Reading the Newspaper

One of our participants, Bob Kurtz, recently read an article which jumped out at him as possibly inconsistent with science we've studied in our group. The headlines included:

- ***"Scientists Counter Narratives on CO2*** *- Several experts say CO2 is essential, higher levels not a problem"*
- ***"Climate Scientists Embrace CO2"***

His reading flagged a number of assertions which seemed questionable, or at least inconsistent with our studies, so he brought it to the group's attention. I volunteered to take a look and help the group read such material with the discernment we are developing by actually studying the subject.

Below are images of the article:

Approximate "Cheat Sheet":

1 meter → 3 feet **1 degree Celsius (^{0}C)** → 2 degree Fahrenheit (^{0}F)
ppm = parts per million **CO_2** = Carbon Dioxide
1 tonne = 1000 kilograms = 2205 pounds **1 gigatonne (1 Gt)** = 1 billion tonnes
1 trillion tonnes (1Tt) = 1000 gigatons

Reading the Newspaper


THE EPOCH TIMES

SAMPLE EDITION

This Hidden Voting Bloc Could Swing the 2024 Election

Behind the Efforts to Regulate the Supreme Court

Scientists Counter Narratives on CO2

Behind the Biggest Nurse Exodus in 40 Years

Destroying the Rule of Law to Get Trump


CARBON DIOXIDE Several climate experts say CO2 is essential and higher levels aren't a problem

Climate Scientists Embrace CO2

CO2 is portrayed now as the cause of damaging extreme weather. Our research indicates these extremes are not becoming more intense or frequent; thus, CO2 cannot be the cause of something not occurring.

John Christy, climatologist and professor of atmospheric science, University of Alabama

Carbon Dioxide and Life

Temperature and CO2 as a Net Good

Politics Versus Science

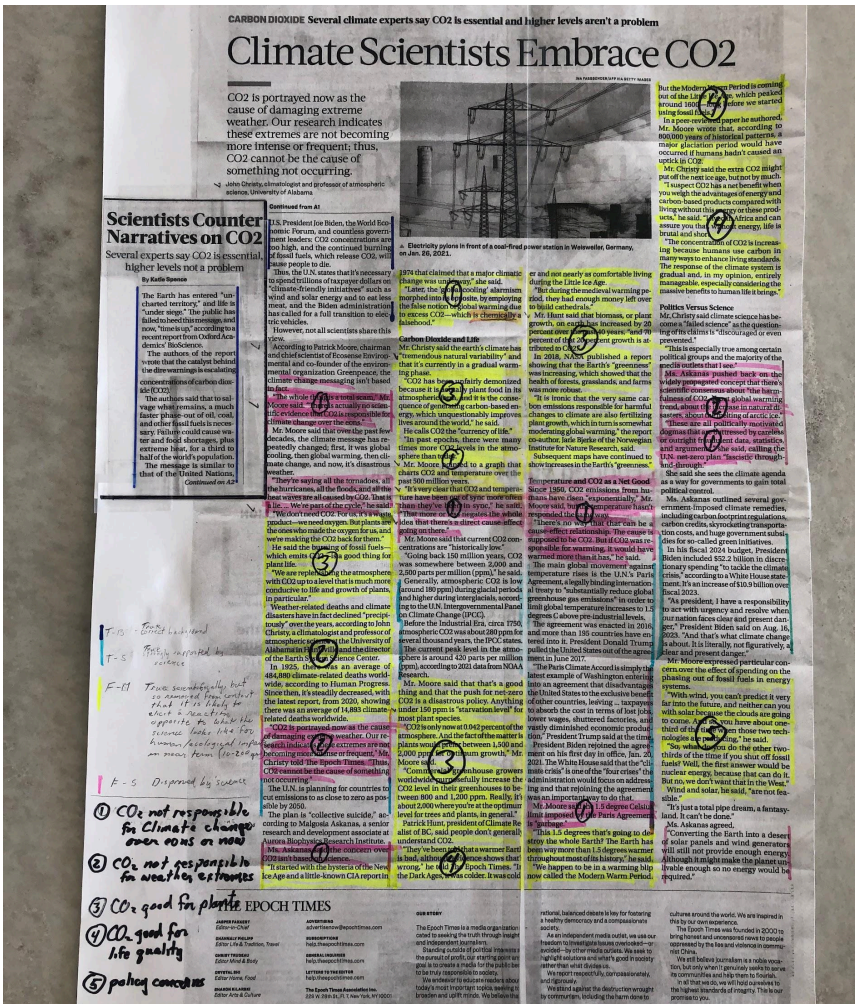
THE EPOCH TIMES

My Methodology (which I just made up on the spot and only to collect my thoughts).

First, I noticed what struck me as **assertions** the writer was making. Then, I assigned **credibility** values, based on my current understanding of the science.

Summarized ASSERTIONS	CREDIBILITY
1. CO_2 is not responsible for climate change over eons or now 2. CO_2 is not responsible for weather extremes 3. CO_2 is good for plants 4. CO_2 is good for life quality 5. Policy claims	**T-B True** - Correct Background **T-S True** - Strongly supported by science **F-M False - Misleading**: True scientifically, but so removed from context that it is likely to elicit a reaction opposite to what the science looks like for human/ecological impact in the near term (10-200 years) **F-S False** - Disproved by science

Reading the Newspaper



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Scientists Counter Narratives on CO2

Several experts say CO2 is essential, higher levels not a problem

By Katlo Rennie

The Earth has entered "uncharted territory," and life is "under siege." The public has failed to heed this message, and now, "time is up," according to a recent report from Oxford Academics' BioScience.

The authors of the report wrote that the catalyst behind the dire warnings is escalating concentrations of carbon dioxide (CO2).

The authors said that to salvage what remains, a much faster phase-out of oil, coal, and other fossil fuels is necessary. Failure could cause water and food shortages, plus extreme heat, for a third to half of the world's population.

The message is similar to that of the United Nations,

Continued on A2

Continued from A1

U.S. President Joe Biden, the World Economic Forum, and countless government leaders. CO2 concentrations are too high, and the continued burning of fossil fuels, which release CO2, will cause people to die.

Thus, the U.N. states that it's necessary to spend trillions of taxpayer dollars on "climate-friendly initiatives" such as wind and solar energy and to eat less meat, and the Biden administration has called for a full transition to electric vehicles.

However, not all scientists share this view.

According to Patrick Moore, chairman and chief scientist of Ecosense Environmental and co-founder of the environmental organization Greenpeace, the climate change messaging isn't based on fact.

"The whole thing is a total scam," Mr. Moore said. "There's actually no scientific evidence that CO2 is responsible for climate change over the ages."

Mr. Moore said that over the past few decades, the climate message has repeatedly changed; first, it was global cooling, then global warming, then climate change, and now, it's disastrous weather.

"They're saying all the tornadoes, all the hurricanes, all the floods, and all the heat waves are all caused by CO2. That is a lie. ... We're part of the cycle," he said. "We don't need CO2. For us, it's a waste product—we need oxygen. But plants are the ones who made the oxygen for us, and we're making the CO2 back for them."

He said the burning of fossil fuels—which emits CO2—is a good thing for plant life.

"We are replenishing the atmosphere with CO2 up to a level that is much more conducive to life and growth of plants, in particular."

Weather-related deaths and climate disasters have in fact declined "precipitously" over the years, according to John Christy, a climatologist and professor of atmospheric science at the University of Alabama in Huntsville and the director of the Earth System Science Center.

In 1925, there was an average of 484,880 climate-related deaths worldwide, according to Human Progress. Since then, it's steadily decreased, with the latest report, from 2020, showing there was an average of 14,885 climate-related deaths worldwide.

"CO2 is portrayed now as the cause of damaging extreme weather. Our research indicates these extremes are not becoming more intense or frequent," Ms. Christy told The Epoch Times. "Thus, CO2 cannot be the cause of something not occurring."

The U.N. is planning for countries to cut emissions to as close to zero as possible by 2050.

"The plan is "collective suicide," according to Malgosia Askanas, a senior research and development associate at Aurora Biophysics Research Institute.

Ms. Askanas said the concern over CO2 isn't based in science.

"It started with the hysteria of the New Ice Age and a little-known CIA report in 1974 that claimed that a major climatic change was underway," she said.

"Later, the idea of cooling" alarmism morphed into its opposite, by employing the false notion that global warming due to excess CO2—which is chemically a falsehood."

Carbon Dioxide and Life

Mr. Christy said the earth's climate has a "tremendous natural variability" and that it's currently in a gradual warming phase.

"CO2 has been fairly demonized because it is used by plant food in its atmospheric form, and it is the consequence of combusting carbon-based energy, which unquestionably improves lives around the world," he said.

He calls CO2 the "currency of life."

"In past epochs, there were many times more CO2 levels in the atmosphere than [now]," he said.

Mr. Moore referred to a graph that charts CO2 and temperature over the past 500 million years.

"It's very clear that CO2 and temperature have been out of sync more often than they've been in sync," he said. "The more or less negates the whole idea that there's a direct cause-effect going on there."

Mr. Moore said that current CO2 concentrations are "historically low."

"Going back 150 million years, CO2 was somewhere between 2,000 and 2,500 parts per million (ppm)," he said. "Generally, atmospheric CO2 is low (around 180 ppm) during glacial periods and higher during interglacials, according to the U.N. Intergovernmental Panel on Climate Change (IPCC).

"Before the Industrial Era, circa 1750, atmospheric CO2 was about 280 ppm for several thousand years, the IPCC states.

"The current peak level in the atmosphere is around 420 parts per million (ppm), according to 2021 data from NOAA Research.

Mr. Moore said that that's a good thing and that the push for net-zero CO2 is a disastrous policy. Anything under 150 ppm is "starvation level" for most plant species.

"CO2 is only now at 0.042 percent of the atmosphere. And the fact of the matter is plants would like it between 1,500 and 2,000 ppm for optimum growth," Mr. Moore said.

"Commercial greenhouse growers worldwide routinely increase the CO2 level in their greenhouses to between 800 and 1,200 ppm. Really, it's about 2,000 where you're at the optimum level for trees and plants, in general."

Patrick Hunt, president of Climate Realist of BC, said people don't generally understand CO2.

"They've been told that a warmer Earth is bad, although science shows that's wrong," he told Epoch Times. "In the Dark Ages, it was colder. It was cold[er] and not nearly as comfortable living during the Little Ice Age.

"But during the medieval warming period, they had enough money left over to build cathedrals."

Mr. Hunt said that biomass, or plant growth, on earth has increased by 20 percent over the last 40 years "and 70 percent of that plant growth is attributed to CO2."

In 2018, NASA published a report showing that the Earth's "greenness" was increasing, which showed that the health of forests, grasslands, and farms was more robust.

"It is ironic that the very same carbon emissions responsible for harmful changes to climate are also fertilizing plant growth, which in turn is somewhat moderating global warming," the report co-author, Jarle Bjerke of the Norwegian Institute for Nature Research, said.

Subsequent maps have continued to show increases in the Earth's "greenness."

Temperature and CO2 as a Net Good

Since 1950, CO2 emissions from humans have risen "exponentially," Mr. Moore said, but temperature hasn't responded like that.

"There's no way that that can be a cause-effect relationship. The cause is supposed to be CO2. But if CO2 was responsible for warming, it would have warmed more than it has," he said.

The main global movement against temperature rises is the U.N.'s Paris Agreement, a legally binding international treaty to "substantially reduce global greenhouse gas emissions" in order to limit global temperature increases to 1.5 degrees C above pre-industrial levels.

The agreement was enacted in 2016, and more than 195 countries have entered into it. President Donald Trump pulled the United States out of the agreement in June 2017.

"The Paris Climate Accord is simply the latest example of Washington entering into an agreement that disadvantages the United States to the exclusive benefit of other countries, leaving ... taxpayers to absorb the cost in terms of lost jobs, lower wages, shuttered factories, and vastly diminished economic production," President Trump said at the time.

President Biden rejoined the agreement on his first day in office, Jan. 20, 2021. The White House said that the "climate crisis" is one of the "four crises" the administration would focus on addressing and that rejoining the agreement was an important way to do that.

Mr. Moore said the 1.5 degree Celsius limit imposed by the Paris Agreement is garbage.

"This 1.5 degrees that's going to destroy the whole Earth? The Earth has been way more than 1.5 degrees warmer throughout most of its history," he said.

"We happen to be in a warming blip now called the Modern Warm Period.

But the Modern Warm Period is coming out of the Little Ice Age, which peaked around 1600 ... before we started using fossil fuels."

In a peer-reviewed paper he authored, Mr. Moore wrote that, according to 600,000 years of historical patterns, a major glaciation period would have occurred if humans hadn't caused an uptick in CO2.

Mr. Christy said the extra CO2 might put off the next ice age, but not by much.

"I suspect CO2 has a net benefit when you weigh the advantages of energy and carbon-based products compared with living without this energy or these products," he said. "... Africa and can assure you that without energy, life is brutal and short.

"The concentration of CO2 is increasing because humans use carbon in many ways to enhance living standards. The response of the climate system is gradual and, in my opinion, entirely manageable, especially considering the massive benefits to human life it brings."

Politics Versus Science

Mr. Christy said climate science has become a "failed science" as the questioning of its claims is "discouraged or even prevented."

"This is especially true among certain political groups and the majority of the specific outlets that use it."

Ms. Askanas pushed back on the widely propagated concept that there's scientific consensus about "the catastrophic consequences" of global warming and about CO2 "rise in natural disasters, about the melting of arctic ice."

"These are all politically-motivated dogmas that are dismissed by carefully or outright fraudulent data, statistics and arguments," she said, calling the U.N. net-zero plan "fascistic through-and-through."

She said she sees the climate agenda as a way for governments to gain total political control.

Ms. Askanas outlined several government-imposed climate remedies, including carbon footprint regulations, carbon credits, skyrocketing transportation costs, and huge government subsidies for so-called green initiatives.

In his fiscal 2024 budget, President Biden included $52.2 billion in discretionary spending "to tackle the climate crisis," according to a White House statement. It's an increase of $10.9 billion over fiscal 2023.

"As president, I have a responsibility to act with urgency and resolve when our nation faces clear and present danger," President Biden said on Aug. 16, 2023. "And that's what climate change is about. It is literally, not figuratively, a clear and present danger."

Mr. Moore expressed particular concern over the effect of spending on the phasing out of fossil fuels in energy systems.

"With wind, you can't predict it very far into the future, and neither can you with solar because the clouds are going to come ... You have about one-third of the time from those two technologies as anything," he said.

"So, what you can do on the other two-thirds of the time if you shut off fossil fuels? Well, the first answer would be nuclear energy, because that can do it. But no, we don't want that in the West."

Wind and solar, he said, "are not feasible."

"It's just a total pipe dream, a fantasyland. It can't be done."

Ms. Askanas agreed.

"Converting the Earth into a desert of solar panels and wind generators will still not provide enough energy. Although it might make the planet uninhabitable enough so no energy would be required."

EPOCH TIMES

OUR STORY

The Epoch Times is a media organization created to seek the truth through insight and independent journalism.

Standing outside of partisan interests and the pursuit of profit, our starting point and goal is to provide a media for the public to be truly responsible to society.

We endeavor to educate readers about today's most important topics, seeking to broaden and uplift minds. We believe that rational, balanced debate is key for fostering a healthy democracy and a compassionate society.

As an independent media outlet, we use our freedom to investigate issues overlooked—or avoided—by other media outlets. We seek to highlight solutions and what's good in society rather than what divides us.

We report respectfully, compassionately, and rigorously.

We stand against the destruction wrought by communism, including the harm done to cultures around the world. We are inspired in this by our own experience.

The Epoch Times was founded in 2000 to bring honest and uncensored news to people oppressed by the lies and violence in communist China.

We still believe journalism is a noble vocation, but only when it genuinely seeks to serve its communities and help to flourish.

In all that we do, we will hold ourselves to the highest standards of integrity. This is our promise to you.

The original article (expanded from the newspaper version) can be found at: https://www.theepochtimes.com/article/climate-scientists-say-we-should-embrace-higher-co2-levels-5551562?welcomeuser=1 and as a pdf in the CSSG-2.16 transmittal email.

Let's take an easy one:

3. CO2 is good for plants - Here's most of the relevant text (which were spread throughout the article as opposed to a specific issue to be addressed), marked regarding True-False as above:

> *"We don't need CO2. For us, it's a waste product—we need oxygen. But plants are the ones who made the oxygen for us, and we're making the CO2 back for them."*

He said the burning of fossil fuels—which emits CO2—is a good thing for plant life.

"We are replenishing the atmosphere with CO2 up to a level that is much more conducive to life and growth of plants, in particular."

"CO2 has been unfairly demonized because it is actually plant food in its atmospheric form, and it is the consequence of generating carbon-based energy, which unquestionably improves lives around the world," he said.

He calls CO2 the "currency of life."

"In past epochs, there were many times more CO2 levels in the atmosphere than today."

Mr. Moore pointed to a graph that charts CO2 and temperature over the past 500 million years.

"It's very clear that CO2 and temperature have been out of sync more often than they've been in sync," he said. "That more or less negates the whole idea that there's a direct cause-effect going on there."

Takuya Sato checks young rose plants under ducts emitting CO2 in a greenhouse in Rokkasho, Japan, on June 9, 2008. (Toru Yamanaka/AFP via Getty Images)

Mr. Moore said that current CO2 concentrations are "historically low."

"Going back 150 million years, CO2 was somewhere between 2,000 and 2,500 parts per million (ppm)," he said.

Generally, atmospheric CO2 is low (around 180 ppm) during glacial periods and higher during interglacials, according to the U.N. Intergovernmental Panel on Climate Change (IPCC).

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In 2018, NASA published a report showing that the Earth's "greenness" was increasing, which showed that the health of forests, grasslands, and farms was more robust.

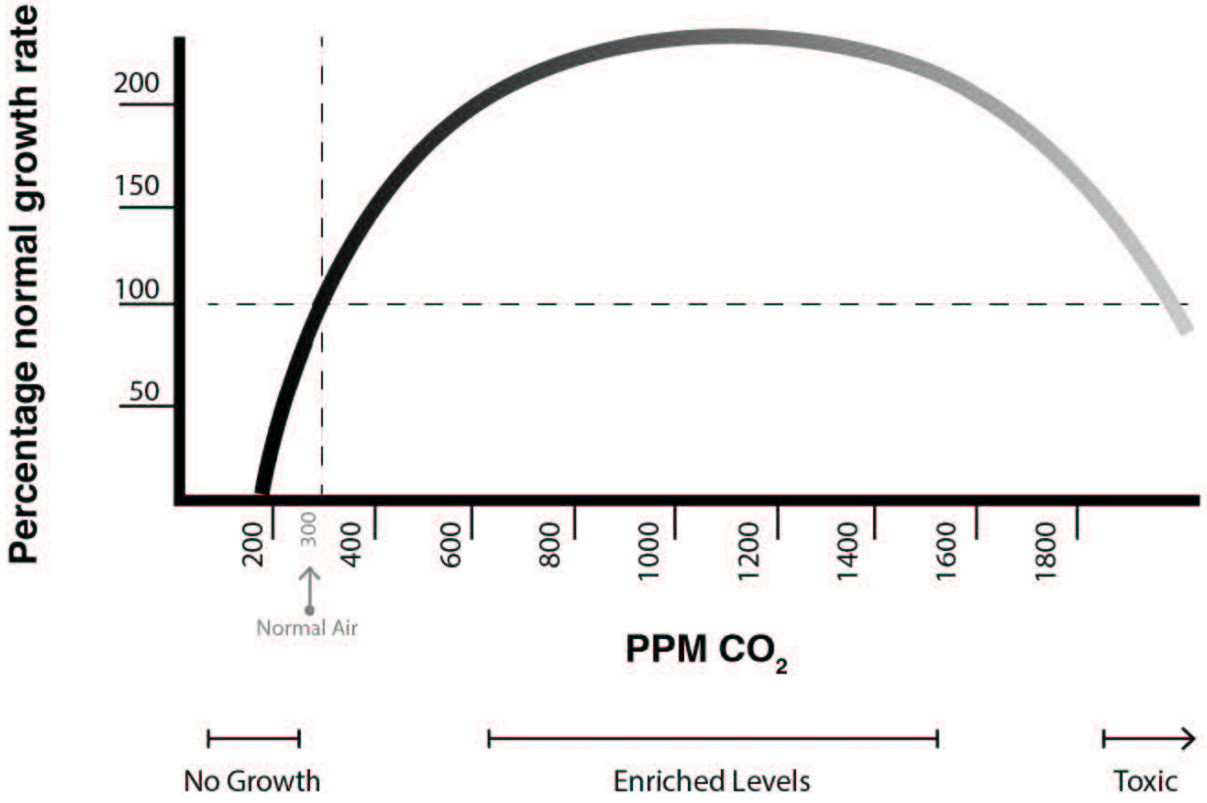
"It is ironic that the very same carbon emissions responsible for harmful changes to climate are also fertilizing plant growth, which in turn is somewhat moderating global warming," the report co-author, Jarle Bjerke of the Norwegian Institute for Nature Research, said.

Subsequent maps have continued to show increases in the Earth's "greenness."

My analysis

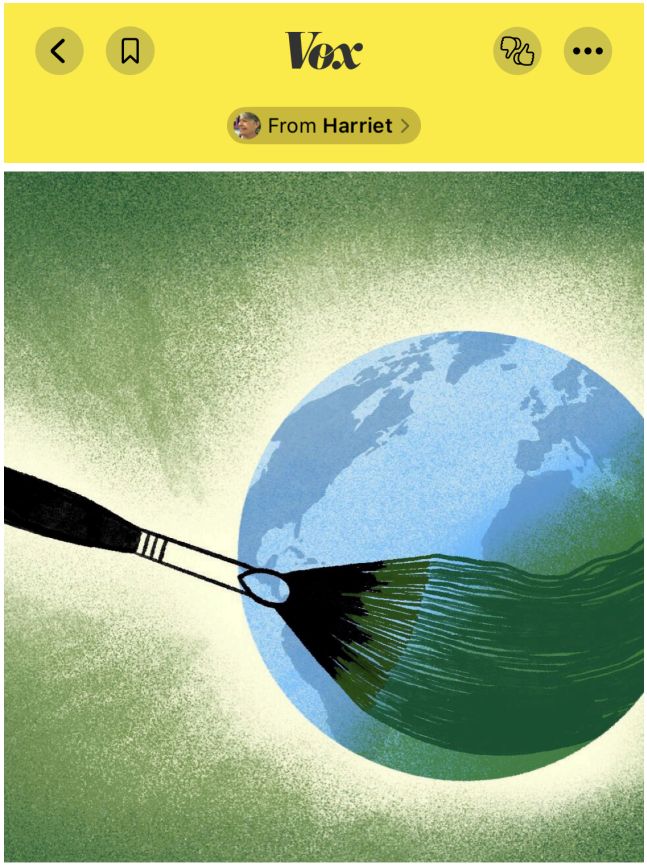
Per Oklahoma State University, increasing CO2 can definitely improve plant growth.

Reading the Newspaper



https://extension.okstate.edu/fact-sheets/greenhouse-carbon-dioxide-supplementation.html

Here's an article confirming that the earth is getting greener and noting areas of research working on sorting out the ways we are modifying the planet.



Paige Vickers/Vox

The Earth is getting greener. Hurray?

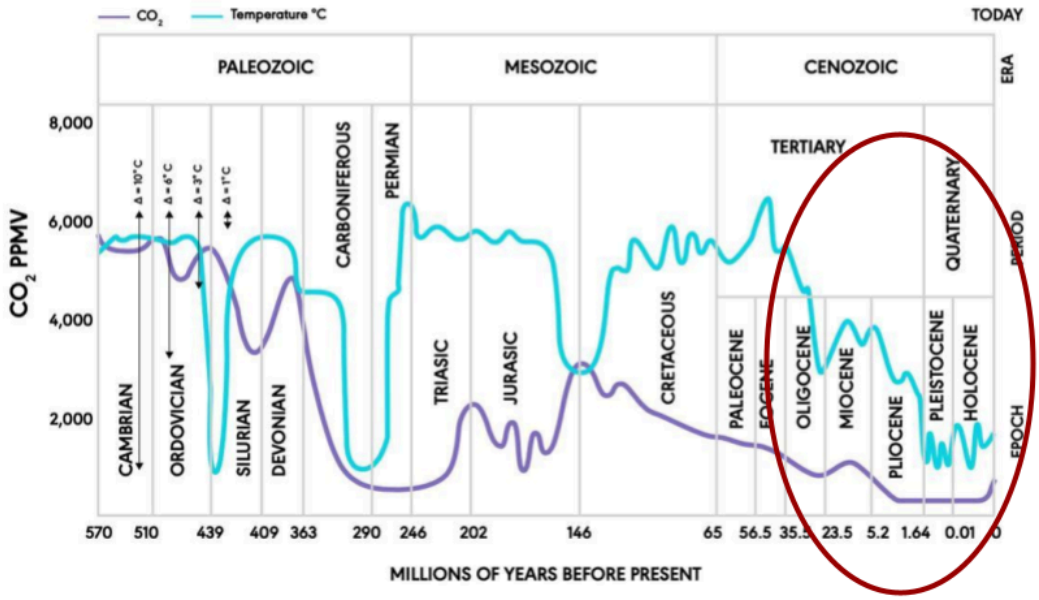
https://apple.news/ASF1ii9ZkTU6mEIADX1C9gg

But is it good for us on this Planet, if we want to continue to thrive here?

The article cites conditions hundreds of millions of years ago - is this appropriate?

Reading the Newspaper

Geological Timescale: Concentration of CO_2 and Temperature Fluctuations



The above chart looks awful! Does it prove there is no relationship between CO2 and Temperature?

Well, we've looked into this matter. We can ignore the curves from before 50 million years ago. And note the consistent decline of temperatures along with the decline of CO2 over this last 50 million years.

Back in ***CSSG-2.3 Paleo Part 2 - the first 4.6 Billion years less 50 million years,*** we found:

> *Given the above, it seems reasonable (and it is definitely convenient!) to just **ignore the Paleo (ancient) record from earlier than 50 million years ago (or so)** as we dig more into the issues facing our own times. The radically different mixes of gases, atmospheric densities, and erratic temperatures (as well as much greater limitations on precise data) of those remote times would make it far more difficult to rationalize an analogy to our current situation.*

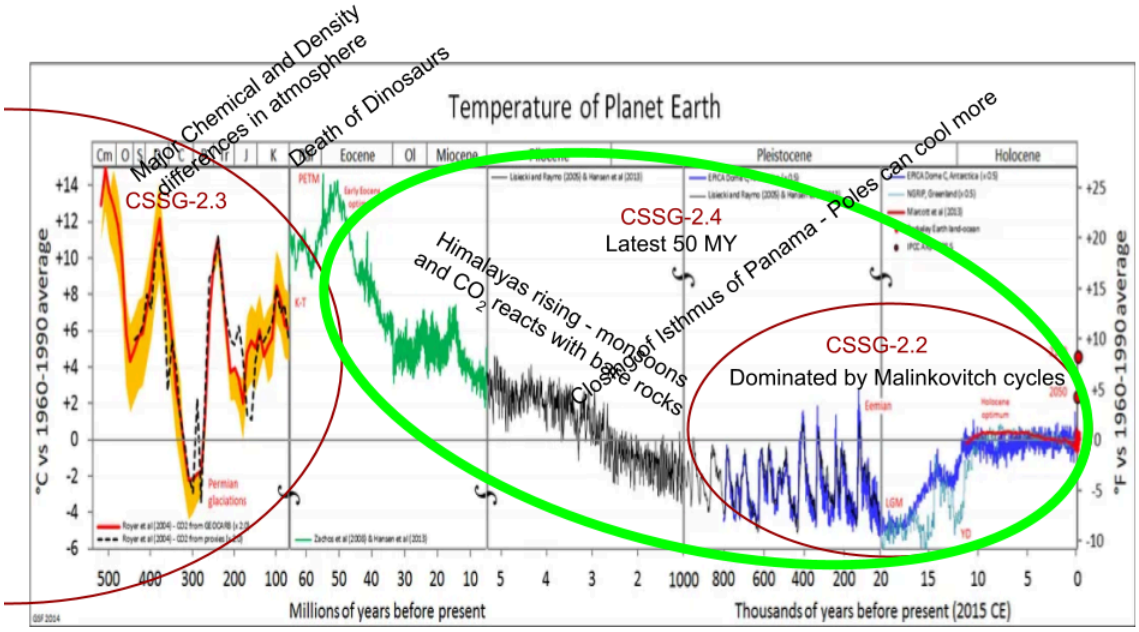
In ***CSSG-2.4 Paleo Part 3 - the latest 50 million years - the Big Cooldown,*** we noted:

Reading the Newspaper

1. *As the **Indian subcontinent collided with Asia**, starting around 50 million years ago, the huge uplifting of bare rock had two effects: 1) the warm, very moist air circulating from the Indian Ocean was now driven upward into cold air. This dramatically increased the monsoon rainfall. 2) Rain and the atmospheric CO_2 (which had been keeping the planet pretty hot for hundreds of millions of years through the dinosaur ages) - reacted with the bare rock, taking a large amount of CO_2 out of the atmosphere. This process is called Weathering. **And the removal of the CO_2 resulted in cooling the planet**.*

2. *The long cooling trend resulted in **enormous ice sheets** developing in the Antarctic and, later, over large portions of the Northern hemisphere continents (during the ice ages in the last million+ years we've touched on).*

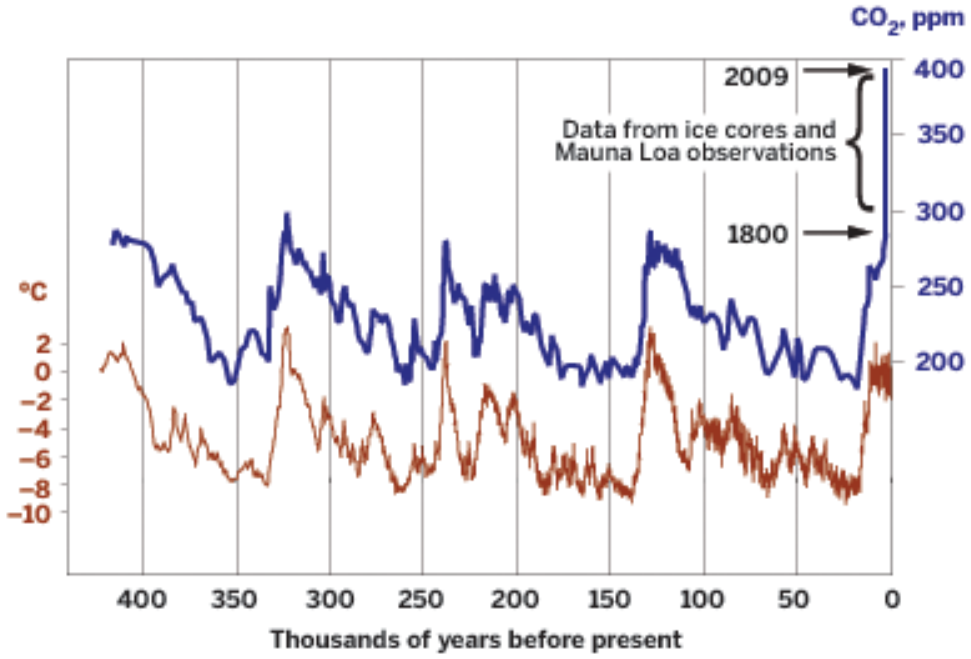
3. *Conveniently for this discussion, the positionings of the continental masses were generally similar to today's, with the major exception of the Indian subcontinent action, above. BUT, one critical change occurred around 3+ million years ago: **the Isthmus of Panama closed**. It is postulated that this made a major change to the motion of warm, tropical waters - allowing the ocean currents to carry heat differently (the Gulf Stream is part of this new system), and the poles to cool even more.*



What we've seen in our studies is that the only reliable analog time is the most recent 3-5 million years. The earth likely would have behaved very differently before then, so we must be careful.

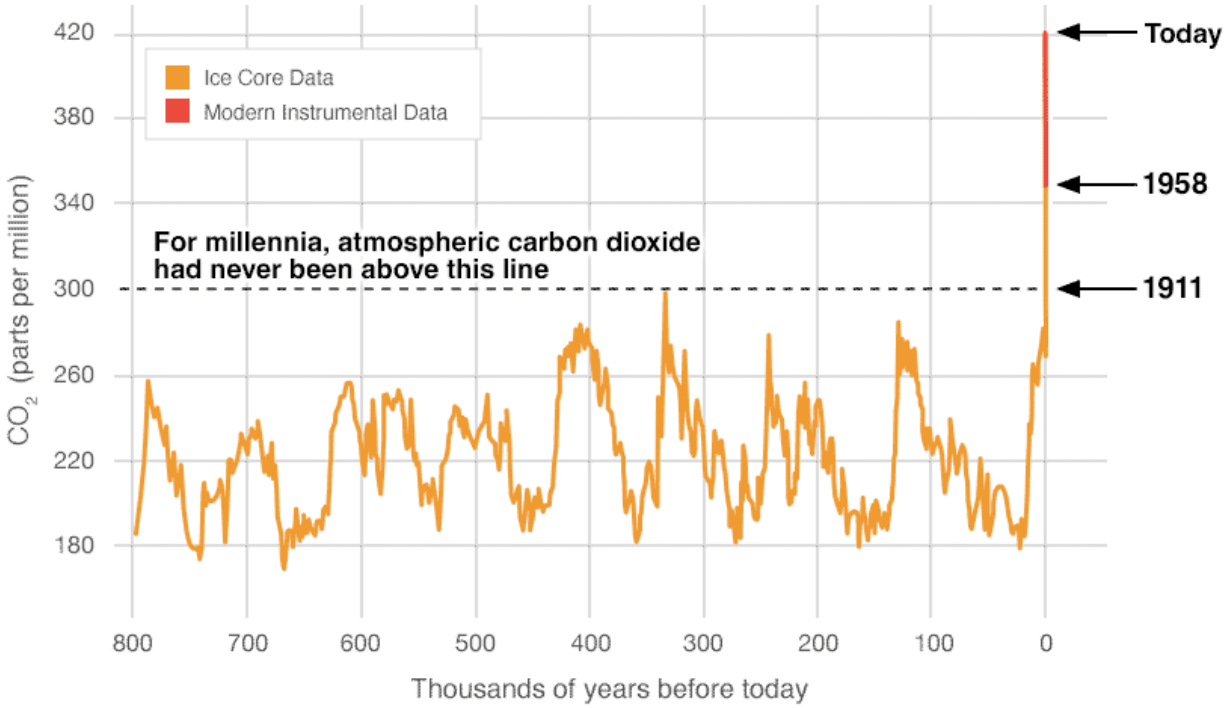
Reading the Newspaper

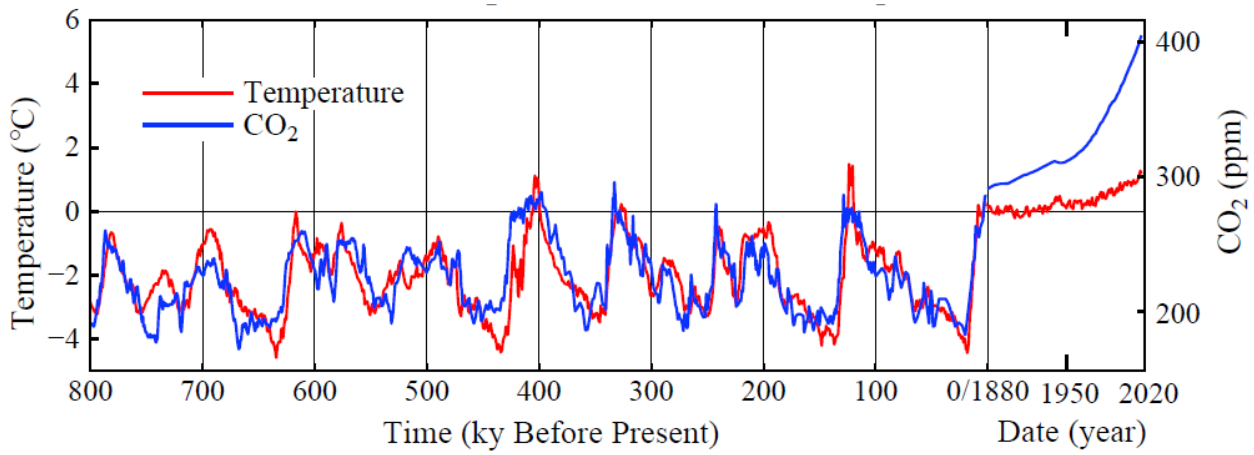
And as for "*It's very clear that CO2 and temperature have been out of sync more often than they've been in sync," he said. "That more or less negates the whole idea that there's a direct cause-effect going on there.",* *let's remember* ***CSSG-2.2 Paleo Part 1 - the last 800,000 years***
with a chart similar to this:



Credit: Michael Ernst/Woods Hole Research Center
Data from Antarctic ice cores show that temperatures have changed before CO_2 concentrations over a series of recent ice ages. That trend has been upset during the past 100 years, as a rapid increase in CO_2 preceded the current warming.

Reading the Newspaper





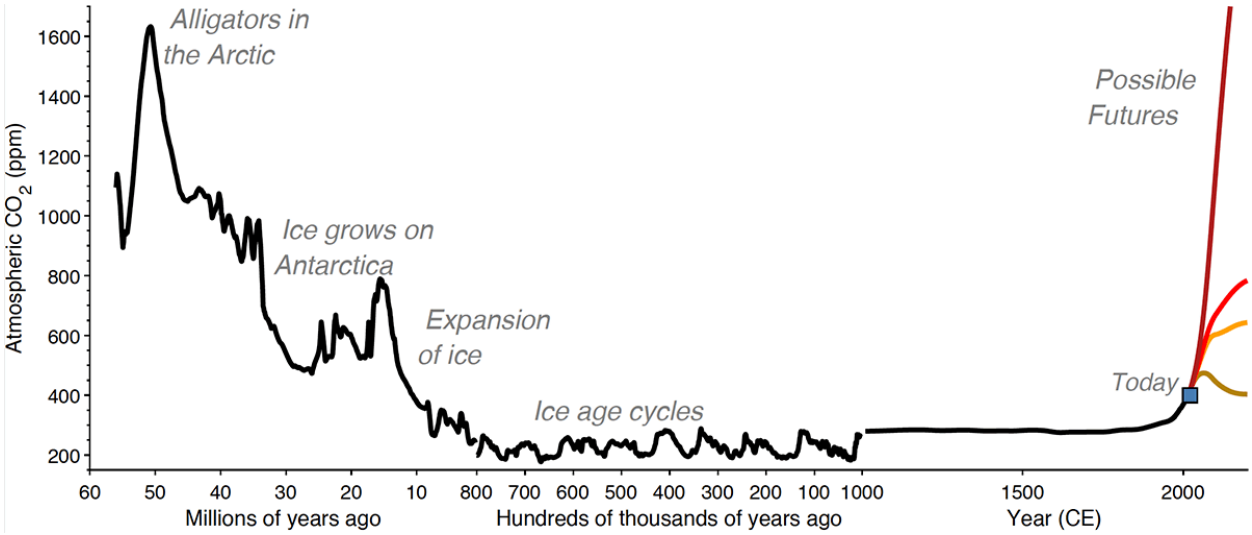
Hansen 2018 - Note the last time Earth has seen these temperatures was 120,000 years ago in the last glacial minimum.

It is totally unsupported, misleading thinking to assert that there is no relationship between CO2 levels and Temperature.

Reading the Newspaper

Finally, what could we expect if CO2 reached 2,000 parts per million, as proposed?

This next chart, consistent with the complex chart above which was provided in the newspaper article, puts this all in perspective. Remember they virtually proposed going to 2000 ppm:



MILLIONS of Years <-> HUNDREDS of THOUSANDS <-> RECENT Years

https://today.tamu.edu/2021/06/14/ancient-deepsea-shells-reveal-66-million-years-of-carbon-dioxide-levels/

Around 50 million years ago, with CO2 levels in the range proposed by the newspaper article, the planet was about 10^0 C hotter than now. Translating this to Farenheit, think of your current summers being around 18^0 F hotter.

For Florida and DC, where 90^0F days are common, this would look more like 105^0 F. Now look at humidity, anything over 50% would be totally normal.

How would this translate to health, per OSHA:

Reading the Newspaper

	Relative Humidity								
°F	10%	20%	30%	40%	50%	60%	70%	80%	90%
104	98	104	110	120					
102	97	101	108	117	125				
100	95	99	105	110	120	132			
98	93	97	101	106	110	125			
96	91	95	98	104	108	120	128		
94	89	93	95	100	105	111			
92	87	90	92	96			114	122	
90	85	88	90	92	96	100	106	114	122

Heat Stress Index									
	Relative Humidity								
°F	10%	20%	30%	40%	50%	60%	70%	80%	90%
104	98	104	110	120	132				
102	97	101	108	117	125				
100	95	99	105	110	120	132			
98	93	97	101	106	110	125			
96	91	95	98	104	108	120	128		
94	89	93	95	100	105	111	122		
92	87	90	92	96	100	106	114	122	
90	85	88	90	92	96	100	106	114	122
88	82	86	87	89	93	95	100	106	115
86	80	84	85	87	90	92	96	100	109
84	78	81	83	85	86	89	91	95	99
82	77	79	80	81	84	86	89	91	95
80	75	77	78	79	81	83	85	86	89
78	72	75	77	78	79	80	81	83	85
76	70	72	75	76	77	77	77	78	79
74	68	70	73	74	75	75	75	76	77
NOTE:	Add 10°F when protective clothing is worn. Add 10°F when in direct sunlight.								

Humiture °F	Danger Category	Injury Threat
Above 130°	EXTREME DANGER	Heat stroke imminent!
105° to 130°	DANGER	Heat cramps or exhaustion likely, heat stroke possible if exposure is prolonged and there is physical activity.
90° to 105°	EXTREME CAUTION	Heat cramps and heat exhaustion possible if exposure is prolonged and there is physical activity.
80° to 90°	CAUTION	Fatigue possible if exposure is prolonged and there is physical activity.
Below 80°	NONE	Little or no danger under normal circumstances.

From the above, it appears that letting CO2 rise to 2000 ppm would make a huge portion of the planet uninhabitable.

So.

How do YOU assess these assertions regarding the encouragement to increase CO2 further?

BONUS !!!

Pictures of the Week - A thunderhead forms, rises through the Troposphere, and collides with the Stratosphere

Reading the Newspaper