ESRP 285: Class Paper at End of Class

Each student will write a paper on a climate topic of personal interest. The papers are due at the final class meeting on December 6, 2011. The paper can deal with topics from either part of the class:

- Part 1: The Science of Climate Change
- Part 2: Energy Policy: Reducing CO2 emissions from the energy system
- Part 3: Carbon Policy: Putting a price on CO2 emissions

Students can select a topic of personal interest. Two examples of recent student interests will illustrate.

One student is interested in learning more about the science, especially the geologic sciences. She wants to learn more about how the geologic record can build our understanding of climate change. She understood the class lectures on the 400-thousand year geologic record shown in Figure 1. And she understood Spencer Weart’s description of the geologic record in the text for Part 1 of the class. Her paper dealt with lessons from the geologic record in the more distant past (going back much further than 400 thousand). Her paper will describe what geologists can teach us about the climate system based on the more distant record.

A challenge for every student paper is to connect conclusions of personal interest to the conclusions from the class. In this geologic example, the student will described whether the lessons from the more distant record reinforced or contradicted lessons drawn from Figure 1.

The second student example involves electric vehicles. This student enjoyed learning about policies to promote production and sale of more efficient and cleaner cars. He was interested in the case for the Corporate Average Fuel Efficiency standards to improve MPG of conventional vehicles, and he was even more interested in the feebates policy to promote increased sale of electric vehicles. The student did a lot of reading on vehicle technologies, and he wrote his paper about the prospects for electric vehicles to be developed with greater range and greater horsepower. The paper described vehicles with various types of batteries and designs. Then he commented on how these vehicles might change the results from the classroom experiments with the feebate policy.

Figure 1. Geologic record stressed in ESRP 285 lectures.
Freedom of Choice

These examples illustrate how previous students used the class paper to explore a topic of personal interest. You should do the same. For example, if you are interested in carbon policy in other countries, you may write your paper about the other country’s policies. You would then describe how those policies compare with the policies in the described in ESRP 285 for the USA. Perhaps you want to learn more about the climate policies in your favorite state. (Washington, Oregon and California all have interesting policies with website access.) You could use your class paper to describe your state’s policies and how they compare with the federal policies described in class.

Format and Length of the Report

The TEXT portion of previous students’ reports have required around 3 pages (single spaced) to do a good job. When previous students added in figures, tables or images, the papers were around 5-6 pages in length.

Your own paper can be shorter or longer than the previous examples. You should aim for clarity, not for length.

You will be explaining findings from various reports, articles, books and websites. These sources of information should be cited when you make use of them, and there should be a list of references at the end of the paper. Follow the format for citations and references used in my book chapter on “Global Climate Change and the Electric Power Industry.”