

Strategies for Sustainable Energy

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Homework Assignment #1 Motivation

assigned: Thursday, April, 7, 2011

due: Tuesday, April, 28, 2011 at the beginning of class

In “Sustainable Energy—without the hot air”, the author presents three motivations for the search for a sustainable energy strategy. They are

- fossil fuels are a finite resource
- energy security (many fossil fuels are located in politically unstable regions of the world, like the Middle East)
- fossil fuels probably cause climate change

The examples and numbers in this text book are taken from the United Kingdom, but the same arguments apply to the Republic of Korea (ROK). To this end, perform each of the following tasks. To answer these questions, use any resources available to you. You may use the library or the internet or other resources as appropriate. You must provide the source of your information. If you use the internet, you must provide the URL. If you use a book from the library, you must provide the title, author, publisher, year of publication and page number

1. What fraction of the energy usage in the ROK comes from fossil fuels? (Find the most recent data available and report the year to which it applies.)
2. Where do the fossil fuels used by the ROK come from? (What fraction is domestic? What fraction comes from the Middle East?)
3. Are there any examples of climate change that have been observed in the ROK?