

**GREENRE TECHNICAL SEMINAR 01-2020**

# **Efficient Central Air-Conditioning Design and Measurement & Verification Systems**

**10<sup>th</sup> & 11<sup>th</sup> March 2020**

**9 am - 6 pm**

**CPD**  
**GREENRE,**  
**IEM, LAM,**  
**ST**

**Wisma REHDA, Petaling Jaya**

## **Introduction**

The major criteria in GreenRE Tools is Energy Efficiency (Part 1) which contributes about 50% of the total scoring points. Credits are allocated for the various energy efficient designs, practices and features used.

GreenRE has introduced pre-requisites to air-conditioning system design including installation requirement for provision of permanent major system for chiller plants.

## **Objectives**

To provide the fundamentals and knowledge of air-conditioning, central chilled water plants, chilled water airside systems, chiller plant performance measurement & verification (M&V) and their optimization.

## **Target Group**

- Engineers, Architects, Planners, Surveyors
- Sustainable & Environmental Managers, Green Building Consultants
- Developers, Project Managers, Building Owners involved in green building projects

**Early  
Bird Fees**  
\*before 21/2/2020

**RM 799**

\*member

**RM 1099**

\*non member

**Normal Fees**  
\*after 21/2/2020

**RM 899**

\*member

**RM 1199**

\*non member

**Kindly contact**

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**www.greenre.org**



He is a Director of Business Development for Measurement & Verification Pte. Ltd. He is qualified as Certified Green Mark Professional, Singapore Certified Energy Manager, US Certified Energy Manager, LEED Accredited Professional and many more. He is also one of the core-trainers of the BCA Academy's Green Mark Facilities Professionals (GMFP) where the contents of his lecture focused on the efficient design and operation of the central chilled water air-conditioning system.

Mr. Steven Kang is known as a trainer who is passionate about propagating the importance of an efficiently designed air-conditioning system. He conducts in-depth trainings on HVAC design and optimization to ESCOs, consultants and building owners throughout Asia. He has spoken at various forums on HVAC designs, energy optimization and green buildings. He is also appointed as the Ambassador for the Singapore's Building Construction Authority and sits on the committee for Singapore Energy Auditor Certification, Singapore Standard on Chiller Plant Measurement and Verification (SS591), Singapore Standard on Air-Conditioning and Mechanical Ventilation in Buildings (SS553) and was in the technical review committee of Vietnam Green Building Council's Sustainable Building Assessment System.

An extraordinary trainer who is sincere about imparting his knowledge to the participants, he also puts extra effort to assist those who lack the basic knowledge. We are confident the course will be a successful and achieve the objective with the presence of a very good trainer like Mr. Steven Kang.

## Course Schedule

### 10<sup>th</sup> March 2020 (Day One)

#### Central chilled water plants

- Overview of chilled water systems
- Introduction to chillers
- Introduction to pumps
- Introduction to cooling towers

#### Chilled water airside systems

- Overview of airside systems

#### Overview of airside systems

- Energy efficient piping design
- Energy efficient ducting design

#### Chiller plant performance optimization

### 11<sup>th</sup> March 2020 (Day Two)

#### Airside optimization

#### Measurement & Verification of chiller plant performance

- AHRI 550: Performance Rating of Chillers using the Vapor Compression Cycle
- SS591: Code of practice for long term measurement of central chilled water system energy efficiency
- Recommended good practices for Instruments for; Temperature measurement, Flow measurement, Power measurement and Data acquisition

#### Case studies

# Registration Form

**Salutation & Full Name:**

**Company Name:**

**Designation:**

**Office/Mobile No.:**

**Email Address:**

**Mailing Address:**

**Membership No.:**

**(GREM/REHDA)**

Participants who have successfully completed the course by attending at least 75% of the 2 days-course will be issued with a Certificate of Attendance from GreenRE.

This technical seminar provides CPD points from GreenRE, IEM and LAM.

## PAYMENT INFORMATION

**Early Bird (before 21<sup>th</sup> February 2020):**

**Member (REHDA/GREM) - RM 799.00**

**Non-Member - RM 1099.00**

**Normal Fee (after 21<sup>th</sup> February 2020):**

**Member (REHDA/GREM) - RM 899.00**

**Non-Member - RM 1199.00**

Course fee is subject to 6% SST (SST No.: B16-1809-32000727). Bank drafts of cheque should be crossed and made payable to "GreenRE Sdn Bhd". The cheque/cash can be deposited to GreenRE's Public Bank account no. 3182 978 625 & please email the bank in slip and your registration form to [training@greenre.org](mailto:training@greenre.org).

## NOTES:

1. Upon confirmation of registration and payment, the e-confirmation will be sent to your email.
2. Cancellation will occur no fee but replacement is compulsory.

The organizer reserves the right to change the content, venue and date or cancel the event if insufficient minimum target number of participants are met.