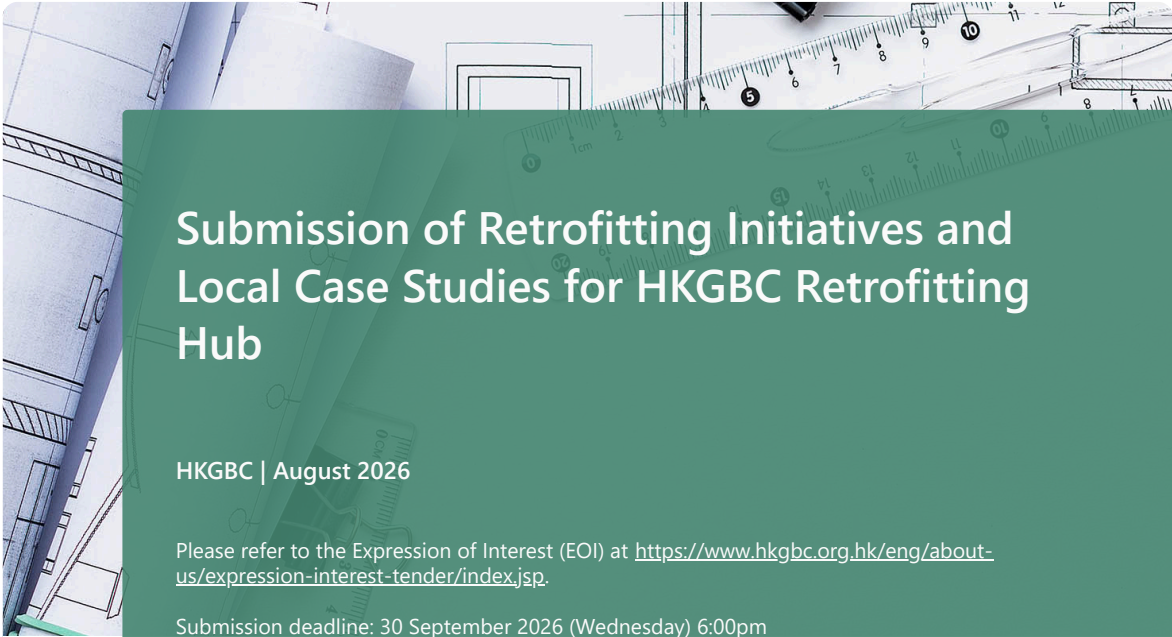




Submission of Retrofitting Initiatives and Local Case Studies for HKGBC Retrofitting Hub

HKGBC | August 2026

Please refer to the Expression of Interest (EOI) at <https://www.hkgbc.org.hk/eng/about-us/expressions-interest-tender/index.jsp>.

Submission deadline: 30 September 2026 (Wednesday) 6:00pm



* Required

Information of Building

Please provide the details of the case study.

1. Building Owner: *

2. Building / Project Name: *

3. Building Type / Unit Type (for tenant cases) *

Please select the major nature/purpose of the building. You might select more than ONE option if the building is multi-purpose.

- ☐ Commercial - Office
- ☐ Commercial - Retail
- ☐ Commercial - Data Centre / Server Room
- ☐ Commercial - Food & Beverage (e.g. restaurant & supermarket)
- ☐ Commercial - Hotel & Hostel / Apartment
- ☐ Government - Office
- ☐ Government - Others
- ☐ Others - Carpark
- ☐ Others - School / Education Institution
- ☐ Others - Hospital / HealthCare
- ☐ Others - Recreational
- ☐ Residential
- ☐ Industrial
- ☐ Other

4. Description of the building: *

Please include a brief introduction including building nature and equipment. (NOT more than 100 words)

Type of Submission and Relevant Information

Please select the type of your submission and provide the relevant information. Select option 3 if the case involve both current retrofitting strategies and new retrofitting strategies.

5. Please select the type of your submission and provide the relevant information *

- ☐ A. A new case study for current retrofitting strategies.
- ☐ B. A new case study with new retrofitting strategies and supplements with a relevant case study.
- ☐ C. A new case study included both new retrofitting strategies and current retrofitting strategies, supplements with a relevant case study.

Current Retrofitting Strategies

Please select relevant retrofitting system and not more than FIVE retrofitting strategies should be involved in the case study.
Please choose from the list below:

6. Please select relevant retrofitting system involved in the case study. *

Please select at most 5 options.

- ☐ HVAC - Waterside Air Conditioning System
- ☐ HVAC - Airside Air Conditioning System
- ☐ HVAC - Heating System
- ☐ HVAC - Carpark Mechanical Ventilation System
- ☐ HVAC - Data Centre / Server Room
- ☐ HVAC - External Pipework and Ductwork
- ☐ Electrical System - Lighting
- ☐ Electrical System - Electricity Distribution System
- ☐ Electrical System - Lift and Escalator
- ☐ Plumbing & Drainage System
- ☐ Commercial Appliances - Green Commercial Kitchen
- ☐ Commercial Appliances - Server Room / Data Centre
- ☐ Building Automation / Management System
- ☐ Smart Control Platform
- ☐ Curtain Wall and Skylight System
- ☐ Opaque Wall and Roof System
- ☐ Passive System
- ☐ Other

7. Please select the current retrofitting strategies involved in the case study. *

Please select at most 5 options.

- ☐ A1. Replacement of more efficient chiller
- ☐ A2. Conversion of air-cooled to water-cooled chiller plant
- ☐ A3. Conversion to variable speed cooling tower fan
- ☐ A4. Installation of auto-cleaning devices for condensers of water-cooled chillers
- ☐ A5. Installation of electromagnetic clamp-on / ultrasonic devices for condensing water system
- ☐ A6. Conversion to variable speed chilled water pump
- ☐ A7. Conversion to primary variable flow system
- ☐ A8. De-centralised chilled water distribution system with zone in-line pump
- ☐ A9. Supply and return chilled water temperature differential control with zone control valve
- ☐ A10. De-centralised chilled water distribution system for equipment with different chilled water operation requirements
- ☐ A11. Installation of thermal energy storage (TES) System
- ☐ A12. Conversion to waterside free cooling system
- ☐ B1. Replacement of traditional 3-speed FCU to variable speed FCU with permanent magnet motor
- ☐ B2. Conversion of constant-air-volume (CAV) to variable-air-volume (VAV) system
- ☐ B3. Conversion of VAV system to sensible space cooling with dedicated outdoor air system (DOAS)
- ☐ B4. Installation of indirect evaporative cooling System (IEC) for pre-cooling of primary fresh air with exhaust air
- ☐ B5. Conversion to demand fresh air control system coupling with exhaust air system
- ☐ B6. Conversion to radiant cooling technologies (e.g. chilled beam / chilled ceiling) with dedicated air handling system (DAHS)
- ☐ B7. Using spot cooling for local air-conditioning zone
- ☐ B8. Using high volume low pressure (HVLP) ceiling fan for ventilated cooling
- ☐ B9. Using lower pressure drop air filters with new technologies and features that can improve filter efficiency
- ☐ B10. Using electronically commutated (EC) plug fan in AHU / PAU / CRAC
- ☐ B11. Enlargement of fresh air inlet and ductwork for free cooling application with low ambient temperature and relative humidity
- ☐ C1. Replacement of electric / gas heater / boiler to heat pump
- ☐ D1. Zoning the carpark for operation mode
- ☐ D2. Conversion to demand fresh air control system coupling with exhaust air system
- ☐ D3. Installation of induction fan unit to minimise fan dust ventilation system
- ☐ E1. Installation of cold-aisle enclosure which can totally separate it from hot-aisle

- ☐ E2. Use of immersion cooling and heat pipe recovery modules for cooling
- ☐ E3. Conversion of CRAC unit to cold door for server rack cooling
- ☐ F1. Application of insulated coating / painting at external pipework and ductwork
- ☐ G1. Re-allocation of office layout plan and/or lighting distribution plan to maximise daylight penetration and match the demand
- ☐ G2. Installation of occupancy / motion sensor for on / off / dimming control of lighting
- ☐ G3. Use of smart lighting control platform
- ☐ G4. Adoption of task lighting to lower the background lighting
- ☐ G5. Replacement of high efficacy lighting source
- ☐ H1. Provision of power and harmonic analyser
- ☐ H2. Provision of smart metering
- ☐ J1. Installation of regenerative drive for lifts
- ☐ J2. Modernisation of lifts and escalators
- ☐ J3. Upgrade of lift control platform with energy efficiency features
- ☐ J4. Optimise the counter weight and decoration weight of lift car
- ☐ L1. Conversion to demand control ventilation system
- ☐ L2. Conversion to heat recovery kitchen appliances
- ☐ M1. Replacement of more energy efficient uninterrupted power system (UPS)
- ☐ N1. Enhancing the BA / BMS for data collection and visualisation, performance monitoring and evaluation, demand control and efficiency improvement
- ☐ N2. Using advance control algorithm to improve energy efficiency and operational performance for major equipment and building services systems
- ☐ N3. Using multi-purpose monitoring devices (e.g. web-cam people counting / recognition system, etc.) for improving energy efficiency and operational performance of air-conditioning and building transportation system
- ☐ P1. Installation of smart energy management platform for data collection and visualisation, performance monitoring and evaluation, demand control and efficiency optimisation
- ☐ P2. Using AI solution and data mining technologies to optimise energy efficiency and operational performance for major equipment and building services systems
- ☐ P3. Using web-cam people counting and recognition system for optimising energy efficiency and operational performance of air-conditioning and building transportation system
- ☐ Q1. Application of solar film / heat reduction / insulated coating at façade / skylight
- ☐ Q2. Application of ventilation façade
- ☐ Q3. Application of multi-skin façade system
- ☐ Q4. Renewable energy integrated with façade
- ☐ Q5. Replacement of façade system
- ☐ R1. Application of vertical green wall and green roof

- ☐ R2. Application of insulated coating / painting at external wall and roof
- ☐ R3. Renewable energy integrated with roof / green roof
- ☐ S1. Use of natural ventilation
- ☐ S2. Use of light shelve and light tube
- ☐ S3. Use of double door / revolving door or installation of air curtain to reduce infiltration

8. Does the case include other retrofitting strategies that are not included in the above list?

- ☐ No
- ☐ Yes

New Retrofitting Strategies

9. Please select relevant retrofitting system for the new retrofitting strategies. *

- ☐ HVAC - Waterside Air Conditioning System
- ☐ HVAC - Airside Air Conditioning System
- ☐ HVAC - Heating System
- ☐ HVAC - Carpark Mechanical Ventilation System
- ☐ HVAC - Data Centre / Server Room
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- ☐ Smart Control Platform
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- ☐ Opaque Wall and Roof System
- ☐ Passive System
- ☐ Other

10. Name a maximum of THREE new retrofitting strategies: *

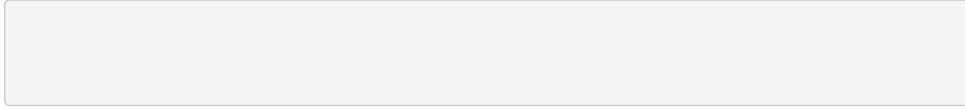
(Required only for choosing Option B or C in Question 5)

11. Brief description of the new retrofitting strategies *

(NOT more than 100 words per new strategies)

12. Suggested consideration of the new retrofitting strategies: *

This section should include items suggested to concern / confirm in order to justify the feasibility of the implementation, and/or possible limitation of the strategies for building owners / operation reference.
(NOT more than 50 words per new strategies)



Information of Retrofitting Project

13. Description of retrofitting strategies application in the case study: *

(Please provide the objectives and features of each retrofitting strategies, NOT more than 300 words)

14. Observed intangible and tangible benefits other than energy saving of the case study: *

15. General observations of the case study: *

This section should cover things to note during the implementation. e.g. challenges / possible impacts / inconveniences during the implementation, measures taken to tackle the challenges or reduce / minimise the impact to building users / operations etc.
(NOT more than 150 words)

16. Name of consultants and contractors:

Cost and Saving

Please indicate the breakdown of each initiative if more than ONE initiative is selected.

17. Project cost of case study (in HKD):

18. Strategies cost breakdown of case study:

19. Case study savings/year (in HKD): *

For case without information of saving in HKD available, please taking HKD1.5 for each kWh of saving as reference for further calculation.

20. Strategies savings/year breakdown:

21. Case study payback period (in year/month): *

22. Strategies payback breakdown:

Subsidy / Funding and Awards

23. The case study is fully / partially funded by (if any):

24. Award(s) received by the case study (if any):

Contact Information

Please provide the contact information for onward liaison. The contact information will NOT be disclosed on the website.

25. Contact person: *

26. Organisation: *

27. Position: *

28. Contact Number: *

29. I confirm the consent from the building owner has been obtained for this submission. *

Remark: For tenant cases, please obtain the consent from the tenant unit instead of the building owner.

☐ I confirm.

30. I understand that the submitted information may be published in the HKGBC Retrofitting Hub and/or Guidebook, and I hereby authorise the HKGBC to disclose such information for this purpose. *

☐ I understand and authorise.

31. I understand that the HKGBC may contact me for clarification, supplementary information, or confirmation of publication details, if necessary. *

☐ I understand and agree to provide additional information, including but not limited to project descriptions, photographs, and diagrams, upon request by the HKGBC should the project be selected as a showcase in the HKGBC Retrofitting Hub and/or Guidebook.

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