

Due at the beginning of class, Wednesday February 8

- 1) Post your experience in not throwing anything away. This is absolutely due on Monday, Feb. 6th. The website is: <http://appropriatetechnology.wikispaces.com/Don%27t+Throw+Anything+Away>
- 2) Do your midterm again in stellar fashion. Please hand these corrections in to be graded
- 3) You're at a cocktail party, and someone screams, "we'll be out of oil by the end of the decade!" Pandemonium ensues. Mike screams, "We'll suck out the last drop soon and then, ***BAM***, no more oil!" The economists despair, the environmentalists rejoice. You need to calm the hysteria. Explain that it's a little more complicated than what Mike says, and describe what it means to "run out of oil", and describe what it will be like. Please include all following considerations:
 - a) Supply and demand and market price
 - b) technological
 - c) Upstream energy use, and emissions
 - d) environmental,
 - e) economic
 - f) political, and
 - g) Environmental Justice. Are any groups disproportionately harmed?
- 4) Please look at the graph from Friday's video. Comment on a few things:
 - a) Starting around 1955, what started to happen and what effect did it have on USA security?
 - b) Note very recently, there has been an abrupt shift in the consumption and the production of petroleum in the USA. What caused that?
 - c) Has the trend (in b above) continued, increased, decreased? Please do some internet research (careful about which websites you believe).
 - d) What do you expect to see happen under the new federal administration?
- 5) The economist says, "In order for the market to work, the decision maker must bare the full cost."
 - a) What do we mean by "the petroleum market is working"?
 - b) Name some external costs.
 - c) Name some subsidies?
 - d) How do these make the market not work so well?
 - e) What could be done, and how would it work out?
- 6) John Keller is an astronomy prof at Cal Poly and also studies education and public understanding. He told me about 5 years ago that the public doesn't distinguish climate change from ozone hole. I responded that my students certainly could. I proved it to him by putting it on the final exam. He was right. So, please distinguish these two very different environmental concerns:
 - a) What are the different anthropogenic gasses that cause the two different problems? Do they have any source gasses in common?
 - b) What is the physical effect of these man-made emissions?
 - c) What is the biological effect of these man-made emissions?
 - d) What is the remedy? Are they different? What are the challenges for each? Is one more difficult than the other to "fix"? Why?

