

CPD TRAINING COURSE

AN INTRODUCTION TO ENERGY MARKET FUNDAMENTALS AND EMERGING TRENDS



FOR MORE
INFORMATION VISIT
www.engineersireland.ie
OR CONTACT US ON
01 6651305 OR
cpdtraining@engineersireland.ie

Overview

This course is designed to provide a wide breadth of energy issues, including the fundamentals and evolving factors within the energy supply chain, policy and regulation, market structure, economics and the emerging trends in technologies, consumer behaviour and business models. The course primarily focuses on the electricity sector, however due to the increasingly integrated and complex energy systems, the course will also include energy requirements impacting heating and transport sectors.

Course Objectives

After the course, the participants should be able to:

- Understand the fundamentals of energy market, including its supply chain, economics and regulation.
- Understand the economics of electricity wholesale price formation.
- Gain a basic overview of Ireland's Single Electricity Market (SEM), as well as a brief overview of the new I-SEM (Integrated – Single Electricity Market) and GB's British Electricity Trading and Transmission Arrangements (BETTA).
- Understand the basic economics of the complete supply-chain of electricity, from generation, transmission, distribution to retail supply.
- Undertake economic evaluation of electricity generation projects including grid-connected projects and on-site generation (distributed generation such as Combined Heat and Power, Solar PV etc.) by utilising economic/financial measures such as levelised cost of energy, net present value, payback and internal rate of return.
- Understand Ireland's decarbonisation targets and options available to policy makers.
- Gain an overview of the emerging trends in technologies (status of various technologies including wind, solar, battery storage, biogas, electric transport, heat pumps, carbon capture and storage, ocean etc.).
- Gain an appreciation of the changing energy landscape and potential impacts for business and residential energy supplies.

Who Should Attend

Consulting Engineers, Civil Engineers, Local Authority Engineers, Environmental Consultants and all those interested in gaining more insights in the energy sector.

Trainer

Eric Khoo – Senior Consultant – Strategic Advisory, ESB International

Eric has over 17 years' experience within the energy sector involving engineering, commercial and economic capacity. Eric has a BEng in mechanical engineering and is a member of Engineers Ireland (MIEI). He also qualified with an MBA and is a charterholder of Chartered Financial Analyst (CFA). Eric is currently a senior energy consultant in strategic advisory services within ESB International.