

Hong Kong Green Building Council Limited (HKGBC)

Invitation for Expression of Interest (Eoi) to Participate as an “ACT-Shop” Pilot Project – For Tertiary Educational Institution Buildings and NGO Buildings – 1st Round

Background

HKSAR Government (HKSARG) has launched an “Energy Saving Plan for Hong Kong’s Built Environment 2015~2025+” in May 2015 for achieving an energy intensity reduction target of 40% by 2025. One of the main focuses is to identify where the best potential energy savings of existing buildings are retro-commissioning(RCx) and retrofits. As the Government’s partner to promote RCx as stated in Hong Kong’s Climate Action Plan 2030+ and Deepening Energy Saving in Existing Buildings In Hong Kong Through ‘4Ts’ Partnership published in 2017, the Hong Kong Green Building Council Limited (HKGBC) (www.hkgbc.org.hk) is initiating an “**ACT-Shop**” Programme to build up the capacity of the building practitioners on knowledge-based energy management.

Objective

The HKGBC wishes to engage different tertiary educational institutions and NGO buildings(participants), in a voluntary basis, without any financial implication, to join our “**ACT-Shop**” Programme to drive the industry on implementation of knowledge-based energy management, RCx practices. The focus of this Pilot Project will be on the HVAC systems.

What is “ACT-Shop”?

A platform for a group of participating tertiary educational institutions and NGO buildings to

- work step-by-step with experienced facilitators to **carry out RCx** for their buildings;
- **build up their in-house competence** in terms of data, knowledge, technology etc. on retro- and re-commissioning practices so as to plan for major retrofits and make ready for next mandatory energy audit; and
- actively participate in HKSARG’s “Climate Ready @ HK” Campaign.

For more details, please refer to **Annex A**.

What is special about “ACT-Shop”?

“**ACT-Shop**” provides a collaborative platform for education and NGO sectors working as peers to develop standardised alternative methodologies for achieving comprehensive data instead of using resourceful metering systems.

Expected Deliverables

Throughout the “ACT” process, different parties can achieve the followings but not limited to:

The HKSARG

1. contribution for future revamp of energy codes; and
2. promotion of RCx as a mainstream practices to the industry.

The Industry

1. centre of excellence for energy efficiency;
2. centre of training and skill transfer; and
3. registration as RCx professionals.

Participating tertiary education institutes and NGOs

1. cost & benefits justifications;
2. electronic operation and maintenance manual enhancement; and
3. continuous exchange of data/information and knowledge.

Obligations

All interested parties are having their obligations to

1. actively participate in “**ACT-Shop**”;
2. implement energy saving initiatives;
3. provide resources, equipment and instruments for adjustment; and
(Resources and liability of all instruments and equipment installation will be borne by the participants)
4. act as “**ACT-Shop**” member to promote benefits of “**ACT-Shop**”.

Disclaimer and other relevant document shall be issued to participants before commencement of the “**ACT-Shop**” Programme. The details of building and participant would not be disclosed unless a written consent from the participant is obtained. All the technical data of the building will be formulated as a database, maintained by the HKGBC, and solely used for knowledge sharing among “**ACT-Shop**” participants.

We are looking for these buildings:

1. Buildings of tertiary educational institutions and NGOs with centralised air-conditioning system (Priority will be given to buildings with multiple chillers in operation);
2. Building age of 5-30 years;
3. Buildings with equipment and instruments (eg. Temperature sensors/thermostat, pressure gauges, air-conditioning pump curves and fan curves etc.) in reasonably good conditions, and operating records (eg. database, logsheets etc.) available;
4. Buildings with management and operation team to support re-tuning actions;
5. **Building owners and/or management companies that have not participated in previous batches of ACT-Shop Pilot Project will be given a higher priority;** and
6. Buildings which are planning to commence their major retrofit on the chiller plant in 2021 will be given a lower priority.

Submission

Any parties who are interested in the Pilot Project are invited to submit building information in our **REPLY SLIP (Annex B)**, fulfilling the above mentioned requirements and guidelines, by email (rpe@hkgbc.org.hk) (a confirmation email will be sent upon receipt of your submission), by post or in person to the following address **before 6:00pm on 14 May 2021 (Friday)** (Please be reminded that all documents sent by post or in person shall be included in a sealed envelope with contact information clearly indicated and put into the drop box at the HKGBC reception area).

Attention:

“ACT-Shop” Pilot Project – For Tertiary Educational Institution Buildings and NGO Buildings

Hong Kong Green Building Council Ltd.,
1/F Jockey Club Environmental Building,
77 Tat Chee Avenue, Kowloon Tong

Late submission will not be considered. Only selected candidates will be informed. The number of the Pilot Case per batch will be limited to 3-5 buildings. Each Pilot Case shall not exceed 2 blocks of building or central plants.

HKGBC reserves the rights to determine the best suited participants.

Should you have any questions, please feel free to contact

Dr Paul SAT at 3994 8821 (email: paul.sat@hkgbc.org.hk) or

Dr Karen CHEUNG at 3994 8860 (email: karen.cheung@hkgbc.org.hk).

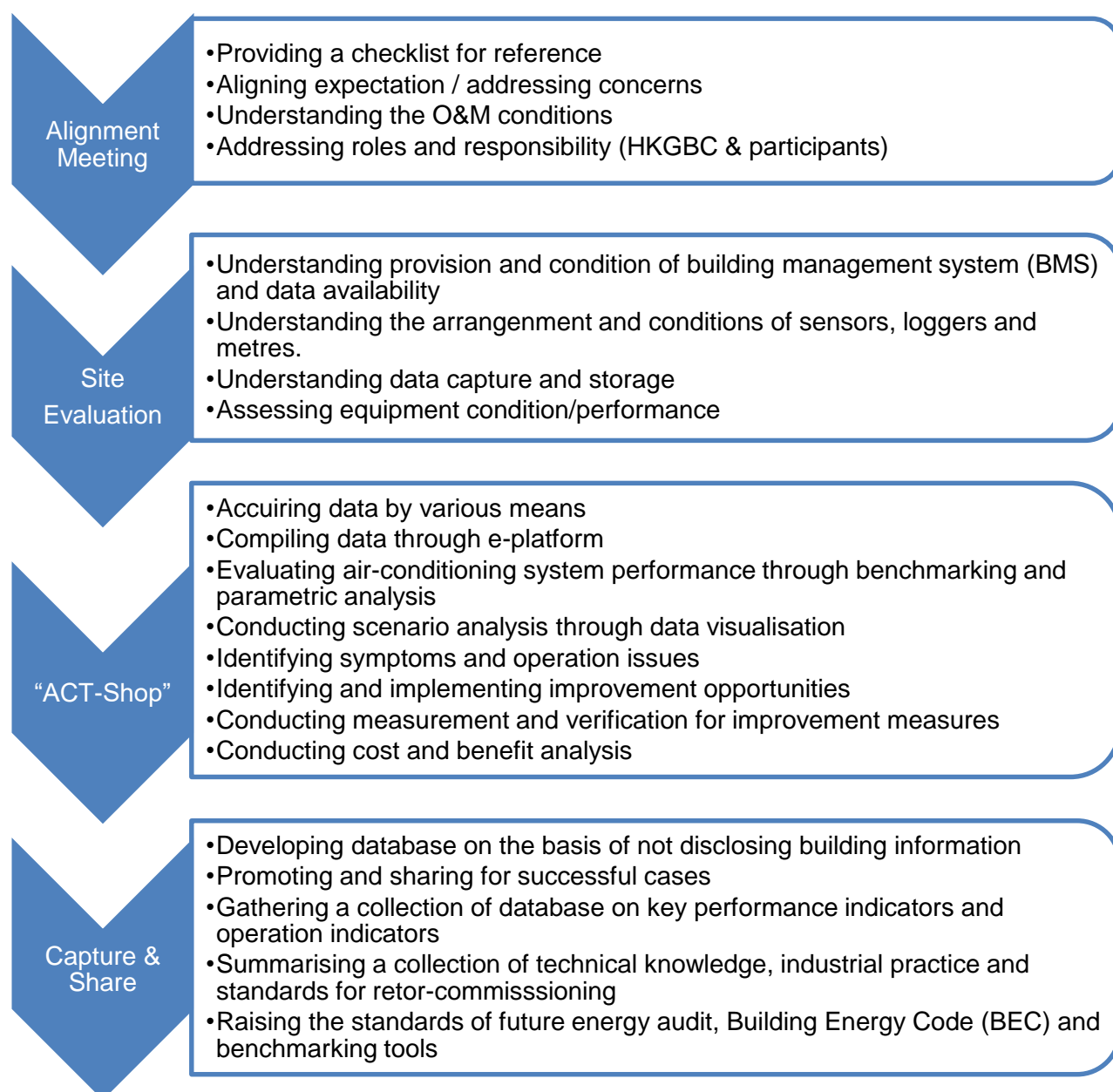
Issued: March 2021

Annex A

“ACT-Shop”

The project will be steered and overseen by HKGBC RCx Steering Group members, with project management by the HKGBC Secretariat. This pilot study is expected to be conducted in May 2021 and completed by Dec 2021. The HKGBC reserved the rights to edit any item of work subject to mutual agreement of both parties (HKGBC & participants).

The main content of this project includes but not limit to:



Annex B

Reply Slip

General information

1. A) For Tertiary Educational Institution Building

Type of facilities included in building:

- ☐ Classroom ☐ Office ☐ Canteen
☐ Functional buildings (theatre, sport centre, library) ☐ Carpark
☐ Others (Please specify): _____

B) For NGO Building

Type of facilities included in building:

- ☐ Office ☐ Retail ☐ Composite (office & retail) ☐ Hotel
☐ Others (Please specify): _____

2. Building name: _____
 3. Building address: _____
 4. Owner of the building: _____
 ☐ Single owner ☐ Multiple owners
 5. Name of the management company: _____
 6. Name of the services providers: _____
 7. Internal floor area: _____ sqm
 8. Year-round Energy Use Intensity (EUI) of building: _____ MJ/sqm/yr
 9. Age of buildings: _____
 10. Contact person: _____
 11. Contact no.: _____
 12. E-mail address: _____
 13. HKGBC membership no.: _____

Technical Information

1. Major Retrofit carried out on air-conditioning equipment / system after year 2006

- ☐ Yes, ☐ No

If Yes: ☐ chillers, ☐ air-conditioning pumps / fans, ☐ installation of Variable Speed Drives,
☐ cooling towers, ☐ others: _____

2. Retro-/re-commissioning carried out on air-conditioning equipment / system after year 2006

- ☐ Yes, ☐ No

If Yes: ☐ chillers, ☐ air-conditioning pumps / fans, ☐ heat rejection system
☐ cooling towers, ☐ others: _____

3. Provision of air-conditioning equipment / system
 - a. ☐ Centralised system, ☐ De-centralised system
 - b. With Variable Speed Drives for ☐ air-conditioning pumps / ☐ fans / ☐ cooling towers
 - c. More than 1 chiller put in operation during peak summer ☐ Yes, ☐ No
4. Centralised air-conditioning operating records:
 - a. Database (over 1 year operating data in electronic format): ☐ Yes, ☐ No
 - b. Logsheet / logbook (1 year hardcopy available): ☐ Yes, ☐ No
 - c. Schematic diagrams of centralised air-conditioning system: ☐ Yes, ☐ No
 - d. Equipment schedule / specification ☐ Yes, ☐ No
5. On site in-situ instrumentation
 - a. With power meters for air-conditioning system / equipment ☐ Yes, ☐ No
(excluded utility meters):
 - b. With temperature sensors / thermostat on ☐ main headers / ☐ risers of the chilled water system
 - c. With pressure gauges across major ☐ air conditioning pumps / ☐ plate heat exchanger / ☐ cooling coils
 - d. With commissioning devices on main branch(es) of the chilled water system: ☐ Yes, ☐ No
 - e. With air-conditioning pump curves: ☐ Yes, ☐ No
 - f. With air-conditioning fan curves: ☐ Yes, ☐ No
6. Provision of human resources
 - a. On-site technicians: ☐ Yes, ☐ No
If Yes, ☐ in-house, ☐ outsource
 - b. On-site operators: ☐ Yes, ☐ No
If Yes, ☐ in-house, ☐ outsource
7. Willingness on participating in the “ACT-Shop” exercise
 - a. Property / Facility Management Team ☐ Yes, ☐ No
 - b. Engineers ☐ Yes, ☐ No
 - c. Technicians ☐ Yes, ☐ No
 - d. Operators ☐ Yes, ☐ No
 - e. Services Providers ☐ Yes, ☐ No
8. Willingness on sharing the followings
 - a. Operating key performed indicator ☐ Yes, ☐ No
 - b. Graphical Information ☐ Yes, ☐ No
 - c. Equipment / System Photos ☐ Yes, ☐ No
 - d. Personnel as speaker for sharing successful cases, difficulties and skills ☐ Yes, ☐ No

*Please ☒ tick the appropriate boxes.

Other Supplementary Information (Optional):

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