

## Hong Kong Green Building Council Limited (HKGBC)

### Invitation for Expression of Interest (Eoi) to Participate as the “ACT-Shop” Pilot Project – 2<sup>nd</sup> 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 and retrofits. In view of this, the Hong Kong Green Building Council Limited (HKGBC) ([www.hkgbc.org.hk](http://www.hkgbc.org.hk)) is initiating an “ACT-Shop” Programme to build up the capacity of the industry on knowledge-based energy management.

#### Objective

The HKGBC wishes to engage different building practitioners (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, retro-commissioning practices. The focus of the 2<sup>nd</sup> round Pilot Project will be on the HVAC systems.

#### What is “ACT-Shop”?

A platform for a group of participating companies to

- work step-by-step with experienced facilitators to carry out retro-commissioning 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 private sector 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. a training ground for recognised professionals.

##### The Industry

1. centre of excellence for energy efficiency;
2. centre of training and skill transfer; and
3. certification body of retro-commissioning professionals.

### Participating organisations

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  
**(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”

# Note of data transferal, liability waiver, non-disclosure agreement 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. Commercial buildings 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. Buildings with management companies that have not participated in the first batch of the Pilot Case in 2016 will be given a higher priority; and
6. Buildings which are planning to commence their major retrofit on the chiller plant in February to August 2017 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](mailto: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 17 January 2017 (Tuesday)** (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 – 2<sup>nd</sup> Round**

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 2<sup>nd</sup> round of Pilot Case will be limited to 5 buildings.

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](mailto:paul.sat@hkgbc.org.hk)) or

Dr Karen Cheung at 3994 8860 (email: [karen.cheung@hkgbc.org.hk](mailto:karen.cheung@hkgbc.org.hk)).

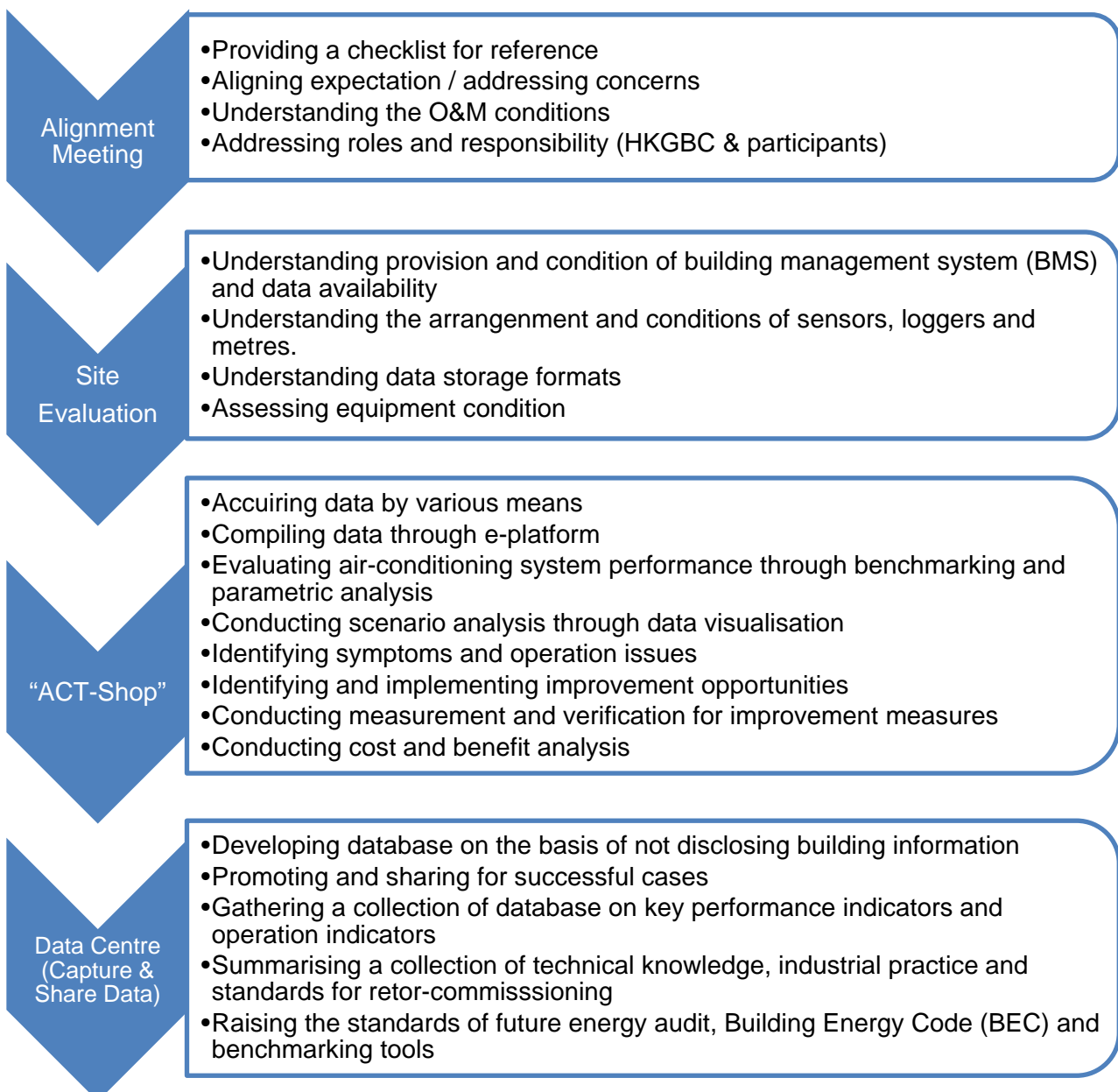
Issued: November 2016

## Annex A

### **“ACT-Shop”**

The project will be steered and overseen by HKGBC “ACT-Shop” Steering Group members, with project management by the HKGBC Secretariat. This pilot study is expected to be conducted in February 2017 and completed by the end of August 2017. The HKGBC reserved the right 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. Type of building:  
☐ office   ☐ retail   ☐ composite (office & retail)   ☐ hotel  
☐ others: \_\_\_\_\_
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 service provider: \_\_\_\_\_
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. Service Provider ☐ Yes, ☐ No

8. Willingness on sharing the followings

- a. Operating Data ☐ Yes, ☐ No
- b. Graphical Information ☐ Yes, ☐ No
- c. Equipment / System Photos ☐ Yes, ☐ No
- d. Personnel as tutors for sharing successful cases, difficulties and skills ☐ Yes, ☐ No

\*Please ☒ tick the appropriate boxes.

Other Supplementary Information (Optional):

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