

Open letter: Please forward to any other interested parties.

Stop demonising Carbon Dioxide.  $\text{CO}_2$  is a minor factor in global warming and absolutely vital to feeding humans who will number seven billion by 2050 (currently 6.5 billion +)

1. The burning of all fossil fuels plus nuclear reactors produce direct heat sufficient to raise the temperature of the earth's atmosphere by  $1^\circ\text{C}$  every 13 years (see appendix 1) Much of this heat will radiate to space or heat oceans but it is enough to account for a measurable "human footprint" in global warming. Any thermal engineer can verify direct heating but tenuous statistical coincidence is the main basis for blaming  $\text{CO}_2$  emissions for global warming. Direct heating makes sense of the Northern Hemisphere increasing in temperature more than the Southern Hemisphere.\* Greenhouse gas emission theory gives the wrong answer to both phenomena especially as California burns more natural gas.

2. Current climate models equate temperature increase to heat input. This is false, as a simple experiment will show. Put 1kg of ice cubes in a kettle and apply a steady input of heat at 1 Calorie per minute. It will take 80 minutes for all the ice to melt. The temperature will remain at  $0^\circ\text{C}$ . In the next 20 minutes the 1 litre of water will now rise in temperature to  $20^\circ\text{C}$ . This lesson is that while ice or permafrost remains in an area the earth's temperature will buffer towards  $0^\circ\text{C}$  but as soon as melting is completed the temperature will increase even though the heat input remains the same. Almost all ice that was between latitudes  $40^\circ$  to  $60^\circ$  has now melted, and the heat input that previously melted this is now available for raising temperatures. In appendix 2 calculations of the heat input required to melt the ice up to  $60^\circ$  latitude in the last 10 000 years is estimated to be 317 to  $475 \times 10^{15}$  Calories per annum. This is between 3.5 and 5.2 times the direct heat input of burning fossil and nuclear fuels. It indicates that human fuel use is only a 20% factor in current temperature rise and that in the many fold repeats of such incidents in the past 15 million years of icing to warm periods the counter buffers have worked to keep the temperature change within reasonable limits. The shear latent heat sink of the massive oceans; the evaporation of water from 361 million- $\text{km}^2$  ocean surface and the increase of radiation at higher temperatures all tend to moderate temperature rise. There is every indication that this is already slowing the rate of temperature rise.

3. Over 60 years ago I often slept overnight in the deserts around Broken Hill. For most of the year the rocks were too hot to sit on in the late afternoon but by morning after a clear night everything was cool to frozen. Outdoor people in WA deserts have told me it remains the same today in WA deserts not noticeably different despite the increase carbon dioxide, which is supposed to be a greenhouse blanket. What is clear is that all the heat accumulated in the deserts rocks and sand during the day can be radiated out into space overnight on a starry night.

\* Insert. "Wealthy California is heating faster than E of USA."

An experiment to put a figure on CO<sub>2</sub> as a greenhouse gas could easily be devised with an air column tube and a direct infrared radiant heat source at the base and heat detectors at the top. A measure of the effect of CO<sub>2</sub> up to 1% could be done on dry air starting without and then with progressive increases of CO<sub>2</sub>.

Such a measured result would clarify ~~the~~ the debate so much and would cost about a millionth of the amount already spent on promoting statistical coincidence as fact. It is not cynical to ask the question "Is the beaucroatic power, revenue and profit from carbon trading so great that promoting a rather tenuous theory of CO<sub>2</sub> greenhouse gas emissions as the main cause of global warming and possibly more calamity ahead is so empowering and rewarding financially that clarity is not wanted?"

4. Our desert observations on clear nights completely change if a cyclonic event up North casts a halo of cloud over deserts. Then the greenhouse effect is immediate and a balmy night will follow a hot day. To understand how clouds can affect climate the lifelong work of Henrik Svensmark as written in *The Chilling Stars* by Svensmark and Calder and distributed by Dymocks is required reading by anyone interested in all the possible explanations of climate change, and which one better fits the facts that are continually becoming available. The European Organisation for Nuclear Research (CERN) will commence checks on smaller tests by Svensmark starting 2010. Why the rush to get carbon trading established before then?

5. Carbon Dioxide is the staff of life. All human and animal food begins from chlorophyll building plant food using sunlight warmth water and carbon dioxide.

It is certain that up to now the main reason a food crisis as predicted by the Club of Rome in 1980's has not arisen with a 4 billion rise in humanity in 80 years is that carbon dioxide and temperature have risen. Plant breeding and fertiliser have helped but the chief engine room for growth remains chlorophyll fed by carbon dioxide, at temperatures above 20°C

If the forecast extra 1 1/2 billion people by 2050 are to be fed the rise in carbon dioxide and warmth will be essential to maintain the food supply. Burying carbon dioxide would be a crime against humanity because the increase of the carbon chain is essential to feed the rapidly growing population. Mass starvation is an ever present risk without interfering with CO<sub>2</sub> levels. For those who have quasi religious belief that carbon dioxide emissions control will fix our problems I can only recommend contemplation of Jesus last prayer for humanity "God forgive them for they know not what they are doing."

#### **Appendix 1:**

Calculations and data: to show burning coal, oil, natural gas & nuclear reactors produce heat sufficient to account for a significant atmospheric temperature rise

$$\begin{aligned} \text{Surface of the earth} &= 510 \text{ km}^2 \times 10^6 \\ \text{cm}^2 &= 510 \times 100,000 \text{ cm} \times 100,000 \text{ cm} \times 10^6 \\ &= 510 \times 10^{16} \text{ cm}^2 \end{aligned}$$

Air pressure average = 1kg per cm<sup>2</sup> therefore weight of atmosphere = 510 x 10<sup>16</sup> kg  
Specific heat of air = 0.24 Therefore calories to heat atmosphere 1°C = 122 x 10<sup>16</sup> calories

Annual Heat Input

Coal burnt annually = 6000 million tons which contains  $6000 \times 10^9$  kg x 6.600 calories per kg  
=  $40 \times 10^{15}$  calories

Oil burnt annually = 4000 million kilo litres which contains  $4000 \times 10^9$  litres x 8.800 calories per litre  
=  $35 \times 10^{15}$  calories

Natural gas and nuclear energy estimate  $15 \times 10^{15}$  calories per annum  
i.e heat input from coal, oil, natural gas and nuclear =  $90 \times 10^{15}$  calories  
This is enough heat to raise the atmosphere by  $1^\circ\text{C}$  in 13-14 years

#### Appendix 2:

Heat required to melt ice up to  $60^\circ$  latitude in the last 10 000 years. Estimated ice equals at least the generally accepted sea level rise of 110M

i.e. 361 million  $\text{km}^2$  of ocean =  $361 \times 10^{12} \text{ m}^2$   
x 110 m deep =  $39700 \times 10^{12} \text{ m}^3$  or tons

To melt 1 ton of ice  $80 \times 1000$  Calories

Calorie requirement =  $39700 \times 10^{12}$   
 $\frac{\times 80 \times 10^3}{317\ 0000 \times 10^{15}}$   
Equals

Divide by 10 000 years to get yearly Calories required =  $317 \times 10^{15}$  Calories per annum

Because of Isostatic Rebound after a major icing event the amount of ice melted could be 50% greater ie requiring  $475 \times 10^{15}$  Calories per annum.

Regards.

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