

ASHRAE DL Seminar on “ASHRAE Building Energy Quotient (bEQ) and Retro-Commissioning for Energy Savings”



Date & Time: 25 April 2018 (Wednesday) (2:00pm – 5:15pm)

Venue: Singapore Polytechnic Graduates' Guild (SPGG), Ballroom, Level 2

► **ASHRAE Building Energy Quotient (bEQ)**

ASHRAE has implemented a comprehensive building energy labelling program called Building Energy Quotient (Building EQ). The objective of this labelling effort is to provide motivation for reducing energy use in commercial buildings by expressing the energy performance of buildings in a tangible way. The underlying belief is that public display and disclosure of the energy efficiency attributes of a building and its energy use intensity (EUI) will lead building owners to strongly consider cost effective energy efficiency improvements at the time of design and construction and in any subsequent renovations. Public display and disclosure of energy efficiency attributes and EUI should be a relevant factor in the real estate transaction marketplace for commercial buildings. Building EQ incorporates both an operational rating, based upon actual energy billing, and an asset rating that normalizes for operational variables. The two rating systems will thus be able to communicate both the performance of the building as operated and the potential performance of the fixed assets of the building. This session will present the major ideas behind the development of the labelling program and the process for implementation.

► **Retro-Commissioning for Energy Savings**

This session will present the outlines and application examples of retro-commissioning for energy savings. The session clarifies the following questions: What is retro-commissioning? What is the difference between commissioning and retro-commissioning? Is retro-commissioning required environmental labelling systems such as LEED or Green Mark? How can a process save energy? What are some of the aspects of an energy saving retro-commissioning application? What guidance is available from ASHRAE guidelines? What are the types of savings from the process and what are the critical components to assure that savings are realized?

Speaker Profile



Hoy R. Bohanon, Jr., P.E., LEED AP, BEAP
ASHRAE Distinguished Lecturer

President
Hoy Bohanon Engineering, PLLC
Clemmons, NC
The United States

Hoy Bohanon, PE, LEED AP, BEAP is principal in Hoy Bohanon Engineering, PLLC, a firm that focuses on improving the performance of existing mission critical buildings. Mr. Bohanon began his engineering career as a research and design engineer, and then gained experience as a project engineer, facilities engineer, facilities manager, indoor air quality research engineer, environmental engineer, and business owner. He has a master's degree in engineering from North Carolina State University, and a bachelor's degree in mechanical engineering from Georgia Institute of Technology.

Mr. Bohanon has written technical papers and articles on indoor air quality, operations, and maintenance and is a frequent presenter at technical society meetings. He is a recipient of the ASHRAE Distinguished Service Award and is chair of ASHRAE Standard 62.1 committee, Ventilation for Acceptable Indoor Air Quality. He also serves on the bEQ committee. He is chair of the US Technical Advisory Group panel 1 (general principles) and panel 4 (indoor air quality) for ISO TC205 Building Environment Design. He is a co-author of The Indoor Air Quality Guide: Best Practices for Design, Construction and Commissioning and Performance Metric Protocols for Commercial Buildings: Best Practices Guide. He also teaches multiple courses for the ASHRAE Learning Institute addressing ASHRAE 62.1 and IAQ. Mr. Bohanon is also a member of the Professional Engineers of North



Registration Form:
 – **ASHRAE DL Seminar on**
“ASHRAE Building Energy Quotient (bEQ)
and Retro-Commissioning for Energy Savings”

Date: 25 April 2018 (Wednesday)
Time: 2.00pm – 5.15pm
(Registration starts 1.30pm)
Speaker: Hoy Bohanon, PE, LEED AP, BEAP
 ASHRAE Distinguished Lecturer

Fee for early registration by 12 April 2018:
 S\$5 for ASHRAE Singapore Chapter (ASC) members
 Free for ASC Student Member (limited to 10)
 S\$30 for ASHRAE/IFMA/IES/SGBC members
 S\$60 for non-members

Fee for registration after 12 April 2018:
 S\$5 for ASC members
 Free for ASC Student Member (limited to 10)
 S\$40 for ASHRAE/IFMA/IES/SGBC members
 S\$70 for non-members
(1 Tea Break will be provided)

Venue:
 Singapore Polytechnic Graduates' Guild
 Ballroom, Level 2, 1010 Dover Road
 Singapore 139658 (Singapore Poly Gate No. 4)

Register by email to elta.ascsecretariat@gmail.com before **19 April 2018**, with the required Registration Details below.

Please make the payment by issuing a cheque to **ASHRAE Singapore Chapter**, c/o 159 Sin Ming Road, AMTECH Building, Lobby 2 #07-02, Singapore 575625

Professional Engineers Board (PDU) Points: Pending
SCEM-PDU Points: Pending

For enquires on program and registration matters please contact:
 Dr. Yuichi Takemasa [Email: y.takemasa@kajima.com.sg], ASHRAE Singapore Chapter CTTC Chair

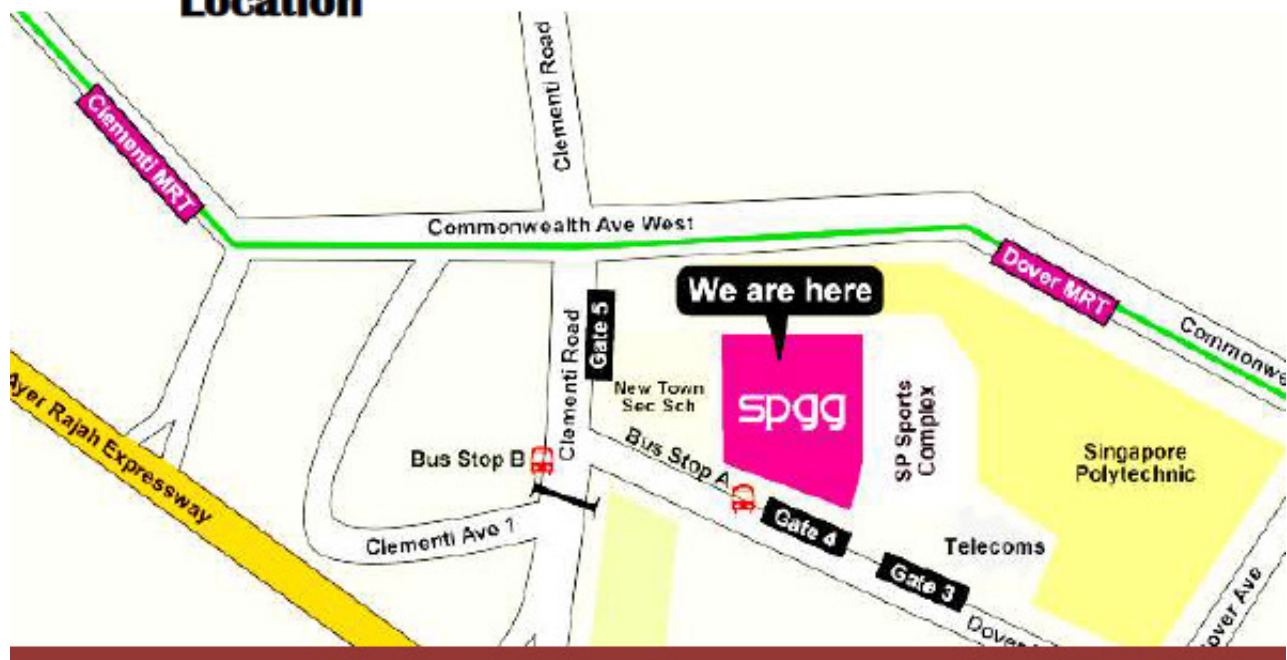
Registration Details

Name of Participant	ASHRAE Membership No.:	ASC Reg No.:	PE Reg No.:
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Organization:	<input type="text"/>	Designation:	<input type="text"/>
Mailing Address:	<input type="text"/>		
	<input type="text"/>	Postal Code	<input type="text"/>
Telephone / Mobile No.:	<input type="text"/>	Fax no.:	<input type="text"/>
Email:	<input type="text"/>		

Signature

Date

Location



- Located at 1010 Dover Road (SP Gate 4)
- 10 mins walk from Dover MRT
- Bus Services to SPGG:
 - Bus Stop A: SBS 33 & SBS 196
 - Bus Stop B: SBS 96, 151, 183