Strategies for Sustainable Energy

David J. Keffer
Department of Chemical and Biomolecular Engineering
Yonsei University
dkeffer@utk.edu

Homework Assignment #2 Consumption

assigned: Thursday, April 27, 2011

due: Thursday, May 12, 2011 at the beginning of class

In "Sustainable Energy—without the hot air", the author presents the consumption of the average citizen in the United Kingdom. He breaks consumption down into 9 categories.

- cars
- planes
- heating & cooling
- light
- gadgets
- food, farming & fertilizer (agriculture)
- manufacture of material goods (stuff)
- transportation of material goods (stuff)
- national defense

It adds up to 195 kWh per day per person.

1. Compile a table for energy use in Korea. Use the latest data you can find. Report the results in units of kWh per day per person. If possible, find numbers for each of the 9 categories. If you find a source that gives a total energy usage per person and breaks it down according to a different set of categories, try to make a correspondence between the categories in this list and the categories in your list. The point is that the two lists can only be compared if they contain the same items. If the list you assemble does not contain an estimate for the manufacture of material goods beyond Korean borders then it will likely yield a much smaller total than that in the text book. As always use any reliable source you can find, but you must cite the source in your homework. Do the best you can. If you can't find all of the categories, compare those categories where you did find numbers.