

**Energy Efficiency Committee Meeting**  
**14 April 2014**  
**3.00pm**

**DNV GL Technology Centre**  
**16 Science Park Drive**  
**118227 Singapore**

**Minutes**

<b>No</b>	<b>Name</b>	<b>Company</b>	<b>Signature</b>
1	Vincent Low	G-Energy Global Pte Ltd	PRESENT
2	Melvin Tan Gim Huat	Accenture	PRESENT
3	Yee Chow	Accenture	PRESENT
4	Yeo Kim Dek	Asia Carbon Pte Ltd	PRESENT
5	Lawrence Kwan	Diamond Energy	PRESENT
6	Sanjay C. Kuttan	DNV GL	PRESENT
7	Rohit Gadre	DNV GL	PRESENT
8	Ming Hui Zhang	DNV GL	PRESENT
9	Ng Koon Siang	DTZ Facilities & Engineering (S) Limited	AWA
10	Adrian Bukmanis	Energz	PRESENT
11	Philip Doyle	KPMG Services Pte Ltd	PRESENT
12	Ron Lim	Lim Kim Hai Electri Co (S)	PRESENT
13	Colin Koh	Precicon D & C Pte Ltd	PRESENT
14	Vinod Kesava	The Green Asia Group	PRESENT
15	JC Sekar	UL International Singapore Pte Ltd	PRESENT
16	Richard Andrew		PRESENT

Description	Action By
<p><b>1. Minutes of the Last Meeting</b></p> <p>Meeting opened at 3:10pm.</p> <p>Minutes of the last meeting were approved and accepted.</p>	
<p><b>2. Update by Mr Vincent Low, SEAS Chairman of EE Committee</b></p> <p>Mr Sanjay Kuttan welcomed everyone to DNV GL office and Mr Vincent Low gave a broad overview to those present about the role of EE committee in SAEs and opened the meeting.</p>	
<p><b>3. Update by Secretariat, Mr Mark Netto,</b></p> <p><b>a) Update on SME-EE</b></p> <p>Plans for 2014 include:</p> <ul style="list-style-type: none"> <li>• Meeting with over 50 SME Company Leaders by August 2014</li> <li>• Total of 10 Project underway between M&amp;V and CDG</li> <li>• 20 Audits Contacted</li> <li>• 1 CEO Round Table</li> <li>• 1 General EE Seminar</li> </ul> <p>Current Status of SME-EE engagement and project developing is:</p> <ul style="list-style-type: none"> <li>• Meeting with 22 companies and senior management to date</li> <li>• Energy Audits Status under ICV Grant : 3 completed, 2 ongoing, and 3 pending</li> <li>• M &amp; V Project Status under iSPRINT: 1 completed &amp; 2 in process 2 pending</li> </ul> <p>SEAS Roles for supporting SEAS Members to connect with SME's and SME's to better understand the value of Energy Efficiency and offerings of the SME-EE initiative were reviewed.</p> <p><i>(Please see slide 13 attached for more information on SEAS supporting its members to cultivate market and project development)</i></p> <p>Members were encouraged to work with SEAS to support SME clients and also provide SEAS with a list of solutions and capabilities they can offer in order for SEAS to appropriately match SME to Member companies.</p> <p><b>b) New Potential Energy Efficiency Labelling Scheme for Building and Industry EE Products</b></p> <p>SPRING has suggested to setup an energy labelling scheme for energy efficiency equipment used in buildings and manufacturing sector. This may make it easier for companies adopting such technologies to pick appropriate options based on validated performance data.</p> <p>Chairman mentioned that it would be difficult to certify products on their own merit alone as usually energy efficiency is a system driven achievement and no single product can account for overall system performance. Even if products and/or systems are endorsed there would still be the issue of performance derived from the use of the systems which could result in inefficiency. JC from UL added, that there could be a certification explored for a system and not a</p>	<p>Secretariat</p> <p>Members</p>

product but there is no point in doing this as there are no system based standards that have been developed.

Chairman requested SEAS members to provide feedback on their thoughts to SEAS.

**c) MFA Training Update**

SEAS conducted a 2 day regional training workshop on Facilitating Private Sector Investment in Climate change Projects in the Asia Pacific for over 40 key decision / policy makers supported by MFA. The workshop was run from 20 to 21 March 2014 and was supported by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) who sponsored and co-organised the event with SEAS.

A networking dinner between SEAS members and attendees of this workshop was organised to support awareness of Singapore based capabilities in the above mentioned sectors as well as explore potential business dealings in the various countries that were represented by the workshop participants.

SEAS plans to put on 3 more training sessions on EE, RE and Policy. The aim is to get members involved on these upcoming courses.

Members

**d) Update on Training Courses**

The following courses are scheduled to be run in the coming months:

- Demand Control Ventilation in Critical Environment (Cleanroom, Laboratory and Healthcare)
- Advance Steam and Compressed Air Systems
- Conduct Preliminary Energy Assessment of Building Facilities
- Assess Air conditioning & Mechanical ventilations Systems
- Apply Management and Economics in Energy Management Industry

Secretariat

**e) Update on JTC Projects for Buildings**

A site visit to Block 20 Woodlands was conducted on 18<sup>th</sup> March with 7 Member companies attending the site visit. Feedback from the companies that JTC needs to identify buildings that have not undergone any retrofit and have more overall energy consumption for common services and facilities. This feedback has been given to JTC and they are shortlisting additional potential buildings that will be shared with members by June. Site visits will also be conducted based on engagements with the tenants of these buildings.

Members are encouraged to attend the site visits as well as furnish SEAS with information on solutions that can be used in the 5 types JTC manages which range from single tenant buildings to multi-tenanted facilities. More information on these buildings has been shared in the attached EE committee meeting slides.

Secretariat

**f) Business Mission to Thailand Report**

A report on the recent business mission with 6 Singapore companies to Thailand will soon be available to members through their online Member Profiles on the SEAS website

The delegation met with the following government bodies and stakeholders:

1. Bureau of Investment (BOI)
2. Department of New and Renewable Energy (DEDE)

Secretariat

<p>3. PTT of Supply of Solutions</p> <p>4. Electricity Generating Authority of Thailand (EGAT)</p> <p>5. Environment Institute of Thailand (EIT)</p> <p>6. Building developers interested in Energy Efficiency and Solar Rooftops</p> <p>7. Developers of Bio Energy Projects</p> <p>SEAS also organized an invite only networking event where the Deputy Director General of the DEDE was invited to deliver an opening address. This event was organized in collaboration with the Thai ESCO Association and had over 20 Thai companies that attended who were keen to connect with the Singapore delegation to explore transfer of knowledge, technologies, financing and partnerships.</p> <p><b>g) Upcoming Trade Fairs &amp; Business Missions</b></p> <ul style="list-style-type: none"> <li>• Business Mission to Bangkok, Thailand – 17-20 MARCH 2014 (TBC)</li> <li>• Renewable Energy Asia 2014 Trade Show, Bangkok Thailand ; 4 - 7 JUNE 2014</li> <li>• Indonesia Building + Solar 2014, Jakarta Indonesia; 14 – 16 AUGUST 2014</li> </ul> <p>Please email Mark Netto at <a href="mailto:mark@seas.org.sg">mark@seas.org.sg</a> for more details on the above and how your company can secure up to 50% reimbursement for exhibition booth costs at these shows.</p>	Members
<p><b>4. Update from SEAS Executive Director, Kavita Gandhi</b></p> <p>BCA has expressed interest in SEAS to participate in BEX Asia Exhibition to contribute content / expertise / speakers for the conference pertaining to energy efficiency and clean energy. Kavita will explore partnerships with the Executive Director SGBC and the BCA to explore partnerships SEAS members at the Singapore Pavilion being setup at the show as well as seeding them into the conference.</p> <p>Kavita provided an update on the upcoming SolarNova initiative by the Singapore Government. SEAS has been in communication with EDB (<i>who will spearhead this initiative</i>) on this already to position SEAS members for this opportunity. JTC has also been approached and interests cultivated to meet with various members of SEAS to explore various project development and financing options.</p>	Secretariat
<p><b>5. Any Other Business</b></p> <p>Proposed next meeting at (<i>SEAS to confirm venue</i>) – Friday, 25<sup>th</sup> July 2014, 3:00 pm.</p> <p>As there was no other matter, the meeting ended at 4.45 pm.</p>	Secretariat

Recorded by : Yatin Premchand / Mark Netto  
Vetted by : Kavita Gandhi  
Approved by : Vincent Low