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APPENDIX 19

IS JAMES HANSEN'S UN GREENHOUSE IN THE OUTHOUSE?

This document is part of, and intended to be read in conjunction with, all parts of and appendices to the document entitled *CSIROh!*

"We have found it of paramount importance that in order to progress, we must recognize our ignorance and leave room for doubt. Scientific knowledge is a body of statements of varying degrees of certainty - some most unsure, some nearly sure, but none absolutely certain". Richard Feynman, Value of Science Shared by Fred Singer

Questions on the UN's Greenhouse Gas Claim

We've already seen that UN climate reports are one sided with conclusions not supported by physical science and contradicting empirical scientific evidence.

Let's consider fundamentals underlying the UN's so-called "*greenhouse warming*" mechanism, the basis of UN climate alarm. For those not familiar with the UN IPCC's claim, it's described in the endnote using work by Klaus Ermecke.ⁱ

Initially I assumed the UN's claimed mechanism to be valid. Thinking about my own practical experience though I started asking questions of others and myself and found it's in intense debate. That's how science progresses.

Firstly, science is determined empirically. Anything beyond direct inference from verifiable facts is inadmissible. It's not science.

Secondly, in a closed system, it's agreed and accepted from laboratory measurements of gas enclosed in a sealed container that carbon dioxide molecules absorb and are warmed by longwave radiation.

The key question though is: in the open system that is our planet's open atmosphere does carbon dioxide from *human* activity warm Earth?

1• Empirical scientific evidence suggests not. Over most recent decades since the 1920's as human production of carbon dioxide, CO2 rose atmospheric temperature often fell or was flat.ⁱⁱ

In the last 62 years the only period of general and sustained warming was from 1977 to 1997. American ground-based temperatures fell for four decades from 1936 to 1975, despite significant global industrial CO2 production increase.

Relying on its claimed *greenhouse mechanism* the UN predicted a hot spot in the troposphere above the tropics. David Evans documents that satellite and radiosonde (weather balloon) measurements show no such hot spot.ⁱⁱⁱ

Where's the UN's claimed unusual, non-natural warming by human output of CO2?

2. Energy input determines temperature. For steady solar input, heat leaving Earth each day on average equals the amount arriving, allowing for entropy and the biosphere.

If the sun sends more energy it raises Earth's temperature. Earth sheds more heat. A new balance is established at a higher temperature.

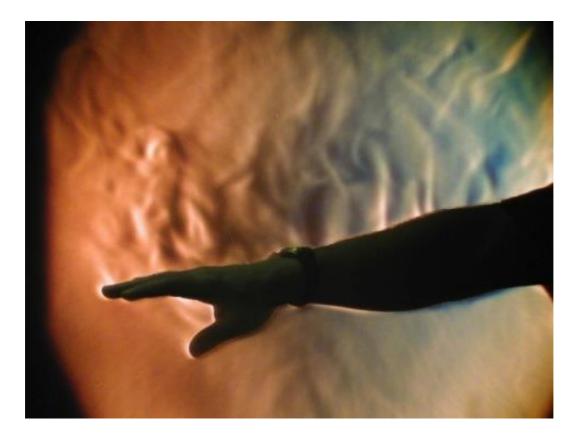
An object's balance temperature can rise **only** by receiving more energy. Only a heat source can raise Earth's temperature.

Carbon dioxide does not create heat. It's not a heat source, is it?

Note: Item 9 below further discusses Earth's temperature.

3 • In Earth's open atmosphere heat moves by conduction and convection. That's the opposite of a glass greenhouse that prevents heat loss by preventing convection.

A photo^{iv} of a naked arm reveals heat moving into adjacent air and warmed air rising:



Next, a photo of the same arm draped under a blanket:



A blanket greatly reduces escape of heat via conduction and convection. It reduces cooling from conduction and convection.

Consider sleeping comfortably outdoors in still air beneath the stars and under a blanket. Removing the blanket leaves us feeling cold. In a wind, it feels much colder because heat is removed more rapidly.

The atmosphere cools us. The moving open atmosphere cools more quickly.

Does CO2's greater ability to absorb heat radiatively increase convection since CO2 conducts heat to neighbouring molecules? Additionally, CO2 is better able to emit radiation to space thereby providing a bigger avenue by which heat can escape.

CO2's effect is the opposite of a blanket. Instead, doesn't CO2 accelerate cooling and give heat more ways to escape Earth's surface?

Yet greenhouse gas warming proponents such as the sole Expert Adviser to the Gillard-Brown Multi Party Climate Change Committee and UN IPCC contributor, Will Steffen claims CO2 acts as a blanket. Why?

4 • Earth's atmosphere is not a sealed laboratory container of pure CO₂. It's not a closed system. Each carbon dioxide molecule in air is surrounded by 2,500-2,600 molecules of other gases. A gas such as CO₂ warmed in Earth's open atmosphere sheds heat by conduction to surrounding gas molecules. All rise and thereby cool. This accelerates movement of heat AWAY from Earth's surface.

Does CO2 thus facilitate Earth's cooling? Is CO2 therefore a coolant?

A greenhouse is a closed system preventing convection. The '*greenhouse*' label is not appropriate for Earth's open atmosphere rotating in and out of day and night so as to create massive heat movements by convection.

5 • Research scientist and UN Expert Science Reviewer Dr. Vincent Gray reveals that a fundamental assumption of the UN's "*Greenhouse*" "*Global Warming*" claim is that the sun's energy arriving at Earth is "*balanced*" by energy emitted from Earth.

He says this illusion is assisted by the UN's false implied assumption that all energy exchanges are by radiation, and therefore are instantaneous.

Without this assumption it would be impossible for the UN to claim that all "*change*" of climate is exclusively caused by human production of gases that absorb CO₂.

Separately, Chilingar et al (2008) earlier proposed CO2 to be a coolant. Note, quote: "convection is the dominant process of heat transfer in troposphere, and all the theories of Earth's atmospheric heating (or cooling) first of all must consider this process of heat (energy)– mass redistribution in atmosphere"^v

The UN's claimed climate mechanism demotes convection, conduction and latent heat from being Nature's proven powerful heat transfer mechanisms to non-existence or insignificance.

In reality much of the sun's energy is used in evaporating water from ocean surfaces and in soils. This cools Earth's surface. Why does the UN's greenhouse model ignore or downplay obvious dominant means of heat movement and transfer?

6. The Earth's surface receives energy from the sun. When a heat absorber such as carbon dioxide intercepts solar energy less energy reaches the surface. Over an admittedly very minor range of wavelengths, CO₂ absorbs incoming solar energy. As NASA recently confirmed, in that role, carbon dioxide acts as a coolant.^{vi}

The Specific Heat of CO₂ is 0.80 meaning it absorbs and releases heat faster than does standard air. Doesn't this mean that carbon dioxide can only enhance cooling, not warming?

Don't gases that absorb radiation therefore cool the Earth?

7• How can a gas that supposedly *"traps heat"*, radiate heat? If heat is trapped, it's trapped, not radiated.

According to the UN's claimed greenhouse mechanism, the act of radiatively cooling Earth's surface simultaneously turns into a supposed heating mechanism.

The warmed gas supposedly warms the surroundings that warmed it. Isn't that counting the same energy twice?

8. The "*greenhouse*" effect is based on early scientists' work from 1850 to 1900.

Scientists reading those early papers find early scientists misunderstood the real world and each other. $^{\rm vii}$

Early last century within a few years of making his initial claim, Svante Arrhenius greatly lowered his theoretical warming by carbon dioxide.

In the American Meteorological Society's 1951 Compendium of Meteorology (pages 1015, 16) the UK Met Office's CEP Brooks used empirical scientific evidence to dismiss the claim that CO2 warms earth.^{viii}

Where Svante Arrhenius failed scientifically, the advocate and propagandist James Hansen succeeded politically. He popularized a claimed "*greenhouse*" mechanism through his 1981 paper and his 1988 congressional testimony in the now infamous sweaty hearing stage-managed without air-conditioning.

In 160 years since 1850 science has moved on. Aether is now not used to explain our atmosphere. Phlogiston has been proven to not exist.

Are we being misled by hanging onto a mid-nineteenth century mistake? Is it the difference between a theoretical computed value and a fraudulently contrived effect?

9• The claimed warming by carbon dioxide is a guess at explaining the difference in Earth's theoretically calculated temperature and actual surface temperature.

The equation used by the UN IPCC to calculate Earth's theoretical temperature uses bogus assumptions. For example:

- 1. The *Earth is flat*. That is, computerised numerical models relied upon by the UN assume the sun's energy strikes Earth as if Earth is a flat disc rather than striking half a sphere. This greatly changes energy distribution, the core of weather;
- 2. The Earth does not rotate;

- 3. The sun shines with a constant intensity on all parts of Earth all day and all night. There is no night and no diurnal temperature change driving weather;
- 4. It shines uniformly with equal intensity on Earth's whole surface;
- 5. The Earth is a blackbody. ie, Earth is a perfect absorber and emitter of energy;
- 6. Energy interchange in climate is entirely by radiation;
- 7. Conduction, convection and latent heat do not occur;
- 8. Air movements, wind, rain, storms and hurricanes are virtually ignored. They're too small to fit into grid systems used for each part of Earth's surface;
- 9. Energy flow parameters are constants with no variability;
- 10. Earth has no water vapour, by far the most significant gas absorbing longwave radiation. Water vapour and latent heat are highly significant coolants;
- 11. The Earth has no living organisms, trees, grasslands, animals, people.

Despite this, the UN supposes change in this system is caused entirely by relatively minuscule human output of one natural atmospheric trace gas produced overwhelmingly by Nature.

Returning to discussion of temperature, an observer in outer space looking at our planet would assess our planet's temperature using only the radiation leaving the atmosphere at great altitude.

For the purposes of the UN's equation though, Earth's atmosphere is not considered part of our planet. Earth's temperature is estimated at Earth's surface.

That's despite Earth's "*average*" temperature being calculated from spatially limited and severely skewed measurements in air surrounding weather stations at some 1.25m to 2m above Earth's surface.

Assumptions used to calculate Earth's *"average*" temperature are thus entirely wrong. Using realistic quantities reveals no temperature difference.^{ix}

In discussing the monitoring, study and forecasting of weather, Dr. Vincent Gray states, quote: "It should be noticed that nowhere in this effective system is there any mention of carbon dioxide or of "greenhouse gases." They have no place in a scientific study of the climate. Most meteorological organisations do not even bother to measure carbon dioxide over land territories.

The climate models favoured by "Climate Change" "scientists" completely ignore the scientific discoveries of genuine climate scientists since time immemorial. They promote completely different computer models based on the following absurd principles: ...". Dr. Gray then lists assumptions similar to those listed above and lists two further UN assumptions, quote: "• All change is caused by changes in greenhouse gases; • Natural influences are merely "variable.""^x

Is the UN a modern Flat Earth Society?

10. Temperatures on the moon in sunlight reach up to 123 degrees C. The dark side of the lunar surface is as cold as minus 153 degrees C. Our moon is both hotter and colder than our Earth.

This wide variation is because our moon has no atmosphere to cool the surface during sunlight or retain heat when not in sunlight.

All atmospheric gases on Earth act as coolants during the hours of sunlight and slow the rate of cooling in absence of sunlight.

Another difference is that our moon has no surface water. In Earth's atmosphere water vapour moderates temperature by reducing highs and raising lows. It stabilises temperature swings. Doesn't this make water vapour a climate stabiliser?

Water vapour transfers heat around the atmosphere. In phase changes it acts as a coolant.

How can water vapour have a positive warming feedback as claimed by the UN?

11. Water vapour has far greater absorption of longwave radiation than does CO2. Additionally, water vapour is up to 100 times more plentiful in our atmosphere.

Consistent with known meteorological observations, Carl Brehmer observes, quote: "that in climates where there is ample ground moisture present the absolute humidity in g/kg goes up and down with the temperature, but when there is not ample ground moisture, like in a desert or during a drought, the mean temperature is higher in the drier climate contrary to the "greenhouse effect" hypothesis."xi

Like CO₂, water vapour is not a source of heat. Water vapour is a carrier of heat. Latent heat is absorbed at evaporation and released with condensation.

During sunshine both act as coolants. During absence of sunlight, CO₂ continues to act as a coolant while water vapour acts as a heat carrier, reducing the rate of cooling.

Doesn't this reverse implied UN claims that warming by CO2 would be magnified by positive feedback of water vapour?

12. The basis of the UN's claimed "*greenhouse*" mechanism was comprehensively disproved by scientists as long ago as 1909 by physicist Professor RW Wood and was

disproved by scientists as long ago as 190 discarded by Neils Bohr.

In 100 years no one has disproved Professor Woods' practical, replicable, experiment. He proved selective transmission in greenhouse glass does not magically create more heat.

In 2011 Professor Nasif Nahle confirmed the "*greenhouse*" claim to be unfounded.^{xii} It contradicts empirical scientific evidence. Doesn't that reject the UN's mechanism?

13. Consider adiabatic heating and cooling of tropospheric air. Variations in quantities of the trace gas CO₂ have no measured or claimed effect on adiabatic warming.

(An adiabatic process: without exchange of heat of a system with its environment.)

14. Eminent scientists and engineers say the UN's greenhouse effect contradicts the Second law of Thermodynamics.

Others say the Second Law does not apply to radiative heat.

There's no way of proving who's correct at sub-atomic levels. Thermodynamics is often poorly understood, even among "*experts*".

The real world of engineering though successfully relies on no heat transfer from cooler bodies such as the atmosphere to warmer bodies like Earth's surface.

Albert Einstein valued thermodynamics,^{xiii} quote: "A law is more impressive the greater the simplicity of its premises, the more different are the kinds of things it relates, and the more extended its range of applicability."

It's been said of the UN's greenhouse claim that the premises of "*backradiation heating*" and/or "*heat trapping heating*" etc. are not simple, not generally applicable, not even explained consistently, and, the math at best is ambiguous.

15. Finally, measurements of CO₂ levels in air, as cited and relied upon by the UN's climate body reveal that CO₂ from human activity can have no measurable effect on the level of CO₂ in air.^{xiv}

Seasonal patterns of variation in CO₂ levels from data cited and relied upon by the UN's climate body and longer-term trends revealed by fine resolution studies of ice cores prove empirically that the <u>level</u> of CO₂ in Earth's air is controlled entirely by Nature^{xv} regardless of human production.

Empirical scientific evidence reveals cause-and-effect is the reverse of that claimed by the UN climate panel. In reality, changes in temperature determine the level of CO2.

Since human production of CO₂ does not measurably change the level of CO₂ in air, CO₂ from human activity cannot affect Earth's temperature.

The concept of CO₂ in a "*bathtub*"^{xvi} or reservoir of fixed capacity in the sky is contradicted by empirical measurements. Instead, by Henry's Law the level of CO₂ in air is determined by the relationship between CO₂ dissolved in the ocean and CO₂ in the air. That relationship is affected by temperature that is determined by Nature.

Even if CO₂ from human activity changed atmospheric CO₂ levels (it doesn't), from preceding observations it could not increase Earth's temperature since Nature's CO₂ does not and cannot warm Earth's surface. As with all atmospheric gases, CO₂ cools Earth's surface.

The UN's climate body estimates that of Earth's annual CO₂ production Nature produces 97%. That's accepted as essential for life. Humans produce just 3% yet that's claimed to produce catastrophic warming at some future unspecified date even though <u>it cannot and does not change the level of CO₂ in air</u>.

Human production of CO2 is estimated to total one quarter of the **variation** alone in Nature's production of CO2. Again, Nature's variation is deemed essential.^{xvii}

Why does the UN contradict the empirical scientific data it cites and relies upon?

Concluding comments and questions to ponder

Klaus Ermecke says: "... thorough review of the pertinent scientific literature and questioning of experts reveals that there is in fact no consensus at all regarding the so-called "greenhouse effect":

- Almost all scientific papers related to "greenhouse effect", "climate change" and supposed human influence do not critically examine these statements, and instead simply assume them to be true,
- There are tens of thousands of publications in which the authors either find no relation to "climate change", or even explicitly reject the concepts on which "climatologists" have based their assumptions,
- There are in fact several different "greenhouse gas theories" based upon very different physical assumptions.

The commonly believed notion that increased CO2 will catastrophically warm the planet does not hold up to scientific scrutiny and the laws of physics.^{xviii}

Without gases absorbing radiation and erroneously labeled "*greenhouse gases*" we would be much warmer during sunlight, yet cool down more quickly out of sunlight. On balance the atmosphere would feel warmer, as sunlight is so much stronger than the warmth coming off the Earth. With CO2 Earth's surface is cooler.

Understanding energy movement in the real world rather than in erroneous computerised numerical models restores reality. Although all worthwhile energy arrives on Earth as radiation and eventually leaves our upper atmosphere as radiation, ignoring or discarding vast energy movements in between ignores reality.

The UN's greenhouse gas claim has never been proven to be real. It exists only in mathematical formulae relying on faulty assumptions and in political agenda.

It seems beyond religious because it's been disproved yet blind belief by some continues.

Geological, historical and scientific temperature records have never tied CO₂ to global temperature as a cause of raising global temperature. Rises and falls of atmospheric CO₂ level have only ever been linked to temperature as a <u>result</u> of rising and falling temperature respectively. There has never been any global warming by human production of CO₂. There never can be.

The UN-James Hansen core climate claim distils merely to claims based on unvalidated computerised numerical models. Their core assumptions contradict Nature and reality.

This document's 15 items question and invalidate their basis. Yet the debate rages as academics fomenting alarm and some sceptics seemingly ignore Nature and contradict empirical scientific measurements.

To propose a *theory* requires consistency with known laws of Nature and science. Does the UN-Hansen supposition even qualify as a theory? No. Isn't it simply a key part of the climate fabrication by the UN and James Hansen?

Agencies such as CSIRO dependent on taxpayer-funding spread a theorised mechanism contradicted by empirical scientific evidence and by Nature. Doesn't their unscientific behaviour raise serious questions? Why do they replace empirical science with the UN-Hansen '*political science*'?

Isn't UN IPCC Expert Science Reviewer Dr. Vincent Gray correct in concluding that the (UN's) climate change theory has been falsified and is therefore invalid?

The UN's greenhouse warming claim has led to entrenched polarised positions and emotive defences. Perhaps the most important question it now raises is whether humanity's quest for honest scientific understanding is more important than emotive pride, fear of embarrassment from admitting error and ego?

Questioning, exploring and now rejecting previously automatically assumed belief in the Hansen-UN greenhouse mechanism has brought understanding, clarity and ease—freedom.

Tolstoi said, quote: "I know that most men, including those at ease with problems of the greatest complexity, can seldom accept even the simplest and most obvious truth if it be such as would oblige them to admit the falsity of conclusions which they delighted in explaining to colleagues, which they have proudly taught to others, and which they have woven, thread by thread, into the fabric of their lives."

> Malcolm Roberts February, 2014 Brisbane, Australia <u>malcolmr@conscious.com.au</u>

Endnotes

- The sun heats Earth by visible light,
- The ground emits energy as infrared light or longwave radiation,
- So-called "*Greenhouse gases*" "trap" the radiation and send part of the energy as "*back radiation*" back to the Earth's surface additionally heating the ground,
- In a fictitious atmosphere without "*greenhouse gases*" all radiation would escape into space and this atmosphere would be colder.

It's claimed that more CO2 from mankind leads to more back radiation and thus to more warming: to a *"man-made effect"* on top of the "natural 33°C". This is the foundation of the UN's claimed global warming mechanism.

Rescue from the Climate Saviors by Klaus Ermecke (June 2010), KE Research die Andersdenker <u>http://www.ke-research.de/downloads/ClimateSaviors.pdf</u> & <u>http://www.ke-research.de/english.html</u>

ⁱⁱ Atmospheric temperatures by radiosonde (weather balloon) fell from 1958 to 1976 yet human CO2 output rose considerably. American ground-based temperatures (USHCN) fell from 1936 to 1975 including a substantial fall during World War 2 when industrial activity increased dramatically. Atmospheric temperatures since 1998 and ground-based temperatures since 1997 show no warming. http://www.conscious.com.au/docs/new/CSIROh 20130201a.pdf with details http://www.conscious.com.au/docs/new/4 AppendixBasicOuestions.pdf

iii <u>http://sciencespeak.com/MissingSignature.pdf</u>

^{iv} Photos courtesy of Alan Siddons

v http://www.mitosyfraudes.org/Calen9/Chillingar Atm Cooling due to CO2.pdf

vi http://science.nasa.gov/science-news/science-at-nasa/2012/22mar_saber/

vii See the work of scientist Timothy Casey: <u>http://geologist-1011.mobi</u> and <u>http://tyndall1861.geologist-1011.mobi</u>

^{viii} In its Compendium of Meteorology the AMS stated that the idea that CO2 could alter the climate "*was never widely accepted and was abandoned when it was found that all the long-wave radiation absorbed by CO2 is absorbed by water vapor.*"

And "... during the past 7,000 years there have been greater fluctuations of temperature without the intervention of man, and there seems no reason to regard the recent rise as more than a coincidence."

The precise citation is found in Brooks, C.E.P. (1951). "Geological and Historical Aspects of Climatic Change." In Compendium of Meteorology, edited by Thomas F. Malone, pp. 1004-18 (at 1016). Boston: American Meteorological Association.

^{ix} Gerlich and Tscheuschner (2009) <u>http://arxiv.org/PS_cache/arxiv/pdf/0707/0707.1161v4.pdf</u> This paper remains unrefuted. Shorter, approved version by Hans Schreuder: <u>http://www.tech-know-</u> group.com/papers/Falsification of the Atmospheric CO2 Greenhouse Effects.pdf And: <u>http://www.principia-</u> scientific.org/techknowgroup/papers/Understanding_the_Atmosphere_Effect.pdf And: <u>http://principia-scientific.org/publications/The_Model_Atmosphere.pdf</u>

ⁱ This "*natural greenhouse effect*" is variously and sometimes conflictingly described. Borrowing from Klaus Ermecke of KE Research, graduate of Hamburg's Helmut-Schmidt University it's most commonly described as:

xi http://principia-

scientific.org/index.php?option=com_content&view=article&id=335&utm_source=newsletter&utm_medium=email&utm_campaign=newsletter_October_9_2013

xii http://principia-scientific.org/publications/New Concise Experiment on Backradiation.pdf

xiii <u>http://secondlawoflife.wordpress.com/2009/07/12/what-einstein-thought-about-thermodynamics/#comment-2780</u>

xiv Appendix 4, here: <u>http://www.conscious.com.au/CSIROh!.html</u> (<u>http://www.conscious.com.au/docs/new/4_AppendixBasicQuestions.pdf</u>)

^{xv} Appendix 4, here: <u>http://www.conscious.com.au/CSIROh!.html</u> Geological, historical and scientific temperature records have never tied CO2 to global temperature as a cause of raising global temperature. Atmospheric CO2 has only ever been linked to temperature as a result of rising temperature.

^{xvi} The source of the curious and false bathtub analogy is reportedly the USA's EPA <u>http://www.onlineopinion.com.au/view.asp?article=14581</u>

xvii Appendix 4, here: http://www.conscious.com.au/CSIROh!.html

^{xviii} *Rescue from the Climate Saviors* by Klaus Ermecke (June 2010), KE Research die Andersdenker <u>http://www.ke-research.de/downloads/ClimateSaviors.pdf</u> & <u>http://www.ke-research.de/english.html</u>