M3A1

* Why are the EROI values for U.S. ethanol fuel from corn different in the studies performed by Shapouri, et al. (2004), Pimentel and Patzek (2005), and Farrell, et al. (2006)? Explain in terms of input energy and co-product energy.
* Describe a case study of the analytical code PRISM developed at Princeton University. Include the company or institution using the software, what data was monitored, and how efficiency intervention was evaluated.
* Table 5.10 lists the average emission rates of CO2, SOx, NOx, and Hg for Washington, California, Virginia, and West Virginia. What 5 states have the highest emission rates? What modifications to the plants in these states are being made to lower emissions? Are new plants being built in these states to replace the high emitters?

With the author offering math equations that suggest his own children smell as well as they used to, after he cut their allocation of shower water from 50 gallons per shower to 20 gallons. He either stands with a stopwatch outside the shower, increasing the wasted time unaccounted for in his equation; or he altogether misses the fact that they, being rational and desiring to be clean in spite of the Spartan shower heads their dad and the federal government now mandate, must now take a 25 minute shower to get equally as clean as they used to. Can we all agree the author advocates that our personal hygiene and/or convenience are to be sacrificed on his altar of “save the planet from evil humans like himself”? I’m not buying it. I like a 50 gallon shower. I rarely take one, but when I want one it should be up to me whether to have it in 10 minutes versus waiting for 25 minutes. Water fast, hot and hard, please? Now – not when the government is ready for me to have it. I’ve had plenty of one-gallon showers while serving in the military to preserve a society such as ours, where people are free to be idiots who believe they should use less water because of the Global Warming Hoax; in spite of its having been proven perpetrated by or against them; their comfort, and (in this case) their personal hygiene. Yet another reason they are rightly called the great unwashed…

As for EROI, we are being stiffed on it by congress and our university-cum-indoctrination system. Anyone missing the fact that we are being stiffed out of 60% of our shower water deserves to smell, but do I have to smell ‘em?

The samples provided by Shapouri, e. al (2004), Pimentel and Patzek (2005) and Farrel, et. al. (2006) are different for a variety of reasons. Varying levels of sugars in corn from different years based on sunshine and rain, planting and harvest time yield different results after processing. Favorable EROIs categorically use optimal “Iowa” conditions, and extrapolate that across all corn as though one could match growing conditions in the Arizona desert with equal fertilizer and tillage rates. (Murphy, D.) Statistical errors in the samplings should be subjected to Steve McIntyre and Anthony Watts, as their statistical analysis has proven fallacies in any number of Global Warmist Fantasies.

PRISM (PRinceton Scorekeeping Method, developed and copyrighted by Princeton University) analysis involves tracking utility bills year-over-year, with adjustments for weather. The model performs statistical analysis on utility bills and average daily temperatures, providing users with before-and-after looks at energy consumption in light of cost-abatement or cost-increasing measures like insulating or installing a new piece of equipment. The process of this data collection and analysis is a Normalized Annual Consumption (NAC) figure.

 The case study I observed was for a home in the northwestern US in 1984. According to the researcher, “Overall, the NAC declined by 28%, from 12,600 kWh/year to 9,100 kWh/ year.” (Fels, Kissock, Marean, and Reynolds)

PRISM offers visibility of modifications against a somewhat standardized backdrop and allows calculations of savings from installing, for instance, insulation or low E glass windows. Extrapolated across building types, these data can be compared to demonstrate prospective savings and therefore help in decision-making. For instance, in my house in Michigan, adding R19 versus the added up-front cost for R30 insulation.

REFERENCES

Murphy, D. (28JUL2010), The net energy of ethanol minimal: study., Retrieved from <http://www.countercurrents.org/murphy280710.htm>.

Fels, M., Kissock, K., Marean, M., and Reynolds, C. (1995), Advancing the art of prism analysis, Retrieved from <http://www.homeenergy.org/show/article/nav/software/page/3/id/1141>