

# **Study Questions to Accompany International Energy Markets**

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## **Chapter 1. Introduction**

**1.1** There are four fundamental factors of production.

**1.1a** What are they?

**1.1b** Give a specific example of each for one energy source.

**1.2** What are the four fundamental forces of energy.

**1.3** Fusion and fission are two nuclear reactions.

**1.3a** What is the difference between them?

**1.3b** Do these reactions both release energy?

**1.3c.** Which of the four fundamental forces governs these two reactions?

**1.4** If energy can neither be created or destroyed, why is there energy scarcity?

**1.5** What are the seven forms of electromagnetic radiation? What creates them? How do they differ from each other. For each type of radiation you have benefited from give an example of the benefit. Do some research to see which category wifi and blu-ray fit into.

**1.6** What are the six forms that commercial energy comes in? For each type of radiation you have benefited from in the last month give an example of the benefit.

**1.7** What is the difference between static and dynamic analysis?

**1.8** What are the characteristics of pure public goods? Is information a pure public good? Why or why not?

**1.9** For economists, risk is the possibility of gain or loss. Financial derivatives allow market participants to transfer risk. Two types of financial derivatives are futures and options. What is the basic difference between these two types of assets?

**1.10** As long as humans have been around, we have been using energy.

**1.10a.** Imagine and write a short description of energy use for one day in the life of some historical figure that you admire. Give the name and approximate date they lived. They should have lived at least 500 years ago.

**1.10b** For a typical day in your life do you get energy from any of the same sources.