Green Data Centre Overview & **Operations (Session 1)**

PDUs to be awarded by Professional Engineers Board, Singapore Up to 60% Cash Payout from PIC Scheme

Date	:	8 September 2015
Time	:	9:00am – 5:00pm
Venue	:	SEAS Training Centre at Park 9 Penang Road, #08-02 Singapore 238459

Energy expenditures account for the vast majority of the operating costs during a data centre life-time, and this fact is becoming critical in order to ensure business profitability. During this one-day course, we will discuss how to manage a data centre efficiently, focusing on both design and operational issues, and showing the state-of-the-art practices to reduce costs in the sector.

Mall

Following the 1-day data centre overview course, a 2-day green data centre design course will equip participants with in-depth knowledge of SS564 and Green Mark for New and Existing Data Centre. The two-day course will also include design best practices and case studies to empower participants with knowledge and ideas to green their data centres.

Objectives

The participants of the course will acquire the following knowledge:

- Strategies and approaches to efficient DC design
- Manage daily Data Centre operations efficiently
- Manage the facilities in a Data Centre efficiently
- Deepen energy and cost management knowledge
- Evaluate procedures to reduce operational expenditures in Data Centre Environments
- Analyse the lay-out of a Data Centre and apply strategies to improve its overall condition

Target Audience

- **Data Centre Operations Managers**
- Data Centre Facilities Managers and technicians
- **Data Centre Designers and Consultants**
- **Data Centre Maintenance Contractors**
- Singapore Certified Energy Managers
- Government officials involved in Data Centre Energy Efficiency policies and regulations
- IT Managers

Programme Outline

1. Guidelines for Energy Efficiency Data Centres

- Engineering, Depolying, Operating and Organising for Efficiency
- **Operational Efficiency and Reliability**
- Guidelines form standards: ANSI/TIA-942, SS 564, ISO 50001, ASHRAE
- BCA/IDA Green mark and LEED
- Efficiency v Reliability (a look into uptime TIER standard)
- Design strategies and solutions for new and existing Data Centres

2. Energy Efficiency Best Practices

- Trends in global energy and Data Centre power consumption
- Energy efficiency drivers for different Data Centre types
- Typical "worst practices in the Data Centre
- Metrics and regulations that apply to and impact energy efficiency
- Major savings related to energy efficiency in power and IT equipment

3. Managing Data Centre Operations

- Floor management procedures and duties such as rack space allocations, management of installers, from an energy efficiency point of view
- Load distribution and management Computational Fluid Dynamics (CFD) analysis, capacity and configuration management solutions
- Equipment inventory and individual energy monitoring
- Reducing energy consumption while ensuring reliability: strategies and approaches

3. Managing Data Centre Operations

- Corporate drivers for energy management
- Corporate and social responsibility
- Brand management
- Basic metrics for data centre efficiency. Capability and limitations
- Key roles and responsibilities in the energy efficient initiative
- Space, cooling and power capacity constraints in the data centre
- Basic energy efficiency management techniques to the areas of IT, Cooling, **Electrical Systems**
- Reporting data centre costs

Organized by:



Supported by:







Sustainable Energy Association of Singapore (SEAS)

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About SEAS

The Sustainable Energy Association of Singapore (SEAS), an industry association launched in 2006, today has 160 members in the area of Energy Efficiency, Solar, Wind, Biomass, Carbon and Clean Energy Financing. SEAS aims to be the voice of sustainable energy industry and promote the business of its member companies.

SEAS also specialises in training, courses and conferences focussed on sustainable energy. SEAS aims to be the one-stop information and training provider in the area of sustainable energy. Our trainers and lecturers are not only highly qualified academic professionals but also industry specialists and professionals that are successful and sought after practitioners in the area of Sustainable Energy. The majority of Key Qualified Personnel (KQP) and Accredited Energy Services Companies are members of SEAS. They have, as a group successfully executed a multitude of energy projects with varying complexities both locally and regionally.

About the Trainer

Mr Lluis Gironella is the Engineering Director of a Singapore-based consulting firm leading its activities in Southeast Asia with regards to energy efficiency and data centre design. Mr Gironella holds an MBA from ESADE Business School and M.Sc. In Engineering from the Polytechnic University of Catalonia (Barcelona). He is also an Accredited Tier Designer (ATD) by Uptime Institute and a member of The Green Grid association for IT efficiency.

Mr Carlos Garcia is a Senior Engineering Consultant, a Singapore-based consulting firm, currently focusing its activities on energy efficient Data Centre design in Europe, Southeast Asia and South America. Mr Garcia holds a M.Sc. In IT Engineering from UPF University (Barcelona) and is a Data Centre Specialist in Design accredited by Datacentre Dynamics.

Mr Chris Ow Yong has been involved in Data Centre industry since 2001: from design, development, construction, maintenance, operations and sales of Data Centre infrastructure and supporting services. Some of tis professional accreditation include those by Uptime Institute, TIA-942 (Telecommunications Industry Association) and was a founding member of Malaysia's Data Centre Program for Economic Transformation Programme. Presently, he leads the business development and delivery effort for the current company with key accomplishment in developing several key accounts, operation and customer management.

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Registration Form

□ Yes! I would like to register for this programme.

□ I am unable to attend but please put me on your mailing list.

			Early Bird (Registration with payment made on/before 30 June 2015)	Normal Fee (Closing Date: 21 July 2015)	No. of Delegates	Fee Payable
SEAS Member	Session 1	□ 8 Sept	S\$400	S\$500		
	Session 1 & 2	□ 8 Sept, 28 & 29 July	S\$950	S\$1,200		
Non Member	Session 1	□ 8 Sept	S\$500	S\$600		
	Session 1 & 2	8 Sept, 28 & 29 July	S\$1,200	S\$1,400		

* Fees are inclusive of GST.

* Fees include refreshments, lunch and programme collateral.

* Only one type of discount scheme is applicable at any one time.

* Please print and complete additional sheets where necessary.

Participant's Details

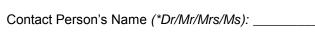
1. Name (*Dr/Mr/Mrs/Ms):		NRIC:
Designation:	HP No:	Email:
2. Name (*Dr/Mr/Mrs/Ms):		NRIC:
Designation:	HP No:	Email:
3. Name (*Dr/Mr/Mrs/Ms):		NRIC:
Designation:	HP No:	Email:

Fax:

Organization's Details

Company Name: ____

Company Address: ___



Tel: __

Email:

Administrative Information

Registration and Payment

Please complete the enclosed registration form and forward it together with your cheque at least 7 days before the commencement of the programme to

Sustainable Energy

Association of Singapore 9 Penang Road #08-02 Park Mall Singapore 238459

Crossed cheque should be made payable to "Sustainable Energy Association of Singapore" Application will close on 21 July 2015

Cancellation

SEAS reserves the right to change programme venue, cancel or reschedule the programme if necessary or warranted by circumstances beyond our control.

There will be no refund of fees for withdrawal. However, if the registration participant is unable to attend, a representative may be allowed to attend at no extra cost. Please inform us of the changes by fax or via email 3 days before the commencement of the programme.

Confirmation of Registration

Confirmation of registration will be given 5 working days before the commencement date via email. Registration is confirmed only upon receipt of payment.

If you do not hear from us Please contact Ms Agnes Seah at: Tel: 63379886 Email: training@seas.org.sg Fax your registration form to 63376658

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