NO CLIMATE CRISIS

But the "Profits of Doom" Will Continue



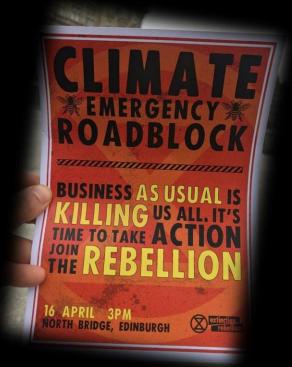
Roy W. Spencer, Ph. D.
The University of Alabama in Huntsville
13 February 2020

Truth is truth, but perception is reality.

PUBLIC PERCEPTION OF CLIMATE CHANGE

The global public is deeply divided in their beliefs regarding climate change.





Views range from climate change being a "hoax," to it being an "existential crisis."

MY MESSAGE

- 1. Slow warming is occurring, probably mostly from CO2, but there is no climate "crisis" or "emergency."
- 2. Global markets for goods and services will continue to be influenced by:



Public perception guided by media, education, etc.

Special interest groups (e.g., green lobbyists, corporate rent-seekers, tech merchants, etc.)

Government subsidies, mandates, and other programs.

WHAT IS CLIMATE SCIENCE FAIRLY CERTAIN OF?

- 1. The climate system has warmed in recent decades, with 2010-2019 the warmest decade in the instrumental record (last ~150 yrs).
- 2. At least some (most?) of this warming is due to increasing carbon dioxide (CO2) from fossil fuel burning.
- 3. Warming should continue into the future.

But none of this is necessarily cause for alarm.

WHAT IS UNCERTAIN?

Natural causes of climate change are largely not understood. Climate can change without any forcing (it's a chaotic system).



GLOBAL WARMING THEORY

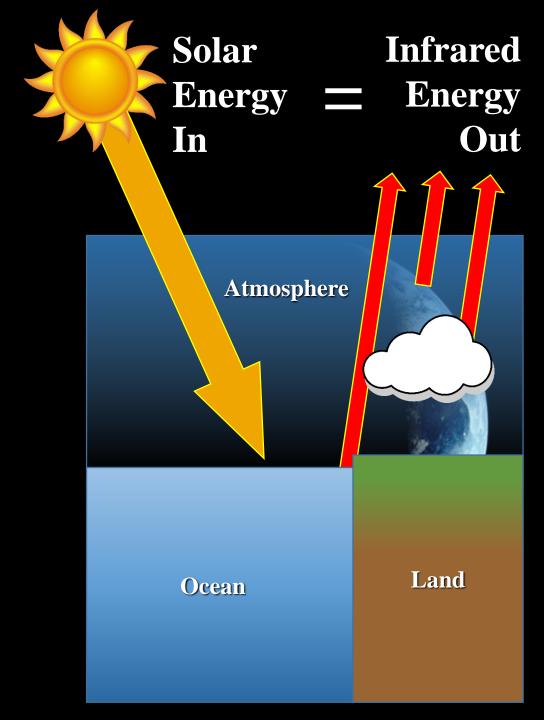
(Its all about the energy balance)

If solar energy in > infrared energy out, the climate system warms.

Increasing CO2 causes a reduction in infrared energy out (warming tendency).

Exactly how much warming will occur is uncertain and debatable...

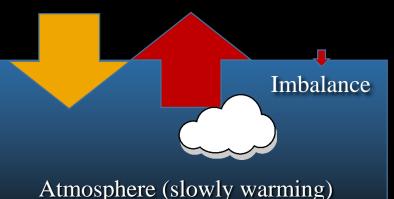
...the UN IPCC says 1.5° to 4.5° C for a doubling of atmospheric CO2 ("2XCO2"); this is called the "equilibrium climate sensitivity" (ECS)



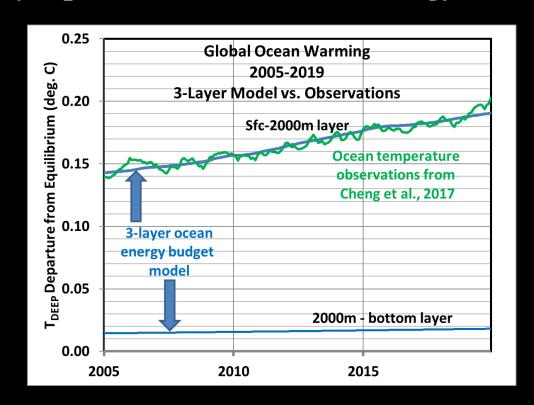
HOW LARGE IS THE GLOBAL ENERGY IMBALANCE?

Since 2005, only about 0.8 Watts per sq. meter; this is only 1 part in 300 of natural energy flows.

Solar Infrared
Energy In Energy Out
(~240 W/m2) (~240 W/m2)



Ocean (slowly warming)



We do not know natural energy flows to this accuracy, thus climate change could be mostly natural, and we would not know it!

TO REPEAT...

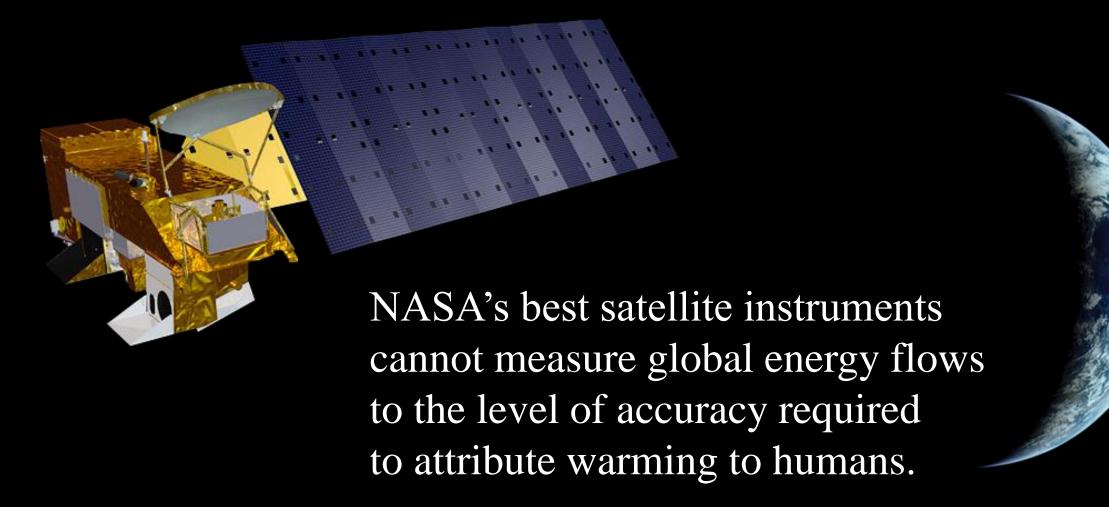
The global energy imbalance responsible for deep-ocean warming is so much smaller (1 part in 300) than our knowledge of the natural energy flows, recent warming could be mostly natural ...and we would never be aware of it.

Climate models that supposedly "prove" humans are responsible use circular reasoning:



They assume from the outset that there is no natural source of warming.

TO REPEAT...



PERCEPTION:

THE ALARMIST LANGUAGE OF "CLIMATE CRISIS"



But Guess What...?

The sun puts the energy equivalent of 300 atomic bombs into the ocean every second.

EVEN ASSUMING ALL WARMING IS HUMAN-CAUSED, CALCULATIONS FROM DATA SUGGEST NO CRISIS



A global energy budget analysis performed by N. Lewis & J. Curry* diagnosed a climate sensitivity of only 1.5° to 1.7° C (IPCC models produce 3.0° to 3.5° C, or more)

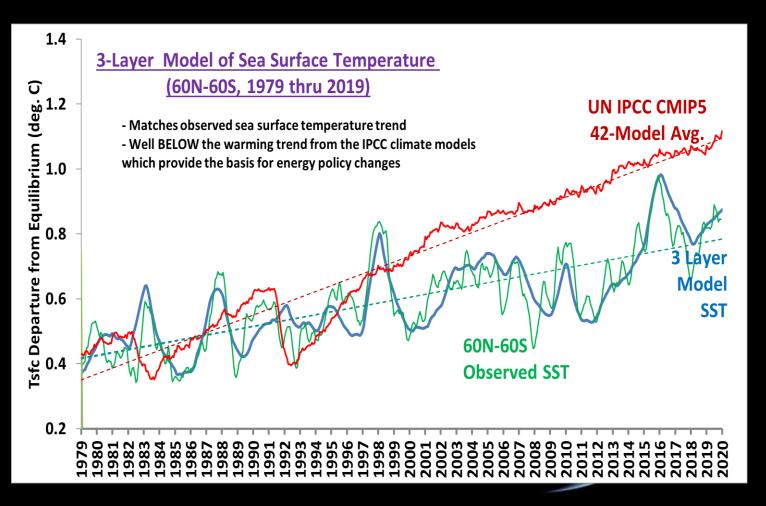
In other words, the climate sensitivity of the climate models used to guide energy policy is probably two times (2x) too high!

WE GET SIMILAR RESULTS

Our D.O.E.-funded model simulations also produce low climate sensitivity.

Only 1.9° C in this 3-layer ocean model simulation, initialized in 1765.





WHAT PEOPLE HEAR ARE EXAGGERATIONS

POPULAR CLAIMS

THE EMPIRICAL REALITY

Hottest year (decade) ever!

By 1/100th of a degree! Did you actually feel it?

Wildfires are increasing!

Global wildfires have not increased!
(Wildfires usually result from policy mismanagement.)

Storms are worsening!

Storm intensity has not changed!
(Storm financial damage increases with wealth.)

Crops are failing!

No! Global crop yields (bushels/acre) continue to break records!

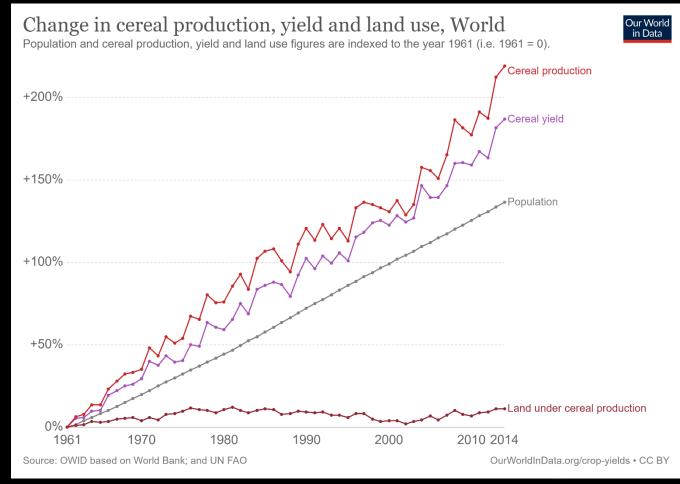


CROP YIELDS CONTINUE TO BREAK RECORDS

More CO2 in the atmosphere has led to an increase of \$3.5 trillion in agricultural productivity from 1961- 2011.

Source: Dr. Craig Idso.





WHAT PEOPLE HEAR: EXAGGERATIONS OR FALSEHOODS

POPULAR CLAIMS

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Humans are suffering!

No! Global crop yields (bushels/acre) continue to break records!

We only have 10 years left!

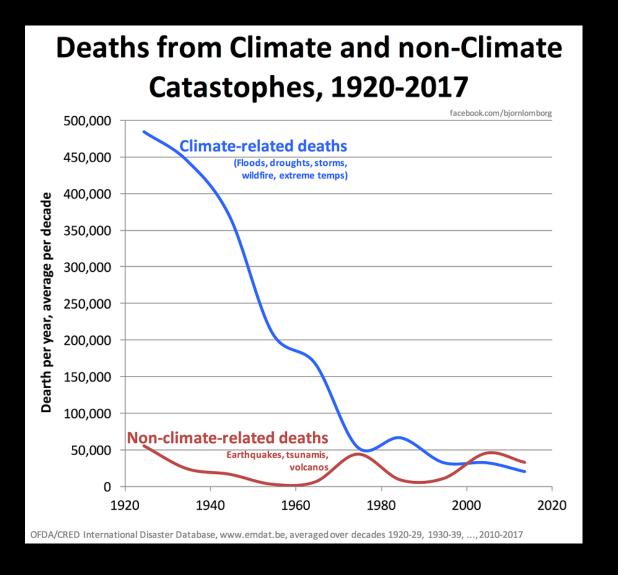
Cold kills more people than heat. No "climate deaths." Poverty is the greatest threat to human flourishing.

We've only had 10 years left for the past 50 years or more!

Extinction Rebellion!

Moving towards a "primitive socialism" is not "being green"!

THE TRUTH: WEATHER-RELATED MORTALITY IS DOWN 95% IN LAST 100 YEARS

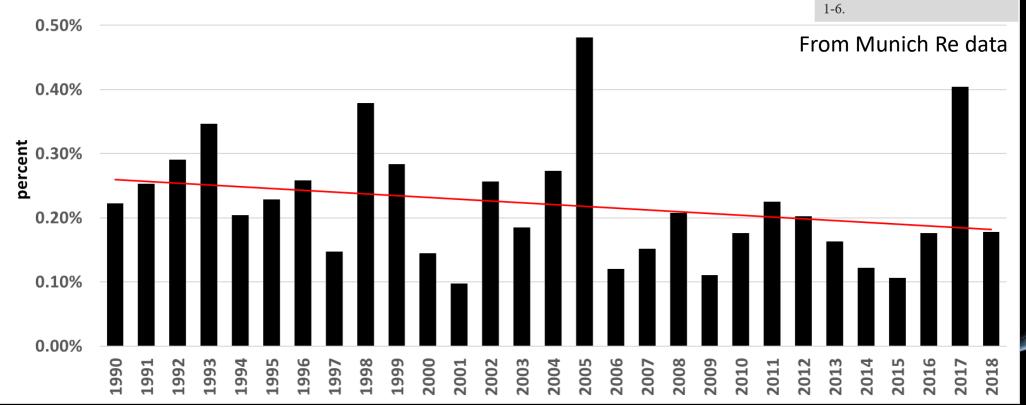




MORE TRUTH: *DOWNWARD* TREND IN WEATHER DISASTER LOSSES RELATIVE TO GDP



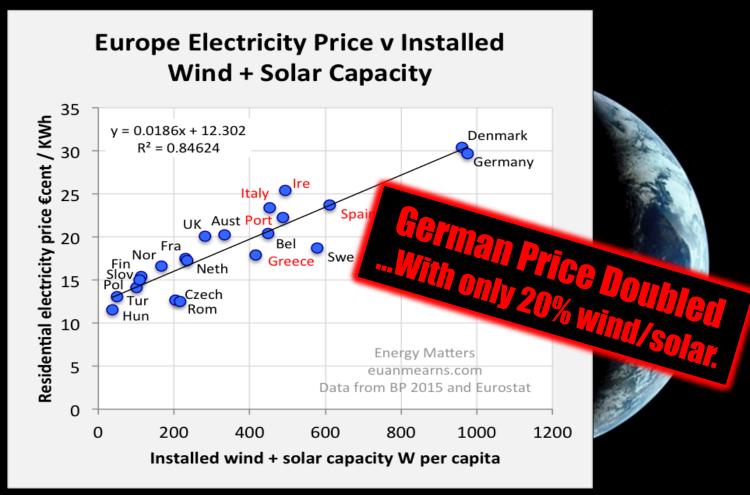
Source: Updated from Pielke, Jr., R. (2018). Tracking progress on the economic costs of disasters under the indicators of the sustainable development goals. *Environmental Hazards*, 1-6.



THE "SOLUTIONS" FOR CLIMATE CHANGE ARE EXPENSIVE, DESTROY PROSPERITY, & HURT THE POOR

The price of electricity in Europe goes up in proportion to how much solar + wind energy is used.





BUT THE "PROFITS OF DOOM" WILL CONTINUE...

The climate change / sustainability / social responsibility narratives are strong, coming from:

The education system;

The news media;

The entertainment industry;

Political leaders and government agencies;

Government grants, programs, and mandates;

Rent-seekers (those who want access to political power);

An increasing number of corporations;

And an increasingly frightened and "guilty" general public.



THE END...

but a place to begin discussion.



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