

**Now, Everyone
Can Contribute to**

ENERGY EFFICIENCY & CONSERVATION

An In-House Awareness Workshop



MyHS00015/22-E002

Overview of the Awareness Course

This awareness course focuses on empowering an organisation and its staff to embrace sustainability culture. It emphasises on sustainable energy management as a key element of an Environmental, Social and Governance (ESG) program, and guides staff of an organisation to implement practical energy efficiency and conservation (EE&C) measures to achieve cost-efficiency and to build organizational excellence and resilience.

Learning Outcomes

At the end of the course, it is expected that participants will:

- Appreciate the key drivers and impacts of energy use on the organization, society, climate and the environment.
- Be able to apply systematic, practical steps to implement energy efficiency and conservation (EE&C) measures and manage GHG emissions for an organisation.
- Understand the cost-benefits of implementing EE&C measures via simple cost-savings analysis.

Course Schedule

Time	Topic	Course Tutor
9:00 am – 10:00 am	Energy use and impact on the GHG emissions, climate, environment and organisations.	Prof. Ir. Ts. Dr. Zainuddin Abdul Manan
10:00 am – 10:30 am	Energy and emissions management.	
10:30 am – 10:45 am	Break	
10:45 am – 11:45 am	Practical EE&C measures in an organization.	Assoc. Prof. Ts. Dr. Jasrul Jamani Bin Jamian
11:45 am – 13:00 pm	Cost-benefit analysis of implementing EE&C measures.	

Targeted Participants

All staff of an organisation.

TRAINERS' PROFILES



TRAINER 1

PROF IR TS DR ZAINUDDIN ABDUL MANAN

Zainuddin Abdul Manan is a professor of chemical and energy engineering, the founder of UTM Process Systems Engineering Centre (PROSPECT), founding Dean of UTM Faculty of Chemical and Energy Engineering, founder of UTM Sustainable Energy Management Program and the CEO and founder of the UTM spin-off company OPTIMISE Sdn Bhd. He began his career as an engineer in PETRONAS and Hume Industries and has been an educator, researcher, consultant and professional coach for over 25 years.

He completed over 100 R&D & consultancy projects serving local and multinational companies, has numerous patents and over 500 publications that include books, refereed journals and conference proceedings on energy and resource conservation using process integration techniques. He is a co-author of the globally referred book on Sustainable Process Integration– Saving Energy, Water and Resources. Zain is a UK/EU chartered engineer, a Fellow IChemE (UK), Fellow of Academy of Sciences Malaysia (ASM), a professional engineer, a professional technologist, a certified energy manager, a registered electrical energy manager and a certified trainer for ASEAN energy managers.

He has coached professionals from over 500 organisations and delivered over 400 invited talks in professional courses, conferences and seminars worldwide. Zain is the Chair of the Energy Efficiency and Conservation Act (EECA–Thermal Energy) Drafting Committee under the Ministry of Energy and Natural Resources. He founded and spearheaded the UTM Sustainable Energy Management initiative that led UTM to save over USD 7 million energy costs between 2011 and 2020, to win the ASEAN Energy Awards, and to be ranked 1st globally on Affordable and Clean Energy (SDG-7) by the Times Higher Education.



TRAINER 2

ASSOC. PROF. TS. DR. JASRUL JAMANI BIN JAMIAN

Dr. Jasrul Jamani Bin Jamian received the Bachelor of Engineering (B. Eng. (Hons)) degree, Master of Engineering (M. Eng.) and Ph.D degree in electrical (power) engineering from Universiti Teknologi Malaysia in 2008, 2010 and 2013 respectively. He is currently director for Power Engineering Division, School of Electrical Engineering, Universiti Teknologi Malaysia. Dr Jasrul is actively involved in research as a principal investigator as well as leader in consultancy projects with several companies such as Petronas and Tenaga Nasional Berhad, which focuses on relay coordination projects and off grid solar PV design. He is the author and co-author of more than 80 publications in international journals and proceedings in the area of Power Systems and Energy. His expertise includes Network Reconfiguration, Optimization technique, and Renewable Energy.

UTM Achievements in Energy Management spearheaded by advisors and experts from OPTIMISE



ASEAN Member Countries



Developer of MGTC ASEAN EMS
Gold Standard

- Ranked 1st Globally on Affordable & Clean Energy (SDG7)
- 1st ASEAN-EMGS 3* Energy-Efficient Facility
- Winner of ASEAN Energy Award 2012, 2022
- RM30 Million Energy Saving 2011-2020
- 10 Registered Electrical Energy Managers
- 50 Certified Energy Managers (CEMs)
- A Centre for Energy Managers Certification
- Centre for Continuing Education in SEM
- Certified ASEAN/ISO50001 Trainers/Auditor
- RDCC Leader in Thermal Energy Efficiency

WHAT OUR TRAINEES *Said*



the course provides a very good understanding on how, by selecting the right equipment, we tend to save the power consumption which eventually helps the environment and sustainability as well.

MERA JANE

TRAINING SPECIALIST
DYSON MALAYSIA

Now, Everyone Can Contribute Toward Energy
Efficiency and Conservation participants



This course explains the concept of energy in an easy to understand way. It includes practical tips on energy saving which I can practice in daily life

CHRIS CHEAR

IT MANAGER
DYSON MALAYSIA

Now, Everyone Can Contribute Toward Energy
Efficiency and Conservation participants



It is good that the presenters prepared the slides based on the audience's job background.

MUHAMMAD IQBAL HASSAN

SENIOR MECHANICAL ENGINEER
DYSON MALAYSIA

Now, Everyone Can Contribute Toward Energy
Efficiency and Conservation participants