

# The Relative Percentages of Anthropogenic and Natural Carbon Dioxide in the Earth's Troposphere



Illustrative image of gas chromatography mass spectrometry apparatus

By Tom Tamarkin

## I. Introduction & Statement of Problem

Correlations of decrease in “average worldwide temperature” and volcanic activity are high.

Correlations of increase in “average worldwide temperatures” and **El Niño** events are high

Empirical measurements and calculations of the relative percentage of anthropogenic carbon dioxide in the total carbon dioxide reservoir are highly uncertain at best.

The total atmospheric CO<sub>2</sub> concentration represented by the Mauna Loa, Hawaii Keeling curve shows an almost straight line degree of annual change from 337 ppm in 1979 to 408 ppm in 2018. The rate of change in annual anthropogenic global fossil-fuel carbon emissions is shown to be, in five year time frames, from 1979 to 1999, as follows; 1979-84 -89 %, 1984-89 +817%, 1989-94 +169%, 1994-99 +344%, 1999-2004 +1,197%, 2004-2009 +933%. This shows that the Keeling curve reflecting total atmospheric

## Relative % of Anthropogenic & Natural CO<sub>2</sub> in Earth's Troposphere

CO<sub>2</sub> concentration is not materially affected by annual anthropogenic global fossil-fuel carbon emissions.

On March 19, 2020, the COVID19 related lockdowns took effect virtually worldwide. From the period of March 20, 2020 to March 20, 2021 there was a rough order 30% worldwide reduction in the use of hydrocarbon fuels across all energy sectors of residential, commercial, industrial and transportation. Yet on March 20, 2021 the Mauna Loa Keeling curve continued its rise to nearly 418 ppm. In other words, even with a massive reduction of worldwide fuel use, the CO<sub>2</sub> trends recorded at Mauna Loa continued to rise in a slope undetectably different from that over the last 50 years.

### **II. Thesis and Premise**

It is estimated that the worldwide annual costs associated with global warming and related alternative energy exceeds 2 trillion U.S. dollars. Countries worldwide are now taking actions or considering actions costing hundreds of billions, even trillions of dollars. However, Anthropogenic Global Warming (AGW) or human caused climate change has not been proven. Therefore the ability to falsify the anthropogenic theory of climate change has enormous financial and societal benefits with significant return on investment. Whereas studies involving the absorption of infrared light reflected from the Earth's surface and then retransmitted to the Earth by so called greenhouse gases have been ongoing for many years, this scientific discipline has been unable to prove or disprove the degree to which anthropogenic processes are responsible for any AGW or climate change on the Earth. Since the primary mechanism of the speculated climate change is predicated on burning of fossil fuel sources by man which produces carbon dioxide gas, then a definitive means of determining the influence of man's contribution, if any, to AGW or climate change is to accurately determine what percentage of the total amount of carbon dioxide resident in the Earth's lower atmosphere results from burning fossil fuels worldwide. Given the dynamic and turbulent nature of the Earth's "carbon system" involving the natural variabilities in carbon dioxide emission and absorption, the ability to mathematically derive the percentage of measured anthropogenic fossil fuel CO<sub>2</sub> which is contributed to the Earth's total reservoir of atmospheric carbon dioxide gas has been virtually impossible due to factors involving the variations within the carbon dioxide flux.

Therefore, given the current uncertainties of the atmospheric carbon dioxide components, a new means of measurement and/or computation of the

## Relative % of Anthropogenic & Natural CO<sub>2</sub> in Earth's Troposphere

anthropogenic component in the total atmospheric reservoir carbon dioxide reservoir must be developed.

### **III. Lecture (discussion)**

A full video of the following discussion in this Question and Answer format is summarily provided as a YouTube based video. Click on the link after

#### **1. There is much discussion about climate change. Does it exist?**

The Earth is over 4.5 billion years old. The Grand Canyon gives us a snap shot of 10% of that record. Think about that. Modern man is trying to use a 50 to 100 year time frame to show...if not prove...that manmade climate change exists! These trends are only .000001% of the Earth's age!

Geological samples show that the Earth has been much warmer and much colder in the past and our current CO<sub>2</sub> level is very low compared to the past. We can prove that the climate does change due to natural variations in solar and planetary motions, coupled with the almost 24 degree tilt of the Earth's axis, its obliquity, its elliptical orbit around the Sun and its precession.

Other natural occurring events such as volcanic eruptions, meteor strikes, and atmospheric oscillations such as El Niño and La Niña create temporary changes in climate perhaps better sated as the weather.

However, we cannot empirically prove that greenhouse gases trapping heat causes measurable amounts of warmth on the Earth. All climate change predictions result from computer models based on the unproven theories of man. And so far all such predictions have been wrong.

All climate change predictions result from computer models based on the unproven theories of man. And so far all such predictions have been wrong.

#### **2. What is the radiated greenhouse gas theory?**

The Infrared Radiated Greenhouse Gas theory is based on the absorption of infrared radiation or heat reflected back from the earth by Greenhouse Gases such as water vapor, Carbon Dioxide, methane, and the like. In the mid-1800s my great grandfather, Sir Thomas E. Thorpe along with Henry Roscoe in the

## Relative % of Anthropogenic & Natural CO<sub>2</sub> in Earth's Troposphere

UK made the first accurate calculations of the amount of CO<sub>2</sub> in the atmosphere.

Later that Century, Svante Arrhenius, John Tyndall and others proposed water vapor and Carbon Dioxide “trapped heat” in the air.

In the early 20th Century, Max Planck developed our modern understanding of quantum mechanics and Karl Schwarzschild applied this understanding to Greenhouse Gases. They showed us why these gases behave the way they do.

These gas molecules do absorb infrared energy but they dissipate it very quickly...in ten thousand billionths of a second...or one femto second...transferring that energy to surrounding molecules mostly nitrogen and oxygen. Then that energy is radiated out in a three dimensional steradian pulse and most passes to outer space either directly or through convection.

Given the extremely low spatial density of Greenhouse Gases in the atmosphere, and given the velocity of light, coupled with the inverse square law, this radiated energy is very weak and is only on the Earth for a very short period of time; again measured in femto seconds.

No measurable corresponding increase of temperature can be measured on Earth. Any increase in the temperature of the atmosphere's majority gases, nitrogen and oxygen, also rises to space due to pseudo-adiabatic expansion & convection.

### **3. You are saying that there is no measurable increase of the Earth's temperature. Is that correct? What do you mean?**

No one has empirically measured and proven any temperature increases on the surface of the Earth due to Greenhouse Gases. These gases do delay cooling of the Earth at night. Without them it would get down to 100 degrees below zero by early morning. But again they create no measurable increase of the “world's temperature.”

### **4. Some scientists, certainly the media, and many politicians say that this (perceived) climate change comes from man's use of fossil fuels which emit carbon dioxide. What effect does CO<sub>2</sub> have?**

## Relative % of Anthropogenic & Natural CO<sub>2</sub> in Earth's Troposphere

Carbon dioxide is a greenhouse gas; but a trace amount one, meaning that it accounts for only 0.04 % of all gases in the atmosphere and only 4% of all so called Greenhouse Gases. But we shouldn't focus on Carbon Dioxide per se. We should focus on manmade Carbon Dioxide which is the whole premise of the climate change argument.

Contrary to popular belief and that of many scientists, the anthropogenic percent of Carbon Dioxide is so low in comparison to the total amount of Carbon Dioxide in the atmosphere, that it is virtually unmeasurable.

Note that over the last year the use of fossil fuels worldwide across all energy sectors dropped by as much as 30% due to covid19. But this major decrease in manmade Carbon Dioxide was not measured, and therefore not reported.

We have our website of [ClimateCite dot com](http://ClimateCite.com), a section titled "Our Position on CO<sub>2</sub>." In the first few paragraphs we show conclusively that the CO<sub>2</sub> measurements taken from Mauna Loa and other monitoring stations simply are not measuring manmade CO<sub>2</sub>. Material increase in Carbon Dioxide seen over the last 50 years are coming entirely from natural sources.

Dr. Murry Salby confirms this and explains the details in a lecture on our website. And Dr. Jamal Munshi, a leading statistician, shows that the likelihood of Carbon Dioxide increases affecting the temperature of the Earth is about as likely as you spotting a UFO after this interview.

### **5. So you are saying that the majority of the increases in carbon dioxide in our atmosphere measured over the last 50 years come from natural sources and not from man?**

Yes. Carbon dioxide comes from two primary natural sources; animals and volcanic eruptions; animals being the larger of the two sources by far. All animals, including fish in the ocean produce Carbon Dioxide. Even bacteria on land produce Carbon Dioxide.

### **6. Why have we seen a steady rise of carbon dioxide over the last fifty years?**

As I said earlier, the various CO<sub>2</sub> monitoring stations are simply not sensitive enough to measure man's contribution of Carbon Dioxide.

## Relative % of Anthropogenic & Natural CO<sub>2</sub> in Earth's Troposphere

The primary reason we have seen a measurable increase in total Carbon Dioxide in recent times relates to the fact that we have been coming out of the little ice age over the last hundred years. People need to understand that the oceans contain 50 to 60 times more Carbon Dioxide than the atmosphere. This ratio is called the partition ratio governed by Henry's law.

As the temperature of the oceans increase, more carbon dioxide is released by the oceans as a function of Henry's law. This is a fundamental law of physics not; a theory. As water body temperatures go up; the CO<sub>2</sub> levels in the air go up. Dr. Ernst Beck demonstrated in a 2006 paper that the curves cited by many geologists today imply far lower levels of CO<sub>2</sub> over the past 1,000 years than actually existed.

### **7. In your opinion, how can this notion of anthropogenic or manmade climate change be put to rest once and for all?**

Well, if I were a strong and honest member of the senate, Ted Cruz, as an example, and I wanted to end this debate once and for all, I would hold a Senate hearing and I would deliver an opening statement wherein I define the man warming debate as follows:

“Does manmade carbon dioxide coming from fossil fuels create warming or climate change?” “The answer to that question solves the issue once and for all.”

“Forget all the physics stuff about absorbed infrared radiation and heat transfer from “greenhouses gases” in the air to the Earth. That is too pedantic and people cannot evaluate it.”

“Look at the recent paper from Dr. Happer of the CO<sub>2</sub> Coalition which is posted on our website. You have to have masters degree in physics...if not a Ph.D. ...to understand it. But the issue can be boiled down to “Does manmade carbon dioxide cause warming or climate change?” Period.

Notice I did not say: “does carbon dioxide cause global warming.” I said: “does manmade carbon dioxide cause warming or climate change?”

## Relative % of Anthropogenic & Natural CO<sub>2</sub> in Earth's Troposphere

With numerous scientists present in the room along with all the left aisle types, I would ask one simple question: “What percentage of the total amount of Carbon Dioxide in the atmosphere is manmade coming from fossil fuel use?

Answer that question definitively.” When all the professor Michael Mann cronies speak up and say look at the Mauna Loa curve, I would ask: “Can anyone here empirically and mathematically prove that curve represents increases from anthropogenic Carbon Dioxide?” There would be total silence and then a lot of posturing and “...Sir, we need to study that...”

### **8. Has the anthropogenic carbon dioxide in the atmosphere been empirically measured using scientific instruments and advanced calculation techniques?**

No. Not yet. The spectrometry or measurement equipment used today to measure Carbon Dioxide levels has to operate at the very limits of its resolution in what we call a non-linear range. Furthermore the signal to noise ratio is too great to resolve man's CO<sub>2</sub>. We can detect seasonal variations in Northern and Southern Hemisphere plant growth but that is it.

### **9. What, if anything, are you doing to solve this problem and answer this question once and for all?**

I am currently working with a team of scientists and mathematicians who are developing a means to solve the signal to noise ratio problem, and empirically measure man's CO<sub>2</sub> contributions. We do this using a technique called **Quantum Resonance Interferometry... or QRI...** which is described on our website.

We are currently in the feasibility study stage and should have a moving forward plan by mid-May 2021. Our goal is to have initial results for peer review and publication by Q2, 2022. The referenced audio video lecture suggests earlier dates.)

Click here to watch the lecture video or copy this link: <https://adilo.bigcommand.com/watch/TfpEtWuZ>