

1. What was the effect of a pollution tax on the “Pink Flamingo economy” of the ENVS 112 class? Based on your observation, do pollution taxes seem to be a rational approach to the problems of environmental pollution.

The pollution tax captured the cost to society (i.e., damage to society of each flamingo on a lawn). Adding the tax increased the cost to the seller, which meant the seller price increased by that amount which left fewer buyers who would spend that much on a flamingo. The result was to lower the number of flamingos sold, which means that the cost to society of flamingos was also lowered, which may (or may not) seem like a rational approach to environmental issues.

2. Comment on the following statement: “electric cars are a part of the solution to our energy problems”

Electric cars run on batteries. Batteries are not a primary energy source. The primary energy source is electricity. Most of this country’s energy comes from coal, so carbon emissions are not reduced by the use of electric cars unless an alternative energy source can be found to produce electricity. Coal is plentiful, so electric cars based on coal production does, at least, lower our dependency on foreign oil, but it is still not a sustainable resource.

3. “...the U.S. can be called the most over-populated nation.” Explain this quote from Erhlich & Ehrlich, Environmental Law (vol. 27, no. 4) 1997

Erhlich was referring to the concept of IPAT. Although we are not the most populous nation in the world, our per capita consumption is higher than any other country, which means our effect on the earth is greater than any other nation.

4. What are external costs (in an economic sense) and why does the price of gasoline in Knox County not reflect such costs?

External costs are those not captured by the market; they affect the “bystanders”, i.e., those people not involved in the transaction of interest. Gasoline has very high external costs, such as carbon emissions, \$\$ spent on defense to keep the Mideast oil coming to the U.S., tax subsidies, etc. None of these costs are included in the price of gasoline at the pump, which only reflects the cost of acquiring and processing the oil.

5. What are ecosystem services? How might their valuation help lead to better environmental decision-making?

Ecosystem services are functions and goods provided by natural ecosystems to humans. These include such things as water purification, pollination, erosion prevention and numerous other benefits. The degradation of these services is not recognized in the market, generally. By valuing such services, we might better understand the true costs of human effects on the environment and might be able to make better decisions with regard to environmental degradation.