Global Change – Readings and Assignment

**Suggested reference books:**

**Suggested reference articles:**


Note: many of the articles above are available online through http://www.library.unr.edu/online/ejournals.asp

Suggested reference web sites:
Carbon Dioxide Information Analysis Center: http://cdiac.esd.ornl.gov/
Congressional Research Report on climate change: http://ncseonline.org/NLE/CRS/
DOE Global Change Research: http://www.science.doe.gov/ober/CCRD_top.html
Global Climate Information Programme: http://www.cate.mmu.ac.uk/global.asp
Intergovernment Panel on Climate Change: http://www.ipcc.ch/
United Nations Framework Convention on Climate Change: http://www.unfccc.de/
ASSIGNMENT – BN #2
Due: Thursday, April 18, 2006 at 1 PM

The purpose of this assignment is to consider and discuss the potential impacts of increased greenhouse gases on a region of the U.S. or of the world, and then consider and discuss potential ways to mitigate those impacts.

First, select a region of the U.S. or of the world.

Second, use the literature and web sites to determine what are the potential impacts of global changes caused by increased greenhouse gases on that particular region. Note that the global changes may include changes in temperature, precipitation, atmospheric CO₂ concentration, etc. Predicted changes for that region also may be increases or decreases in the annual values, or may be changes in the seasonal distribution of those values.

Third, describe 2 specific policies that you would like to see implemented that would mitigate or reduce the potential for adverse effects of increased greenhouse gases on this particular region. These policies could be something that occurs at a scale large than the particular region or could be very specific to you selected region.

As in any human endeavor, some uncertainty exists in our ability to predict the future. Thus, predicted global changes may or may not occur to the extent as predicted, and some contend that we do not even have the direction of the change correct. One approach to implementing a policy and its associated management actions is to examine the potential benefits (and detriments) of the policy (and its associated management actions) under various scenarios, i.e. what is the “pay-off” of implementing (or not implementing) the policy/actions given that the future may (or may not) be as predicted and the policy/actions may (or may not) have the desired effect. For 1 of your 2 policies, describe in more details:

1. What are the potential benefits and detriments of your policy for the scenario where our climate predictions are correct (i.e. global warming is actually occurring due to increased greenhouse gases)?
2. What are the potential benefits and detriments of your policy for the scenario where our climate predictions are NOT correct?
3. What are the potential benefits and detriments of NOT implementing your policy for the scenario where our climate predictions are correct?
4. What are the potential benefits and detriments of NOT implementing your policy for the scenario where our climate predictions are NOT correct?
5. Does the “pay-off” from your policy outweigh the “costs”? Be prepared to provide a rationale for your decision.

Be sure to discuss the strength of the science behind a policy of reducing greenhouse gasses and its associated management actions. Also, discuss the social, political, and economic factors that would impact the policy decision and its associated management actions as well as how these factors would be affected by the policy/actions.

Undergraduates should have a total of 10 different citations in their paper, and graduate students should have at least 14 different citations. For all students, at least 6 of those citations should be from journals or books.