary table of the amenities provided and their locations	√	√
HWB-02-02_02	Photo record(s) of the amenities provided	-	√

Remarks

(a) Additional Information

None

(b) Related Credit Head(s)

None

7 Health and Wellbeing HWB-03 Indoor Environmental Quality

HWB-03-01 Ventilation Performance

Objective

Ensure that a minimum quantity of outdoor air is supplied to spaces in the project in order to support the well-being and comfort of the occupants.

Credit point(s) Attainable

2

Credit Requirement

(a) Minimum Ventilation (Calculation)

1 credit point for demonstrating that the design outdoor air flow rate exceeds the minimum outdoor air required by ANSI/ASHRAE Standard 62.1-2022.

(b) Minimum Ventilation (Measurement)

1 credit point for conducting measurement to demonstrate the minimum outdoor air has been achieved.

Assessment

(a) Minimum Ventilation (Calculation)

1. Provide calculation of minimum amount of outdoor air of each individual tenant space and normally occupied landlord area as required by ANSI/ASHRAE Standard 62.1-2022.

2. For projects with bare shell provisions (i.e., the responsibility for providing fresh air equipment to supply fresh air into indoor spaces rests with the future users/tenants), the Applicant shall ensure that there are adequate fresh air louvres to draw outdoor air into the project's indoor space. The Applicant shall refer to an authoritative source, such as the criteria for louvre sizing specified in the ASHRAE Handbook - Fundamentals, when determining the actual number and size of the louvres provided at the façade of the project.

3. The calculation shall be endorsed by building-in-charge/ team lead.

(b) Minimum Ventilation (Measurement)

1. Measure the total amount of outdoor air being delivered to individual tenant space and normally occupied landlord area. Measurements can be made directly or by installed flow measurement devices in the air side system. The instruments/ sensors for measurement shall be calibrated in accordance with manufacturer’s recommendation.

2. Demonstrate that the measured results shall be equal or larger than calculated minimum amount of outdoor air of each individual tenant space and normally occupied landlord area.

3. For direct measurement, a minimum of 5 points across each sectional area of duct shall be taken.

4. The measurement shall be conducted within the past 12 months prior to the first assessment submission.

5. The measured results and calculation shall be endorsed by building-in-charge/ team lead.

Submittals

(a) Minimum Ventilation (Calculation)

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
HWB-03-01a_00	EB submission form for HWB-03-01a	√	√
HWB-03-01a_01	Calculation of minimum outdoor air	√	√
HWB-03-01a_02	MVAC layout plan / schematic diagram showing fresh air flow rate of fresh air equipment	√	√

(b) Minimum Ventilation (Measurement)

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
HWB-03-01b_00	EB submission form for HWB-03-01b	√	√
HWB-03-01b_01	Calculation of minimum outdoor air	√	√
HWB-03-01b_02	MVAC layout plan / schematic diagram showing fresh air flow rate of fresh air equipment	√	√
HWB-03-01b_03	Measurement results of total amount of outdoor air for each tenancy area and normally occupied area	-	√
HWB-03-01b_04	Layout plan indicating the measurement points	√	√

Remarks

(a) Additional Information

ANSI/ASHRAE Standard 62.1-2022 - Ventilation and Acceptable Indoor Air Quality
[ONLINE]
https://webstore.ansi.org/standards/ashrae/ansiashrae622022
[Accessed Jun 2025]

(b) Related Credit Head(s)

None

7 Health and Wellbeing **HWB-03 Indoor Environmental Quality**

HWB-03-03 Indoor Acoustic Environment

Objective Ensure the normally occupied spaces have a pleasant acoustic environment.

Credit point(s) Attainable 3

Credit Requirement

(a) Background Noise Level

1 credit point for demonstrating background noise levels within the prescribed criteria.

(b) Reverberation Time

1 credit point for demonstrating that the reverberation time in the applicable areas meets the prescribed criteria of given types of space.

(c) Noise Isolation

1 credit point for demonstrating airborne noise isolation between spaces fulfils the prescribed criteria.

Assessment

(a) Background Noise Level

1. Demonstrate the background noise level of the normally occupied space arising from external noise source and internal building services equipment is within below criteria by computer simulation or measurement depending on the Applicant's preference. NR and NC value shall be consistently used in the project.

Types of Space	Required NR/NC
Classroom Conference room Clinic Library Hotel and serviced apartment Residential flat	35
Clubhouse Office	40
Shopping mall	45
Leisure & Entertainment	50

For on-site measurement, the measurement shall be based on an equivalent continuous sound level of 5 minutes [L_{eq} (5mins)] with the HVAC&R system operating under normal condition.

2. The measurement shall be conducted within the past 12 months prior to the first assessment submission.

3. The assessment shall include at least one sample from each type of normally occupied space.

(b) Reverberation Time

1. Demonstrate the mid-frequency reverberation time (RT) of the interior spaces is within below criteria by computer simulation or measurement depending on the Applicant's preference.
The average reverberation time for mid frequencies (500Hz, 1kHz and 2kHz) shall not exceed:

Types of Space	RT (second)
Conference room Clinic Hotel and serviced apartment Office Residential flat	0.6
Classroom Library	0.8
Clubhouse Shopping mall	1.5
Leisure & Entertainment	2.0

2. The measurement shall be conducted within the past 12 months prior to the first assessment submission.

3. The assessment shall include at least one sample from each type of normally occupied space.

(c) Noise Isolation

1. Demonstrate airborne noise isolation between spaces fulfilling the prescribed criteria.

   Compliance shall be demonstrated by computer simulation or measurements depending on the Applicant's preference. The performance of the weighted Sound Reduction Index (SRI) or Level Difference shall fulfil the requirements as stated in below table:

Type of Premises	Weighted SRI	Level Difference
Between classrooms	R_w 37	$D_{nT,w}$ 31
Between offices/ conference rooms/ retail shops	R_w 44	$D_{nT,w}$ 38
Between hotel rooms/ serviced apartments/ function rooms/ activity rooms	R_w 52	$D_{nT,w}$ 46
Between plantrooms/ circulation space	R_w 52	$D_{nT,w}$ 46

Note:

Measuring equipment shall conform to the accuracy requirements given by IEC 61672-1 [1] Class 1 requirements, or equivalent.

The assessment shall take into account noise from building services equipment under normal operation mode.

All acoustic calculations or measurement reports for this credit shall be endorsed by a Corporate Member of Hong Kong Institute of Acoustics or equivalent.

2. The measurement shall be conducted within the past 12 months prior to the first assessment submission.

3. The assessment shall include at least one sample from each type of normally occupied space.

4. The criteria applied to partition walls only.

Submittals

(a) Background Noise Level

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
HWB-03-03a_00	EB submission form for HWB-03-03a	√	√
HWB-03-03a_01	Layout plan highlighting the representative locations to be assessed	√	√
HWB-03-03a_02	Measurement report for background noise level	-	√
HWB-03-03a_03	Calibration certificate for all sound level meters	-	√
HWB-03-03a_04	Simulation report for background noise level	-	√

(b) Reverberation Time

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
HWB-03-03b_00	EB submission form for HWB-03-03b	√	√
HWB-03-03b_01	Layout plan highlighting the representative locations to be assessed	√	√
HWB-03-03b_02	Measurement report for reverberation time	-	√
HWB-03-03b_03	Calibration certificate for all sound level meters	-	√
HWB-03-03b_04	Calculation sheets/ Simulation report for reverberation time	-	√

(c) Noise Isolation

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
HWB-03-03c_00	EB submission form for HWB-03-03c	√	√
HWB-03-03c_01	Layout plan highlighting the representative locations to be assessed	√	√
HWB-03-03c_02	Schedule of the rooms within the assessment boundary	√	√
HWB-03-03c_03	Measurement report for noise isolation	-	√
HWB-03-03c_04	Calibration certificate for all sound level meters	-	√
HWB-03-03c_05	Simulation report for noise isolation	-	√
HWB-03-03c_06	Construction details of the partition walls	√	√

Remarks

(a) Additional Information

None

(b) Related Credit Head(s)

None

7 Health and Wellbeing **HWB-03 Indoor Environmental Quality**

HWB-03-05 Continuous IAQ Monitoring

Objective Promote building occupants' comfort, wellbeing and productivity by continuous monitoring of indoor air quality

Credit point(s) Attainable 4

Credit Requirement

(a) Provision of IAQ Sensor

1 to 2 credit point(s) for installing an IAQ sensor for every 500m^2 and at least one (1) per floor to measure at least four (4)/ six (6) of the following parameters in a normally occupied or common space within the assessment boundary:

List of Parameters		
$PM_{2.5}$	PM_{10}	Carbon dioxide
Total VOCs	Nitrogen dioxide	Ozone
Carbon monoxide	Formaldehyde	Radon

(b) Response Mechanism

1 credit point for buildings with a response mechanism setting out the mitigation measures, when the monitored parameters fail to meet the Good Class requirements of the certification scheme of the Environmental Protection Department.

(c) Real-time IAQ Data Disclosure

1 credit point for publishing the data from such continuous monitoring from selected locations in the building, in real time to its building users.

Assessment

(a) Provision of IAQ Sensor

1. Provide a narrative demonstrating compliance with the credit requirements.

(b) Response Mechanism

1. Demonstrate the response mechanism for the assessment boundary.

(c) Real-time IAQ Data Disclosure

1. Provide a screen capture of the platform (e.g., website/ mobile application/ digital display screen) showing the real-time IAQ data published for its occupants.

Submittals

(a) Provision of IAQ Sensor

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
HWB-03-05a_00	EB submission form for HWB-03-05a	√	√
HWB-03-05a_01	Layout plan with the locations of all IAQ monitors	√	√
HWB-03-05a_02	Catalogue of IAQ monitor	√	√
HWB-03-05a_03	Sample photo record(s) of the IAQ monitors installed	-	√

(b) Response Mechanism

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
HWB-03-05b_00	EB submission form for HWB-03-05b	√	√
HWB-03-05b_01	Narrative of the response mechanism	√	√

(c) Real-time IAQ Data Disclosure

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
HWB-03-05c_00	EB submission form for HWB-03-05a	√	√
HWB-03-05c_01	Screen capture of display screen or website/ mobile application	-	√

Remarks

(a) Additional Information

None

(b) Related Credit Head(s)

None

7 Health and Wellbeing **HWB-03 Indoor Environmental Quality**

HWB-03-06 Thermal Comfort Monitoring

Objective Provide an acceptable thermal environment to the building users.

Credit point(s) Attainable 2

Credit Requirement

(a) Temperature and Humidity Control

1 credit point for demonstrating the temperature and the relative humidity meet the prescribed criteria in the communal areas with air conditioning.

(b) Continuous Monitoring

1 credit point for installing sensors for continuous monitoring.

Assessment

(a) Temperature and Humidity Control

1. Provide on-site measurement reports or data from sensors to demonstrate the temperature and relative humidity meet the following criteria:

Temperature	Relative humidity
25.5^{o}C ± 1.5 ^{o}C	40% to 70%

2. The measurements shall be conducted in summer (June to August) only.

3. The measurement method shall make reference to ANSI/ASHRAE Standard 55-2023.

4. The assessment shall include at least one sample from each type of normally occupied space as defined under Section 9.2 of the Appendices if applicable.

5. The measurement shall be conducted within the past 12 months prior to the first assessment submission.

6. The measured results shall be endorsed by building-in-charge/ team lead of building management team.

(b) Continuous Monitoring

1. Submit the technical specification of the sensor to demonstrate the sensor is capable to measure temperature and relative humidity.

2. All data collected would be available to the building users by means of display screen or website/ mobile application.

3. The measured data shall be able to update every 15 minutes.

4. The assessment shall include at least one sample from each type of normally occupied space as defined under Section 9.2 of the Appendices if applicable.

Submittals

(a) Temperature and Humidity Control

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
HWB-03-06a_00	EB submission form for HWB-03-06a	√	√
HWB-03-06a_01	Thermal comfort measurement report	-	√

(b) Continuous Monitoring

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
HWB-03-06b_00	EB submission form for HWB-03-06b	√	√
HWB-03-06b_01	Technical specification of the sensor	√	√
HWB-03-06b_02	Layout plan showing the installation location of the sensor	√	√
HWB-03-06b_03	Photo records of the installed sensor	-	√
HWB-03-06b_04	Screen capture of display screen or website/ mobile application	-	√

Remarks

(a) Additional Information

ANSI/ASHRAE Standard 55-2023 - Thermal Environmental Conditions for Human Occupancy
[ONLINE]
https://webstore.ansi.org/standards/ashrae/ansiashraestandard552023
[Accessed Jun 2025]

(b) Related Credit Head(s)

None

7 Health and Wellbeing **HWB-03 Indoor Environmental Quality**

HWB-03-07 Acceptable Lighting Performance

Objective Ensure optimal visual comfort for building users.

Credit point(s) Attainable 2

Credit Requirement

(a) Lighting Performance in Normally Occupied Spaces

1 credit point for demonstrating the illuminance level, unified glare rating limit and uniformity in normally occupied spaces meet the prescribed area.

(b) Lighting Performance in Not Normally Occupied Spaces

1 credit point for demonstrating the illuminance level and unified glare rating limit in not normally occupied spaces meet the prescribed criteria.

Assessment

(a) Lighting Performance in Normally Occupied Spaces

1. Demonstrate the illuminance level, UGR limit and uniformity in normally occupied spaces regarding the lighting performance criteria complied with the requirements as stipulated in the SLL Lighting Handbook or equivalent.

2. The Applicant can choose to demonstrate the compliance by either measurements or modelling.

3. At least one sample of each type of normally occupied spaces shall be included. Tenancy areas shall be excluded from the assessment.

(b) Lighting Performance in Not Normally Occupied Spaces

1. Demonstrate the illuminance level and UGR limit in not normally occupied spaces regarding the lighting performance criteria complied with the requirements as stipulated in the SLL Lighting Handbook or equivalent.

2. The Applicant can choose to demonstrate the compliance by either measurements or modelling.

3. At least one sample of each type of not normally occupied spaces shall be included.

Submittals

(a) Lighting Performance in Normally Occupied Spaces

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
HWB-03-07a_00	EB submission form for HWB-03-07a	√	√
HWB-03-07a_01	Lighting layout plan	√	√
HWB-03-07a_02	Light fitting schedule	√	√
HWB-03-07a_03	Measurement or modelling report	-	√

(b) Lighting Performance in Not Normally Occupied Spaces

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
HWB-03-07b_00	EB submission form for HWB-03-07b	√	√
HWB-03-07b_01	Lighting layout plan	√	√
HWB-03-07b_02	Light fitting schedule	√	√
HWB-03-07b_03	Measurement or modelling report	-	√

Remarks

(a) Additional Information

None

(b) Related Credit Head(s)

None

7 Health and Wellbeing **HWB-03 Indoor Environmental Quality**

HWB-03-08 Daylight

Objective

Introduce daylight into indoor environment and reduce the reliance on artificial lighting.

Credit point(s) Attainable

1

Credit Requirement

1 credit point for achieving a glazing-to-floor ratio of at least 10% for a minimum of 80% of the total internal floor area of normally occupied spaces.

Assessment

1. Conduct calculation to demonstrate a total area of glazing to total internal floor area ratio of at least 10% for a minimum of 80% of the total internal floor area of normally occupied spaces.

2. Tenancy area shall be included in the calculation.

Submittals

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
HWB-03-08_00	EB submission form for HWB-03-08	√	√
HWB-03-08_01	Layout and elevation plan showing the size of the glazing and room configuration	√	√
HWB-03-08_02	Calculation indicating the glazing-to-floor ratio of applicable space	√	√
HWB-03-08_03	Calculation demonstrating at least 80% of normally occupied space in the building having a glazing-to-floor ratio of at least 10%	√	√
HWB-03-08_04	Photos showing the glazing	-	√

Remarks

(a) Additional Information

None

(b) Related Credit Head(s)

None

7 Health and Wellbeing **HWB-03 Indoor Environmental Quality**

HWB-03-10 Water Quality Survey and Access to Drinking Water

Objective Ensure the quality of drinking water delivered to the building occupants and promote health

Credit point(s) Attainable 2

Credit Requirement **(a) Water Quality Survey**

1 credit point for demonstrating that the quality of drinking water meets WSD's latest guideline [1].

Parameter(s)	Criteria
Chemical and Physical	
Turbidity	≤ 3.0 NTU
Colour	≤ 5 Hazen Unit
pH at 25°C	≥ 6.5 and ≤ 9.5
Free Residual Chlorine	> 0 mg/L and ≤ 1.5 mg/L
Conductivity at 25°C	≤ 500 µS/cm
Metals	
Lead	≤ 10 µg/L
Chromium	≤ 50 µg/L
Nickel	≤ 70 µg/L
Cadmium	≤ 3 µg/L
Copper	≤ 2000 µg/L
Antimony	≤ 20 µg/L
Bacteriological	
Heterotrophic Plate Count	≤ 20 cfu/mL
E. Coli	0 cfu/100 mL

The water quality survey shall be conducted by a HOKLAS accredited laboratory and water sampling shall follow the latest WSD's water sampling protocol.

The minimum sampling locations and frequency shall be as follows:

a. All potable water tank(s) on yearly basis;
b. Farthest point of each distribution route which is for drinking purpose on yearly basis;
c. Drinking purpose means that the potable water serving the F&B, kitchen, and pantry areas is intended solely for drinking purposes, excluding the potable water for lavatories;
d. All water dispensers on quarterly basis.

(b) Access to Drinking Water

1 credit point for providing at least one water dispenser within assessment boundary which is accessible to the public.

Assessment

(a) Water Quality Survey

1. Provide plumbing schematic and layout drawing(s) with all sampling points and distribution route clearly indicated to demonstrate that water sampling has been taken at farthest point(s) of use in the drinking water distribution system.

2. Provide water quality survey report issued by the HOKLAS laboratory under the food, environmental testing category to demonstrate that the result of the water quality survey meets the referenced drinking water supply standard.

(b) Access to Drinking Water

1. Provide layout drawing to demonstrate the provision of the water dispenser.

2. The water dispenser shall be accessible by the public.

Submittals

(a) Water Quality Survey

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
HWB-03-10a_00	EB submission form for HWB-03-10a	√	√
HWB-03-10a_01	Plumbing schematic and layout drawings	√	√
HWB-03-10a_02	Water quality survey report	-	√

(b) Access to Drinking Water

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
HWB-03-10b_00	EB submission form for HWB-03-10b	√	√
HWB-03-10b_01	Plumbing schematic and layout drawings	√	√
HWB-03-10b_02	Photo record(s) of the water dispenser	-	√

Remarks

(a) Additional Information

None

(b) Related Credit Head(s)

None

7 Health and Wellbeing **HWB-03 Indoor Environmental Quality**

HWB-03-11 Air Filtration and Purification Treatment

Objective Enhance the quality of indoor air by employing effective media or techniques to eliminate contaminants and pollutants

Credit point(s) Attainable 2

Credit Requirement

(a) Particle Filtration

1 credit point for installing air filters with MERV rating of 12 in all landlord's controlled fresh air intake system serving normally occupied spaces as defined under Section 9.2 of the Appendices.

(b) Air Purification Treatment

1 credit point for providing an air purification technique in the centralised mechanical ventilation system (i.e. ventilation fan/ air handling unit with air ducting serving multiple spaces) or a standalone air purification device for the localised mechanical ventilation system (i.e. ventilation fan serving a single space) in all landlord's controlled normally occupied spaces as defined under Section 9.2 of the Appendices.

Assessment

(a) Particle Filtration

1. Provide details of the air filter to demonstrate its MERV rating can achieve 12 or above.

(b) Air Purification Treatment

1. Specify the air treatment methods being used and the corresponding indoor air pollutants that have been tackled.

2. Demonstrate that the fresh air intake system is served with air purification device.

3. Area coverage of the standalone air purifier to meet sizable requirement shall be referred to manufacturer's recommendations in catalogue.

Submittals

(a) Particle Filtration

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
HWB-03-11a_00	EB submission form for HWB-03-11a	√	√
HWB-03-11a_01	Catalogue of the filter	√	√
HWB-03-11a_02	Photo records of the filter installed	-	√

(b) Air Purification Treatment

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
HWB-03-11b_00	EB submission form for HWB-03-11b	√	√
HWB-03-11b_01	Catalogue of the air purification device or the standalone air purifier	√	√
HWB-03-11b_02	Calculation showing the area coverage of the standalone air purifier meeting sizable requirements	√	√
HWB-03-11b_03	Location plan and photo records of the air purification device or the standalone air purifier installed	-	√

Remarks

(a) Additional Information

None

(b) Related Credit Head(s)

None

7 Health and Wellbeing HWB-04 Good Hygiene Practices

HWB-04-02 Health Protection

Objective

Safeguard the health of the building users.

Credit point(s) Attainable

2

Credit Requirement

1 to 2 credit point(s) for providing at least three (3)/ six (6) of the following health protection measures/ features.

List of health protection measures/ features		
Blood pressure meter	Oximeter	Face mask
Disinfectant wipe	AED	First aid kit
Hand-held thermometer	Clinic room	Automatic disinfection station
Hand washing stations (other than those in washroom)	Contactless lift button for at least 50% of lift	Contactless door release button for at least 50% of the main doors of entrances/ exits
Others to be proposed by the Applicant		

Assessment

1. Prepare a summary table listing the health protection measures/ features provided and their locations.

2. The health protection measures/ features shall be placed in a location that is accessible by all building users.

Submittals

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
HWB-04-02_00	EB submission form for HWB-04-02	√	√
HWB-04-02_01	Summary table listing the health protection measures/ features provided and their locations	√	√
HWB-04-02_02	Photo record(s) of the health protection measures/ features	-	√

Remarks

(a) Additional Information

None

(b) Related Credit Head(s)

None

8. Innovations and Additions

BEAM encourages innovative and/ or new techniques that are yet to be found in the mainstream application in the industry addressing sustainability objectives for the buildings.

This section allows the Applicant to submit any innovative techniques, where additional environmental benefits can be provided, on top of those covered in this manual for consideration of the award of credit point(s).

The Applicant shall be solely responsible to submit qualitative and/ or quantitative evidence for BEAM Society Limited (BSL) Assessment Sub-Committee (ASC) review and approval.

Generally, the submission materials shall comprehensively detail the benefits, environmental impacts averted, or exemplary performance achieved as compared to the existing criteria.

8 Innovations and Additions

IA-01 Innovations and Additions

IA-01-01 Innovations and Additions

Objective

Encourage innovative and/ or new techniques/ practices/ design that are yet to find in the mainstream application in Hong Kong addressing sustainability objectives for existing buildings.

Credit point(s) Attainable

Maximum 10 credit points for IA.

Assessment

1. Present evidence of the application of new practices, technologies, and/or techniques that:

   (a) are not described in this manual;
   (b) are not part of mainstream market implementation; or
   (c) achieve multiple aspects of sustainability.

2. Demonstrate the associated benefits of these applications in addressing sustainability objectives for existing buildings:

   1.1. Identify the sustainability objectives addressed by the proposed innovative applications.

   1.2. Detail the methods and criteria used to evaluate the benefits and effectiveness of the applications (quantifiable performance indicators should be proposed, if applicable).

   1.3. Maximum number of credit point for each proposed application is limited to one (1);

   1.4. Provide evidence of the implementation of the applications.

The assessor will refer the proposal to the BSL Assessment Sub-Committee, which will evaluate each application on its merits.

Submittals

Supporting Documents *Please provide softcopies with filename prefix as indicated on the leftmost column below.*		**PA**	**FA**
IA-01-01_00	EB submission form for IA-01-01	√	√
IA-01-01_01	Report on the objectives, evaluating method and criteria for the innovative techniques/ practices/ design	√	√
IA-01-01_02	Evidence of implementation and evaluation for the innovative techniques/ practices/ design	√	√

Remarks

(a) Additional Information

None

(b) Related Credit Head(s)

None

9. Appendices

9.1 Glossary

Biophilic Design

Designing for people as a biological organism and respecting the mind-body systems as indicators of health and well-being in the context of what is locally appropriate and responsive.

Certificate Validity

Certificate Validity refers to the duration for which a BEAM Plus certificate and rating remains effective and officially recognised by the HKGBC.

Global Warming Potential

Global Warming Potential, GWP, provides a measure of the potential for damage that a chemical has relative to one unit of carbon dioxide, the primary greenhouse gas.

Hydro-chlorofluorocarbons

HCFCs cause ozone depletion when released into the atmosphere.

Interior General Lighting

Interior general lighting provides a substantially uniform level of illumination in an area. General lighting shall not include decorative lighting or lighting that provides a dissimilar level of illumination to serve a specialised application or feature within such area.

Normally Occupied Spaces

Normally occupied spaces are enclosed areas where people normally stay more than 1 hour. Spaces which are not used daily but will be occupied for more than 1 hour being used, are considered as normally occupied spaces. Refer to Appendix 9.2 for examples of normally occupied spaces.

Not Normally Occupied Spaces

Not normally occupied spaces are enclosed areas within the building where people normally stay less than 1 hour. Refer to Appendix 9.2 for examples of not normally occupied spaces.

Primary Zone

The 15m vertical zone of a site along the abutting street level. The greenery in this zone is for providing visual contacts or access from a street through common parts of the building for enhancing the walkability of urban space to the public, visitors or occupiers. The top level of soil or similar base for planting shall be taken as the reference level for inclusion in the Primary Zone.

Unoccupied Spaces

Unoccupied spaces are areas within the building where the primary function is not intended for human activities. These spaces are occupied by the occupants for a short period of time and only occasionally. Refer to Appendix 9.2 for examples of unoccupied spaces.

9. Appendices

9.2 Space Type

BEAM Plus considers indoor environmental quality as a key to sustain occupants' health and wellbeing. To assist the Applicant in designing a more thorough and satisfactory strategies, BEAM Plus imposes high requirements on indoor environmental quality covering ventilation, air quality, acoustics and lighting.

As the impacts of indoor environmental quality are dependent on the level of interaction between the occupants and the indoor spaces where they spend their time in, it is crucial for the Applicant to understand and identify the level of usage of each indoor space. To facilitate assessment, the Applicant shall prepare a schedule including all spaces present within the building and their respective locations. The spaces shall be categorised into the following three types (refer to Glossary for definitions):

- Normally occupied spaces
- Not normally occupied spaces
- Unoccupied spaces

Listed below are some examples of each space type. These examples are not exhaustive. If a space present in the Applicant's building is not included below, the Applicant should identify similar examples or categorise the space type according to the definition. Justification is required should the Applicant believe a space cannot be categorised according to the space type definitions.

Space Usage of *normally occupied spaces*

- Auditorium
- Concourse
- Conference room
- Dining (commercial and residential)
- Food and beverage dining area
- Front desk
- Gallery area
- Gymnasium
- Hospital patient rooms
- Hotel guest room
- Hotel entrance lobby
- Information desk
- Kitchens (commercial)
- Lecture hall
- Meeting room
- Open office
- Private office
- Reception
- Residential bedroom
- Residential dining room
- Residential living room
- Retails
- School classroom
- Shipping and receiving
- Shopping arcade

Space Usage of *not normally occupied spaces*

- Break room
- Copy rooms
- Corridor
- Entrance lobby (other than hotel)
- Staircases
- Main lift lobby
- Lift lobby
- Pantry
- Toilet
- Residential kitchen

Space Usage of *unoccupied spaces*

- Emergency exit corridor
- Mechanical and electrical rooms
- Car park
- Storeroom
- Warehouse
- Data Centre/Server room

