

1-DAY WORKSHOP ON REAL TIME ENERGY OPTIMISATION FEASIBILITY ANALYSIS USING RENKEI CONTROL



ONLINE MODE
8:30AM - 1:15PM (GMT+8)
(Session 1 Only)



PHYSICAL MODE
8:30AM - 5:30PM (GMT+8)
(Sessions 1 & 2)
(Limited to 50 participants)

Note: The physical slot is limited to 50 pax only and targeted for energy managers, energy auditors and company personnel. The online slot is open to all.

WORKSHOP DETAILS:

<https://shorturl.at/5IjLh>

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WORKSHOP OVERVIEW

This workshop introduces the fundamentals and concept of RENKEI Control for energy auditors/managers/users. It also provides a free assessment tool for companies that would like to assess RENKEI control potential in their companies. The physical workshop would have additional hands-on working sessions for those that would like to learn how to perform RENKEI Control feasibility energy analysis.

WHAT IS RENKEI CONTROL?

RENKEI Control is real time optimisation of multiple equipment to reduce energy consumption in facilities through control via energy digitalisation. It is a quick win approach, requires less investment, a short construction period and is highly cost effective.

TARGET PARTICIPANTS

Energy Auditors, Energy Managers/Engineers,
Energy Service Companies (ESCOs), Sustainability/ESG Manager

KEY HIGHLIGHTS

- ✓ Learn how RENKEI control works to minimise energy consumption via Real Time Optimisation (RTO)
- ✓ Evaluate an energy system's RTO potential using RENKEI control
- ✓ Assess RENKEI control's energy saving potential during energy audit
- ✓ Free hands-on tools for RENKEI control assessment

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TENTATIVE PROGRAM

DATE: 16 JANUARY 2025 (THURSDAY)

Time	Content
SESSION 1: RENKEI Control Fundamentals and Concept (Online and Physical)	
8:30-8:45	Registration
8:45-9:00	METI Welcoming Remarks and Introduction to CEFIA
9:00-9:15	Malaysia Energy Efficiency Direction
9:15-9:45	Introduction to RENKEI Control
9:45-10:30	RENKEI Control for Air Compressor Systems
10:30-10:45	Q&A Session
10:45-11:00	Break
11:00-11:30	RENKEI Control for Boiler and Turbine Generation (BTG) Systems
11:30-12:15	RENKEI Control - Case Study
12:15-12:45	Building Energy Management System
12.45-13.15	RENKEI Control Assessment Tool
SESSION 2: Hands-on Session on RENKEI Control Feasibility Analysis (Physical only)	
13:15-14:30	Lunch Break
14:30-16:30	Hands-on Working Session on Boiler and Turbine Generation RENKEI Control Feasibility Analysis
16:30-16:45	Break
16:45-17:15	Software Demo for Air Compressor RENKEI Control Feasibility Analysis
17:15-17:30	Q&A and Closing

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SPEAKERS



LEE PEYOY YING

Engineer,
Advanced Solution
Department,
Azbil Corporation (Japan)

Lee Peoy Ying graduated with Bachelor degree of Chemical Process Engineering from Malaysia Japan International Institute of Technology (MJIIT), Universiti Teknologi Malaysia. She has been working with Azbil Corporation in Japan since her graduation in 2019, in the Advanced Solution Department. Her tasks include feasibility studies and implementation of Azbil's plant operation optimization solution into customer plant.



KEN'ICHI KAMADA

Manager, Operational
Excellence Group
Project Design Department,
Innovation Center, Yokogawa
Electrical Corporation

Ken'ichi Kamada is a manager of Operational Excellence Group, Project Design Department, Innovation Center, Yokogawa Electric Corporation. He has been engaged in research and development on mathematical modeling and optimization technologies for plant operation. He has experiences in projects to improve plant operations in several industry sectors/processes including pulp and paper, wastewater treatment, and chemical recycling processes.



SEI SAISAKI

General Manager
Systems Engineering
Department,
EBARA DENSAN Limited

Sei Sasaki is a General Manager of the system engineering department, EBARA DENSAN Limited and a convenor for RENKEI control working group for JEITA. He has actively contributed to infrastructure construction projects like distribution pump stations, irrigation pumping stations, power plants, water treatment plants and incinerator plants in Japan and overseas. Especially, for overseas projects, he has many experiences to plan and design the Japanese ODA project for South-East Asia, Africa and others as an electrical engineer.

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SPEAKERS



PROF. IR. TS. DR. SHARIFAH RAFIDAH WAN ALWI

Director of R&D, Optimal Systems Engineering,

Professor in Process Systems Engineering, universiti teknologi Malaysia

Prof. Ir. Ts. Dr. Sharifah Rafidah Wan Alwi is a globally recognized expert in process integration and resource minimization, with over 20 years of experience. She is a Professor in the Faculty of Chemical and Energy Engineering at Universiti Teknologi Malaysia and a Fellow of the Academy of Sciences Malaysia. Prof. Sharifah has led the Process Systems Engineering Research Centre (UTM-PROSPECT) as the Director for a decade. She is also the co-founder and Director of Optimal Systems Engineering Sdn Bhd (OPTIMISE), a UTM spin-off company. Prof. Sharifah is highly active as a consultant, trainer, researcher, and entrepreneur. She holds numerous certifications, including Registered Electrical Energy Manager (REEM), AEMAS Certified Energy Manager (CEM), Certified Trainer for ASEAN Energy Managers, ISO 50001 Lead Auditor, Practicing Professional Engineer, Professional Technologist (Green Technology), HRD Certified Trainer, REISO Lead Assessor, and UKCGE Recognised Research Supervisor. Prof. Sharifah currently serves as the advisor for UTM's Sustainable Energy Management System, which won the National Energy Award in 2022. She has also been honoured with over 50 international and national awards.



ER HONG AN

Project Engineer, Energy and Mechanical Solutions, Cyclelect Engineering

Er Hong An is serving as a Project Engineer at Cyclelect Engineering to deliver energy solutions that integrate the EPC for chilled water, advanced cooling, trigeneration, and renewable energy systems. In addition, he is pursuing postgraduate study at Universiti Teknologi Malaysia, focusing on the research in the Heat Integration of non-continuous processes through Heat Exchanger Storage Networks to recover process waste heat. He is proficient in utilizing P-Graph (a MILP framework) and Python to optimize utility system performance. Previously, he worked as a Production Engineer in a steel mill for two years, where he actively contributed to production management, troubleshooting, energy efficiency enhancements, and compliance with international standards, including both ISO 9001 and ISO 14001.



SITI NOR AZREEN AHMAD TERMIZI

Lecturer Faculty of Chemical Engineering & Technology Universiti Malaysia Perlis (UniMAP)

Siti Nor Azreen Ahmad Termizi is a lecturer at the Faculty of Chemical Engineering & Technology at Universiti Malaysia Perlis (UniMAP). She holds both bachelor's and master's degrees in Chemical Engineering from Universiti Sains Malaysia (USM) and brings over five years of experience teaching courses in chemical engineering, specializing in process control, dynamics, and simulation. A certified Thermal Energy Recovery Technologist (TERT) at the professional level, she is currently pursuing her PhD at Universiti Teknologi Malaysia (UTM), where her research focuses on advancing heat integration and process control, particularly in the real-time optimization of steam utility plants for Eco-Industrial Parks. She has had a small but impactful role in the RENKEI Control project and other initiatives, such as the Resource Efficiency and Industrial Symbiosis Opportunity (REISO). She remains eager to contribute further to projects that promote sustainable and efficient energy use across various sectors.

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PAST PARTICIPANTS REVIEWS

“ This workshop truly opened my eyes to the ways modern technology can aid in assessing and implementing energy-saving measures, particularly for systems like chillers, compressors, boilers, and turbines. It has significantly enhanced my understanding and contributed immensely to my knowledge in this field ”

“ Attending the workshop on RENKEI Control Feasibility Analysis During Energy Audits was an incredibly enriching experience. The comprehensive coverage of RENKEI control systems and integration into energy audits provided valuable insights into optimizing energy efficiency in our organization ”

“ It is a good opportunity for an existing company/factory to capitalized on the assessment tools to ensure future operation saving & emission compliance. ”

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