

Rampant Negativity – No Reason to be so Glum

Predictably, as scientific evidence clarifies that the dangerous level of atmospheric CO₂ is at hand, there are cries that it is impractical to avoid climate catastrophe. Such negativity is part of the playbook of those who stand to gain from business-as-usual. A recent report by the Scripps Howard News Service claims that I stated “we must reduce greenhouse gases by 80 percent within 12 years or it will be too late to prevent a climate catastrophe.” What nonsense.

The “Peak Oil” paper by Kharecha and Hansen has been accepted for publication in Global Biogeochemical Cycles. The final form is available at <http://arxiv.org/pdf/0704.2782v3>

In this paper we show that if emissions from coal are phased out linearly between 2020 and 2050 atmospheric CO₂ will not exceed ~450 ppm, with the exact peak CO₂ depending on the true amount of oil and gas reserves, about which there is some dispute. (Long-term coal use is permitted, but only with carbon capture and storage). The ~450 ppm CO₂ peak also depends on the assumption that the world does not turn to unconventional fossil fuels (such as tar shale) as fossil fuels are depleted. Emissions from unconventional fossil fuels so far are negligible (mainly a small bit from tar sands), and that will always be the case if an appropriate price is placed on carbon emissions.

In our draft (http://www.columbia.edu/~jeh1/2008/TargetCO2_20080317.pdf) “Target CO₂” paper we show that 450 ppm CO₂ is far into the dangerous zone, and we recommend a goal of phasing out coal emissions by 2030 (the practical difficulty of phasing out coal emissions in 20-25 years is acknowledged and discussed at the end of the paper). This keeps peak CO₂ close to 400 ppm, again with some variation depending on the magnitude of true undiscovered oil reserves.

People can help assure that maximum CO₂ stays close to 400 ppm by vociferously opposing oil drilling in environmentally sensitive regions such as the Arctic and Antarctic, on public land, in off-shore regions where states and other governments can foil the desire of oil companies to extract every last drop of oil, etc. Of course the most effective way to assure that we do not act as desperate addicts, refusing to move to the cleaner world beyond fossil fuels, tearing up the land for every last bit of fossil fuels, is via a significant and gradually rising price on carbon emissions.

The public must take the lead, because there are so many “well-oiled” officials in our governments, and not just in the United States. To summarize the present and prior discussions, important things that the public can do are:

1. Fight for a moratorium on new coal-fired power plants,
2. Oppose extraction of fossil fuels in public and environmentally sensitive regions,
3. Vote for politicians who take the Stewardship pledge (http://www.columbia.edu/~jeh1/mailings/20070802_Stewardship.pdf)
-- do not vote for “well-oiled” politicians who accept funding from fossil fuel interests.

The Earth’s history shows us that we cannot put all the carbon in fossil fuels back into the air without producing a very different planet from the one to which humanity is adapted. There is still time to phase off fossil fuels, but it requires sensible policies in the public interest. This will not be easy: the special interests are pouring huge amounts of funding into disinformation campaigns. More on this soon.