CLIMATE – THERE IS NO EMERGENCY

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Summary

There is increasing concern by governments and activists bordering on panic over what they claim to be catastrophic global warming driven by the rising concentration of carbon dioxide in the atmosphere emitted from human activities. This "emergency" first arose from a theory proposed by Svante Arrhenius in 1896 that the combustion of fossil fuel emitting "Greenhouse" gasses would eventually result in enhanced global warming. The main greenhouse gases include carbon dioxide, methane and water vapour and complex computer modelling, accepted unconditionally by governments, predicts that the increasing concentrations of carbon dioxide in the atmosphere is leading the world into a climate disaster.

In addition to the many studies that contradict those views, a recent study of official daily temperatures across cities globally showed no visible correlation between the small steady linear temperature growth of 1.8 ^{O}C per century recorded against the exponentially increasing concentration of carbon dioxide in the atmosphere.

In reality, the claimed global warming emergency due to carbon dioxide does not exist and associated costly and disruptive government gas mitigation policies should be abandoned immediately.

1. What Influences Climate

The earth's climate is changing, always has, always will, controlled by cosmic, global, and local influences. Humans have no control over cosmic and global influences and only minor control over local influences. Cosmic and global influences on climate arise from the constant movements of planetary systems within our galaxy and more locally within our solar system with cycles ranging from daily - to a few years - to hundreds of thousands of years – to millions of years. The most familiar is the day/night/day cycle, yearly seasonal changes, and the 11-year sunspot cycle. Local influences are many and varied and include the topography of the site in question, and its location within that topography.

2. Global Temperatures During Past Few Decades

Global temperatures continue to rise as they have for decades and, not surprisingly, sometimes accompanied by climate extremes gleefully reported by the media. The average rate of increase in measured temperatures from recent data obtained for 19 global cities, regions and towns was a steady 0.018 ^{O}C per year, well within the glacial range of temperature increases (from Ice Core measurements) [1] [2]. This increase of 0.018 ^{O}C per year represents 1.8 ^{O}C every 100 years, slightly more than the value released recently by the Australian Meteorological Bureau (31 October 2024): "…since 1910 (114 years ago) temperatures in Australia have risen by 1.5 ^{O}C…."

3. Recent Geological Past

Ice core measurements show that the concentration of carbon dioxide in the atmosphere has been relatively constant during the past 20,000 years, ranging from a glacial maximum of 200 ppm through to 280 ppm during the interglacial period to the current level of 425 ppm, trending higher than in the past due to human activities such as fossil fuel emissions, deforestation and population increases. These impacts are puny in comparison to major volcanic events.

4. The Past 450,000 Years - Temperature Cycles

Measurements of temperatures from ice cores covering the period from 450,000 years ago to the present day, show both rises and falls within the range: -9.4 to +5.0 ^{O}C over major cycles of about 100,000 years [2]. Within those major cycles are sub-cycles in which the rate of change of temperatures ranges from 0.014 to 0.025 ^{O}C per year [3]. The earth is currently in one of those sub-cycles in line with the measured global city temperatures [1].

5. Distant Geological Past – Carboniferous (coal) and Mesozoic (oil and gas)

During the earth's ancient history dating from the Carboniferous Period 350 million years ago, the concentration of carbon dioxide in the atmosphere was sometimes as high as 2000 ppm [10], part of it being absorbed over time by living plants and animals on land and in the seas. When they died and their remains were absorbed by the earth, the carbon component ultimately became locked up as coal, oil, and gas as well as in minerals such as those contained in the white cliffs of Dover in the UK. Burning these fuels during the past two centuries has released the fossilised carbon back to the atmosphere, completing the well-known carbon cycle [9]. During this geological span, global temperatures were sometimes as much as 5 to 10 ^{O}C higher than now [11]. Under these higher temperatures, higher concentrations of carbon dioxide and higher humidity, plant and animal life flourished and boosted fossil fuel deposits.

6. The Greenhouse Process

Greenhouse gases are so named because they absorb infrared radiation emitted by the heated Earth's surface and re-radiate it in all directions, including back toward the earth's surface. The two main Greenhouse gases in the atmosphere are water vapour and carbon dioxide [5] [13]. The concentration of carbon dioxide is currently ~0.04% while the concentration of water vapour ranges from 0.0% to 4.0% depending upon the local weather, so water vapour can be up to 100 times more concentrated than carbon dioxide. Even at a low concentration of say, 1.0%, water vapour is still significantly more abundant than carbon dioxide at 0.04% [6] [7]. With 71% of the earth's surface covered by water, the influence of water vapour on global temperatures is reasonably constant when averaged over location and time. Importantly, that influence is limited to its maximum 4% level of concentration [8].

In research carried out on the molecular structure of water vapor and its atmospheric concentrations in a cloud-free atmosphere, carbon dioxide was shown to be responsible for ~33.0% of the greenhouse temperature forcing, and water vapor, ~66.0%. If clouds were present, water in all its phases was shown to be capable of exceeding 90% of the forcing effect [4].

For simplicity, the following calculations assume the greenhouse forcing by carbon dioxide to be 33.0% and there are no clouds. This can be considered as the strongest case for carbon dioxide with its maximum forcing effect on global temperatures.

7. The Total Greenhouse Effect on Temperatures

Assuming the above conditions, the question arises:

> *"of the current rise in global temperatures at the rate of 0.018 ^{O}C per year, how much of it is due to carbon dioxide"?*

The simplest way to view what is a complex process is to assume that the 0.018 ^{O}C rise in temperature is due entirely to greenhouse gases, and that humans are the sole source of all the recent increases in atmospheric carbon dioxide.

Note that this simplified approach implies that the Cosmic effects that have influenced the earth's climate for hundreds of millions of years have suddenly become inactive.

Using this logic, the 33.0% impact of carbon dioxide on the greenhouse temperature rise of 0.018 ^{O}C is 0.0059 ^{O}C per year. Since Australia's contribution to the world's carbon dioxide emissions is 1.02%, then its contribution to the global rise in temperature is 1.02% of the 0.0059 ^{O}C or 0.0000606 ^{O}C per year. This figure is also based on the assumption that, although the increasing concentration of carbon dioxide in the atmosphere is exponential, the rise in actual temperature as recorded for 19 cities and towns during the past two centuries remains linear. None of these linear city temperature rises correlate with the exponentially increasing carbon dioxide.

The above discussion is based on the best-case scenario for carbon dioxide as the main temperature forcing agent. It is only valid if (a) there are no clouds, (b) carbon dioxide is responsible for its full 33.0% of the greenhouse gas effect, (c) the overall rise in temperature of 0.018 ^{O}C per year is due entirely to greenhouse gases, and (d) Cosmic effects are absent.

8. Alternative View on the Effect of Greenhouse Gases on Global temperatures

There is detailed research from ice core temperature measurements [12] [14] [15] [16] demonstrating that the greenhouse effect on global temperatures is trivial because the relationship between temperature increases and increase in the concentration of carbon dioxide in the atmosphere is the reverse of that championed by climate emergency activists. This research shows that changes in global temperature over geological time precede rather than follow changes in the concentration carbon dioxide in the atmosphere, and that therefore, carbon dioxide has only a trivial influence on global temperatures over geological time.

In this view, the measured linear rise in global temperatures can therefore be attributed to cosmic influences that climate "emergency" activists ignore in favour of carbon dioxide.

These conclusions raise a key question: should the Australian government seriously damage the Australian economy through severe regulations, taxation, and subsidies towards zero emissions of carbon dioxide for the sake of avoiding a global temperature rise of 0.0000606 ^{O}C per year- or 0.00606 ^{O}C per century?

> *(This question and the following questions do not arise if the alternative view of greenhouse gases described above, is ultimately shown to be correct).*

The same argument applies to the USA which is responsible for 12.60% of the global emissions of carbon dioxide: should the US government seriously damage the US economy through severe regulations, taxation, and subsidies towards zero emissions of carbon dioxide for the sake of avoiding a global temperature rise of 0.000748 ^{O}C per year- or 0.0748 ^{O}C per century?

And a third question: should all world governments acting together seriously damage world economies for the sake of avoiding a global rise in temperature of 0.0059 ^{O}C per year or 0.59 ^{O}C per century (where the responsibilities are: Australia (1.02%): 0.0000605 ^{O}C, USA (12.60%): 0.000748 ^{O}C; other countries (86.38%): 0.00513 ^{O}C, total 0.0059 ^{O}C).

The logical answer to these questions is clearly in the negative – a loud NO!

9. Next Steps

Evidence that carbon dioxide is not responsible for the ongoing rise in global temperatures is convincing and based on unbiased research, so the following actions should be taken as soon as possible:

- Immediately lift all government restrictions on the exploration, extraction and use of coal, oil, and gas.
- Build new coal-fired or gas-fired power stations to address the increasing demand for power.
- Complete any renewable energy plants currently under construction, and add the power produced to the national grid, so those investments are not lost.
- Shelve any planned construction of renewable energy works like solar farms and wind generators dependent on subsidies and preferential grid access.
- Reduce Government preference for electric vehicles to no more than that for those powered by petrol or diesel ie., to be market neutral.
- Update old coal burning power stations with the latest technology to remove the emission of serious pollutants like sulphur and nitrogen compounds and carbon monoxide as a government public health initiative.
- Upgrade petrol and diesel engines wherever feasible to reduce these pollutants from their emissions.
- Ignore the impact of carbon dioxide emissions from all sources since it is essential for plants and global food production.

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