

Spring 2013

AGB 494-Topic: Development of Energy Economics (Section #: 21179)

Instructor: Dr. Yueming (Lucy) Qiu , Assistant Professor, yueming.qiu@asu.edu

This course applies economic theories and empirical tools to understand energy resources and markets, including coal, electricity, oil, natural gas, renewable energy and energy efficiency industries, as well as the influence of energy resources on climate change and the role of government policies. The course will examine the supply and demand, market structure, game theory, environmental issues, energy policy, energy regulation, and dynamic optimization of energy resources. The emphasis in the course is on the development of appropriate economic models and their application to current issues in energy industry and energy policy.

Examples of the types of issues addressed include:

- Impact of the recent explosion in natural gas production from shales and the potential increase in unconventional oil production on U.S. energy industry and policy regime
- Consequences of electricity deregulation in California: blackouts, skyrocketing prices, etc
- Justifications for government to support expensive clean energy technologies such as solar and wind energy
- Behavior issues in the adoption of clean energy and energy efficiency strategies

Course Objectives

- Understand basic economic concepts that underlie energy supply and demand.
- Understand how institutions affect energy industry.
- Become familiar with historical and contemporary public policy issues related to energy.
- Be able to apply this knowledge to analysis of specific energy industries and policy questions.

There are no formal course prerequisites for this course.

About the instructor: Dr. Qiu is an assistant professor in resource economics in the Morrison School of Agribusiness and Resource Management. Her main research area is energy economics. She has worked on research projects on wind energy, energy efficiency in the commercial and industrial sectors, and energy in transportation sector. Before coming to ASU, she was a Ph.D student at Stanford University, where she taught classes on energy resources and energy systems.