

Energy: Markets, Models and Strategies

Subject Area	Management Science & Operations
Lecturer	Derek W. Bunn
Course Code	E348
Term	AUT09
Credit Value	1

Aims & Objectives

This course provides an introduction to an industrial sector of worldwide importance, and one in which there are now many business challenges through market restructuring and liberalisation. It focuses mainly upon electricity, gas and carbon trading, but is also relevant to students wishing to be familiar with related issues affecting the oil sector.

Topics Covered

- Power system economics, regulation and market liberalisations
- Understanding value creation and migration in the sector
- Carbon-trading and low carbon technologies
- Gas and power convergence, and their links to oil
- Modelling prices and strategic behaviour in the competitive markets.

Format & Teaching Methods

Lectures, plus practical workshops using simulation and risk analysis models, together with several outside experts from industry

Pre-requisites & Input Required

The course does not make specific requirements, but pre-reading will be distributed.

Assignments & Assessments

Individual Summary of a market simulation exercise (50%). Group Paper due after the end of the block week (50%).