

Read this prelude to Dr Goldberg's video before watching.

In this video Fred Goldman presents an overview of the AGW/CC (anthropogenic global warming/carbon cycle) controversy. One of the most important points he makes relates to human contribution of CO₂ to the atmosphere, and what it means.

A few reminders might make it easier to follow:

The atmosphere contains about 800 gigatons of CO₂ (=400 ppmv). At the present time, man contributes about 8 gigatons/year from burning fossil fuels, making concrete, etc.

About 90 % of the greenhouse effect (perhaps 33 degrees C) is due to water vapor, about 5% is due to CO₂, and about 5% is due to other GHG's, according to Goldman.

About 224 gigatons of atmospheric CO₂ is recycled each year thru the carbon (CO₂) cycle involving the ocean and biological processes (see carbon cycle chart), or about 28% of the 800 gt's of CO₂ in the atmosphere. This means that the residence time of any manmade CO₂ added to the atmosphere is about 5 years, decreasing at the rate of 28% / year.

The solubility ratio of CO₂ in sea water to the atmosphere is about 50:1 (or perhaps 32:1), depending on the temperature (following Henry's Law).

Therefore, if man has contributed about 8 gt CO₂ / year for 50 years, he has added 400 gt CO₂ to the atmosphere, of which about $400 / 50 = 8$ gt of manmade CO₂ remains in the atmosphere after equilibration, plus any additional CO₂ produced in the past 5 years that has not been equilibrated, about 22 gt. Therefore, man is responsible for about $8 \text{ gt} + 22 \text{ gt} = 30$ gt of the 800 gt of CO₂ in the atmosphere, or 3.75% of atmospheric CO₂.

If atmospheric CO₂ is responsible for 5% of the GHE (greenhouse effect), then man is responsible for $3.75\% \times 5\% \times 33 \text{ degrees C} = 0.06 \text{ degrees C}$ increase in the present temperature, due to his production of CO₂.

The above discussion should make it easier to follow Dr. Goldman in his presentation. Henry's Law explains the outgassing of CO₂ by the warming oceans since the last Little Ice Age, which ended around 1850.

Two conclusions should be evident:

- 1) If the effect of man's contribution of CO₂ on the earth's temperature is insignificant, then the suppression of clean hydrocarbon energy (such as clean coal) is not only a fool's errand, but it is detrimental to our economy, our standard of living, our national security, our freedom, and hurts the poor the most.
- 2) Regardless of the source of increasing CO₂, such as degassing of the oceans, there is no reason to suppress CO₂ levels via sequestration or suppress hydrocarbon energy (upon which we are still dependent) since it does not significantly increase the temperature past 100 ppmv, is not a pollutant, and more is good for plants and animals via photosynthesis.

One reason to preserve hydrocarbons is for their synthetic uses which are universal, after we are energy sufficient using clean nuclear energy and other forms of energy which might be developed in the future, and which are not so environmentally destructive such as wind and solar at present.

So, we should ask ourselves why the science has been perverted, why the scientific organizations have prostituted themselves; why the environmentalists support wasting trillions of dollars trying to solve a non-problem instead of solving real, solvable

problems; why the politicians have failed to stop the radical, agenda driven social transformers who are piggybacking on the green movement to promote their transformation efforts based on scaremongering, over regulation, and climate lies; and we know why the special interests support the fraud.

These are the Bedfellows.