

Energy Economics

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Content

International energy markets have the following characteristics: international and large market (oil is by far the most valuable trade, several oil companies are among the 10 largest), dependence on exhaustible resource, the importance of externalities (largely environmental, e.g. SO₂, CO₂, etc.), public ownership and/or regulation of utilities. Related to the last issue are topics from industrial organization and Public Choice. Last but not least, this industry is characterized by dramatic changes due to the world-wide deregulations and privatization of formerly nationalized and regulated industries, not to mention the turmoils in energy markets (high oil prices, interruption of gas supplies from Russia, shale gas, global warming and emission trading,)

This course will consists of the following where the topics and particular emphasis may be chosen by the students:

1. Survey of international energy markets
2. Exhaustible resources
3. Alternative energy (backstops) and renewables
4. Oil price volatility
5. Externalities (basics) and special energy related problems like global warming and here taxes versus permits
6. Public utility economics (ownership, regulation)
7. Electricity markets
8. Natural gas markets: contracts and distribution networks (pipeline vs LNG)
9. Energy market related issues: IO, engineering and some methods.

Teaching

The topics will be covered in the form of a traditional lecture relying by and large on own compiled material rather than standard textbook. In fact, I do not even know a satisfactory text book on energy economics.

Goals

To acquire an understanding of some of the fundamental issues of energy markets. Indeed, I personally consider the real world problems and issues from energy markets as stimulating even for purely theoretical investigations.

Grading Method

The grading will be based on the following:

1. A standard test about the material presented in course (60%).
2. Active participation in the course (40%).