

Hong Kong Green Building Council Limited 香港綠色建築議會有限公司 1/F Jockey Club Environmental Building 77 Tat Chee Avenue, Kowloon Tong, Hong Kong 香港九龍塘達之路77號賽馬會環保樓一樓 Tel +852 3994 8888 Fax +852 3994 8899 www.hkgbc.org.hk

Hong Kong Green Building Council Limited (HKGBC)

Invitation for Expression of Interest (EoI) to Participate as an "ACT-Shop" Pilot Project

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 focus 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) is initiating an "ACT-Shop" programme to build up the capacity of the industry on retro-commissioning.

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.

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".

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 standarised alternative methodologies for achieving comprehensive data instead of using resourceful metering systems.

Expected Deliverables

Throughout the ACT process, different parties can also 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

- 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 (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 those buildings with suitable:

- 1. commercial buildings with centralised air-conditioning system
- 2. building age of 5-30 years
- equipment and instruments (eg. Temperature sensors/thermostat, pressure gauges, airconditioning pump curves and fan curves etc.) in reasonably good conditions, and operating records (eg. database, logsheets etc.) available; and
- 4. management and operation team.

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 16 May 2016 (Monday) (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

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

<u>Late submission will not be considered.</u> Only selected candidates will be informed.

Should you have any questions, please feel free to contact

Ir 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: April 2016





Annex A

"ACT-Shop"

The project will be steered and overseen by HKGBC "ACT-Shop" Task Force members, with project management by the HKGBC Secretariat. This pilot study is expected to be conducted in mid of May 2016 and completed by end of Nov 2016. 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 shall include but not limit to:

Alignment Meeting

- Checklist
- Align expectation / address concerns
- Understand the O&M conditions
- Roles & responsible (HKGBC & participants)

Site Evaluation

- •BMS provision & information
- Sensors and meters arrangement & location
- Log sheets/books records
- Equipment conditions

"ACT-Shop"

- Acquire data
- Compile data
- Evaluate air-conditioning system performance
- Conduct scenario analysis
- Identify symptoms and operation issues
- Implement improvement opportunities and evaluation
- Conduct cost & benefits analysis

Data Centre (Capture & Share Data)

- Non-disclosure of buildings and participants' details
- Maintain by the HKGBC
- •For future energy audit, BEC & benchmarking tools



Hong Kong Green Building Council Limited 香港綠色建築議會有限公司 1/F Jockey Club Environmental Building 77 Tat Chee Avenue, Kowloon Tong, Hong Kong 香港九龍塘達之路77號賽馬會環保樓一樓 Tel +852 3994 8888 Fax +852 3994 8899 www.hkgbc.org.hk

Annex B

Reply Slip

Gene	ral information					
1.	Type of building:					
	□ office □ retail □ composite (office & retail) □ hotel□ others:					
2.	Building name:					
3.	Building address:					
4.	Internal floor area:sqm					
5.	Year-round Energy Use Intensity (EUI) of building: MJ/sqm/yr					
6.	Age of buildings:					
7.	Contact person:					
8.	Contact no.:					
9.	E-mail address:					
10.	HKGBC membership no.:					
	nical 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					
	ree: = ee.e, = a ee.a					
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					
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:					
	Detailed of Assert Assert on a section data in all attention formation.					
	a. Database (over 1 year operating data in electronic format): Yes, No					
	 b. Logsheet / Logbook (1 year hardcopy available): c. Schematic diagrams of centralised air-conditioning system: ☐ Yes, ☐ No 					
	c. Schematic diagrams of centralised air-conditioning system: 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 \square main headers / \square risers of the chilled water					
	system					
	c. With pressure gauges across major □ air conditioning pumps / □ plate heat exchanger / □ cooling coils					



Hong Kong Green Building Council Limited 香港綠色建築議會有限公司 1/F Jockey Club Environmental Building 77 Tat Chee Avenue, Kowloon Tong, Hong Kong 香港九龍塘達之路77號賽馬會環保樓一樓 Tel +852 3994 8888 Fax +852 3994 8899 www.hkgbc.org.hk

	d.	3	Yes,	No
	e. f.	water system: With air-conditioning pump curves: With air-conditioning fan curves:	Yes, Yes,	No No
6.	Prov	vision of human resources		
	a.	On-site technicians: If Yes, □ in-house, □ outsource	Yes,	No
	b.		Yes,	No
7.	Willi	ngness on participating in the "ACT-Shop" exercise		
	a. b. c. d.	Property / Facility management team Engineers Technicians Operators	Yes, Yes, Yes, Yes,	No No No No
8.	Willi	ngness on sharing the followings		
	a. b. c. d.	_ :	Yes, Yes, Yes, Yes,	No No No No
*Pleas	se ☑ t	tick the appropriate boxes.		
Other	Supp	lementary Information (Optional):		

~ End of Reply Slip ~