

## MS ISO 50001 Class EnMS Workshop in Malaysia

25<sup>th</sup> – 27<sup>th</sup> September

### 3-day Agenda:

### Day-1 am

Am/ pm	Session	Title	Description
am	1-01	Welcome	<ul style="list-style-type: none"> <li>- Welcome and make audience relax</li> <li>- Know each other</li> <li>- Explain overall objectives and flow of 3-day workshop</li> </ul>
	1-02	Introduction: Energy management is business	<ul style="list-style-type: none"> <li>- Understand the strength of EnMS</li> <li>- Understand the EnMS impact to the business</li> <li>- Understand the importance of energy in our life</li> </ul>
	1-03	Practical Guide to ISO 50001 Energy Management System	<ul style="list-style-type: none"> <li>- Learn about ISO</li> <li>- Learn about Management System</li> <li>- Learn about ISO 50001 role and purpose</li> </ul>
	1-04	Top Management Involvement: Key #1	<ul style="list-style-type: none"> <li>- Why Top Management involvement is necessary</li> <li>- What does top management involvement mean                             <ul style="list-style-type: none"> <li>* Energy Policy, organisation, etc.</li> <li>* Check through ISO 50001 top mgmt. section</li> <li>* EnMS audit</li> <li>* Management Review</li> </ul> </li> </ul>
	1-05	EnMS Charter and 12 Key EnMS management documents	<ul style="list-style-type: none"> <li>- Understand the importance of documentation: ISO 50001 Class EnMS operation cannot be achieved unless there is proper documentation in place.</li> <li>- EnMS Charter, the constitution of EnMS to manage the operation in order</li> </ul>
	1-05	Energy performance verification: standardisation in "y=ax+b" EnPI for baseline and targets  <div style="border: 1px solid black; padding: 5px; width: fit-content;">                         Specific Energy Consumption (SEC) Regression Analysis                     </div>	<ul style="list-style-type: none"> <li>- What is "y=ax+b" EnPI from regression analysis</li> <li>- Using an actual set of data to define the year 2009 as the baseline to perform cusum analysis to verify if you are saving or losing today.</li> <li>- Using an actual set of data to define the 2011 as the baseline to analyse what should be the target EnPI for 2012 and determine what would be the potential saving %.</li> </ul>

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**Day-1** pm


Am/ pm	Session	Title	Description
pm	1-06	<i>[Workshop Exercise]</i> Using actual data to perform SEC regression analysis	<ul style="list-style-type: none"> <li>- Using an actual set of data, and define a baseline year to analyse what would be the baseline EnPI and target EnPI.</li> <li>- Provide analytic comments from the SEC regression analysis</li> <li>- Present and persuade the audience what is the organisation target and how much savings expected.</li> </ul>
	1-07	Practical Energy Review	<ul style="list-style-type: none"> <li>- Understand the importance of the energy review <ul style="list-style-type: none"> <li>• Energy review defines elements for action</li> </ul> </li> <li>- Understand what to be covered in the energy review <ul style="list-style-type: none"> <li>• Energy audit for identifying operational aspect Energy Conservation Opportunities (ECO)</li> <li>• Energy audit for identifying technical aspect ECOs</li> <li>• RENKEI Control opportunities</li> <li>• Identify the first phase energy monitoring system best suited for the organisation's EnMS operation</li> </ul> </li> <li>- Gain capability to implement energy review after going back to organisation</li> </ul>
	1-08	Monitoring & Action	<ul style="list-style-type: none"> <li>- Learn a word "Miyeru-ka" (Seeing Energy) <ul style="list-style-type: none"> <li>• Seeing energy movement</li> <li>• Obtaining results</li> <li>• Seeing the results</li> <li>• Reporting the result</li> <li>• Sustaining and improving further</li> </ul> </li> <li>- Understand the benefit of M&amp;T</li> <li>- Understand the EnMS key element that Energy performance improvement quantitative verification cannot be done without M&amp;T</li> </ul>
	1-09	Day 1 wrap up and conclusion	<ul style="list-style-type: none"> <li>- Briefly review what happen in the Day 1</li> <li>- Validate the Contents learned</li> <li><b>Presentation of:</b>  <b>"Mastering the language and practice of ISO50001 Energy Management System"</b>  <b>by Kit Oung (Energy Management Expert at BSI and Projective Ltd)</b> </li> <li>- Questions and answers</li> </ul>

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**Day-2** am

Am/ pm	Session		Description
am	2-01	wiki50001 Introduction 	<ul style="list-style-type: none"> <li>- Understand the feature, function and benefit of wiki50001</li> <li>- Demonstrate the enms-doc-demo.wiki50001 version through the screen</li> <li>- Understand the superiority of the operating system to enhance the actual EnMS operation                             <ul style="list-style-type: none"> <li>• Complete with key 12 management documents yet paperless environment</li> <li>• Closing the top management to work force</li> <li>• Obtain the right EnMS information at the right place at the right time.</li> <li>• Excellent and efficient tool for communication, training and EnMS audit that would save a significant amount of time and cost.</li> </ul> </li> </ul>
	2-02	ISO 50001 Management Elements related to <b>"implementation &amp; operation"</b>	<ul style="list-style-type: none"> <li>- Go over "implementation &amp; operation" ISO 50001 requirement with wiki50001 and see the EnMS impact to the business</li> <li>- Using wiki50001 to understand EnMS is about organisation's business management.</li> </ul>
	2-03	ISO 50001 Management Elements related to <b>"checking performance"</b>	<ul style="list-style-type: none"> <li>- Using wiki50001 in interfacing M &amp; T Procedure and EnPI performance improvement</li> <li>- Using wiki50001 in Continual Improvement procedure</li> <li>- Review Energy performance improvement verification</li> </ul>
	2-04	<i>[Workshop Exercise]</i> Energy Review Practice	<ul style="list-style-type: none"> <li>- Establish a business unit in order to perform energy review</li> <li>- Data analysis to identify significant energy use items and EnPIs</li> <li>- Identify energy conservation opportunities (ECO)                             <ul style="list-style-type: none"> <li>* Operational aspects</li> <li>* Technical aspects</li> </ul> </li> <li>- Identify the first phase M&amp;T system suitable for organisation</li> <li>- Prepare to present the results and provide recommendation to the management review to win their approval</li> </ul>

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**Day-2. pm**

Am/ pm	Session		Description
pm	2-04	<i>[Workshop Exercise]</i> Management Review Practice	<ul style="list-style-type: none"> <li>- Consolidate what was found in energy review and set up strategy what is needed by the top management.</li> <li>- Identify what action is necessary for following year and mid-long term</li> <li>- Obtain management commitment for EnMS Action from the management review session</li> </ul>
	2-05	Establishing EnMS Action Plan	<ul style="list-style-type: none"> <li>- Based on what was agreed in the management review, understand the process of how the energy review results are reflected in the action plan</li> <li>- Understand ways to establishing EnMS Action Plan for implementation of EnMS operation</li> <li>- Using wiki50001 in reviewing how the EnMS Action Plan is integrated in the system so that the organisation can manage the progress.</li> </ul>
	2-06	Day-2 wrap-up	<ul style="list-style-type: none"> <li>- Briefly review what happen in the Day 2</li> <li>- Questions and answers</li> </ul>



Chew, Hock San, representing Group A presenting their result from the Energy Review exercise.

Lai, Tuck Lock, representing Group B presenting their result from the Energy Review exercise on operational aspect.



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**Day-3** am

Am/ pm	Session	Title	Description
am	3-01	<i>[Workshop Exercise]</i> Hands on operation of <a href="#">wiki50001</a> <a href="#">Enms-doc-demo.wiki50001</a> version prepared by TEAM	<ul style="list-style-type: none"> <li>- Editing of "Energy Policy" on <a href="#">Enms-doc-demo.wiki50001</a>.</li> <li>- Present the outcome of the "Energy Policy"</li> <li>- Experience the continual improvement procedure thru <a href="#">Enms-doc-demo.wiki50001</a> to fully appreciate the superiority of EnMS (PDCA) <ul style="list-style-type: none"> <li>• EnMS Monitoring and Targeting Go over improvement procedure using "exception management" page of <a href="#">Enms-doc-demo.wiki50001</a></li> <li>• Continual Improvement Procedure Go over improvement procedure using "exception management" page of <a href="#">Enms-doc-demo.wiki50001</a></li> </ul> </li> </ul>
	3-02	EnMS Audit Fundamental	<ul style="list-style-type: none"> <li>- Understand the basics of EnMS Audit <ul style="list-style-type: none"> <li>• Go over EnMS Guideline using "auditors" page of <a href="#">Enms-doc-demo.wiki50001</a></li> </ul> </li> </ul>
	3-03	EnMS Audit Scorecard Introduction	<ul style="list-style-type: none"> <li>- Understand the scoring procedure <ul style="list-style-type: none"> <li>• Go over the scoring procedure to make the scoring procedure clarified</li> </ul> </li> <li>- Understand the superiority of using scoring procedure <ul style="list-style-type: none"> <li>• Appreciate the efficiency and transparency of the audit using scorecard</li> </ul> </li> </ul>

Chan, Yen Siang, Chew, Hock San  
and Lai, Tuck Lock editing [wiki50001](#)  
for Group B



Chong, Yee How, Albert, Francis and  
Chew, Tat Sen editing [wiki50001](#) for  
Group A

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### Day-3 pm

Am/ pm	Session	Title	Description
pm	3-04	<p><i>[Workshop Exercise]</i></p> <p>EnMS Audit Implementation using Scorecard</p> <p>Used file:  <i>EnMS-Audit.SCR-R04E_Path01-02(Mgmt)_Sample.xlsx</i></p>	<ul style="list-style-type: none"> <li>- Explain the procedure of EnMS Audit to be conducted by each group.</li> <li>- Reach audit expertise by hands on experience in EnMS audit activities from both auditor and auditee perspectives.</li> <li>- Draw competitive posture by workshop teams with audit evaluated with scorecard system</li> <li>- Consolidation of audit findings and scorecard points.</li> <li>- Present the audit finding overview and scorecard result at closing session.</li> </ul>
	3-05	<p><i>[Discussion]</i></p> <p>ISO 50001 compatibility gap analysis</p>	<ul style="list-style-type: none"> <li>- To go over with participants what they consider the gap.</li> <li>- Identify what might be the gap in the participant's organisation in order to self-declare ISO 50001.</li> <li>- Identify action items to fill up the gap in respective organisations.</li> </ul>
	3-06	Ending Message and session certification presentation	<ul style="list-style-type: none"> <li>- Talk about what is the next step: 2 min speech by participants.</li> <li>- Discuss items what participants expressed, and agree on next action.</li> <li>- Provide confidence level that their organisations are very close to ISO 50001 Class with the participants gaining know-how and receiving documents during the workshop.</li> <li>- Present workshop completion certificate.</li> <li>- Initiate Malaysia League of "ISO 50001 Self-Declaration Energy User Union" by the workshop participants taking lead in the global scene.</li> </ul>



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Lam, Sing Yew,      Chong, Yee How      Lai, Tuck Lock      Chan, Yen Siang  
Chew, Tat Sen      Albert, Francis      Chew, Hock San      Yamanouchi, Nobby

### Workshop Completion Certification Presentation:



Lai, Tuck Lock



Chew, Tat Sen



Chan, Yen Siang



Albert, Francis



Chew, Hock San



Chong, Yee How

at Grand Dorsett Subang Hotel, KL Malaysia