

“But one must say clearly that we redistribute de facto the world’s wealth by climate policy. Obviously, the owners of coal and oil will not be enthusiastic about this. One has to free oneself from the illusion that international climate policy is environmental policy. This has almost nothing to do with environmental policy anymore, with problems such as deforestation or the ozone hole.”

-German economist and IPCC official Ottmar Edenhofer (2010)

“I’m here to say that (Extinction Rebellion) isn’t about climate...the climate’s breakdown is a symptom of a toxic system that has infected the ways we relate to each other as humans and all life.”

-Extinction Rebellion (XR) Co-Founder, Stuart Basden (2019)

Greetings Colleagues, after a copious note-taking SMART hearing, it seems we are on a path without a destination. We have goals, but without a purpose. If we are to expend millions of dollars extracted by force from “we the people,” it seems we ensure it is to ends of their benefit, otherwise it is just theft. We are currently exerting tremendous force, but going no distance; thus, no work is actually being done.

Bjorn Lomborg has put significant time into studying and advocating for EFFECTIVE policy. In a recent [interview](#), he noted with respect to a recent heat wave in England that while 1500 died from heat, 65,000 had perished from cold the previous winter. Both problems are largely due to energy being fiscally or physically unavailable. He notes that even the IPCC recognizes that Net-Zero would yield Near-Zero (0.3F) difference by 2100, at the cost of trillions of dollars & millions of lives.

Let’s start with something you already know, but maybe don’t know you know:

the energy in the atmosphere is primarily carried by water vapor, not carbon dioxide.

During the SMART hearing, only CO2 and [methane](#)(CH4) were noted as GHG’s, because they are only considering dry air. CO2 is about **0.04%** of the atmosphere, while CH4 comprises only about 0.0002%. But water vapor is around 4%, which is 100 times and 20,000 times more, respectively.

(The air you exhale is about 4% CO2, and in movie theater will quickly rise above 10%)

You know H2O carries energy because you likely love the lack of **humidity** in Colorado, and is why a [heat index](#) factors water vapor, not CO2. Thus, a low humidity 90F feels like 91F, but with high humidity, it feels like 132F, even though the change in water vapor is only 3-4%.

The only way to remove heat in a vacuum is radiation, but to move energy away from the earth to the lower atmosphere, the most effective means is evaporation. MIT estimates that Infrared Radiation only removes about **$66 \frac{W}{m^2}$** of energy away from earth, while evaporation moves **$78 \frac{W}{m^2}$**

So, on a scale of 100%, IR removes about **46%** and evaporation removes 54%

(“on average, evaporation of water from the surface carries away 78W/m², net IR carries away 66W/m²” -MIT)

We know also that of the [IR](#) leaving the planet, about 20% goes straight past all the atmospheric gasses, and of the IR that is absorbed, water vapor absorbs over [90%](#) and CO2 absorbs less than **10%**.

Of the CO2 in the atmosphere, about [35gigatons](#) of the 3120gigatons (400pm @ [7.8GT/ppm](#)) CO2 molecules (**1%**) in 1,000,000 atmospheric molecules result from hydrocarbon combustion; about [15%](#) (5130/33621) of that is attributed the United States.

(CO2 absorbs very little of the IR incoming from the sun compared to water vapor. Most of the energy from the sun passes straight through the atmosphere to be absorbed by earth and water. It’s estimated about 30% is reflected by snow and clouds, but it’s a very dynamic range.)

So, I calculate the energy in the atmosphere attributable to “manmade” CO₂ to be about 15% of 1% of 10% of 46%;

0.007% of the energy in the atmosphere comes from hydrocarbon combustion in the US.

If we reduce that by 20%, we will have achieved a **0.002% decrease** on atmospheric energy for the entire United States.

Perhaps, the 0.002% effect is more relevant than the 20% reduction.

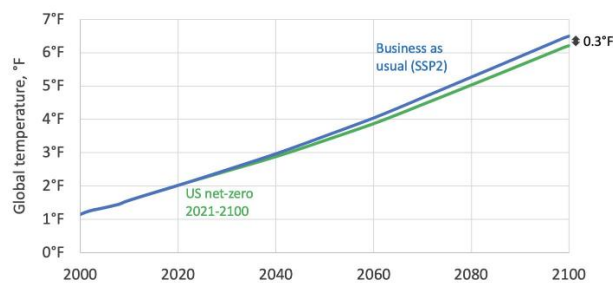
The effect of CO₂ on the atmosphere is **Logarithmic**, with a diminishing effect as CO₂ increases
At 280ppm the Net Downward Forcing is 257W/m², 261 at 560ppm, and 264 at 1120ppm

If the entire change from 280ppm to 400ppm is considered manmade, then the heat effect is **0.2%**
Currently we’re measuring our climate goals by how hard we work, not by what we achieve.

It would be one thing if we were spending our own money, but we are not.

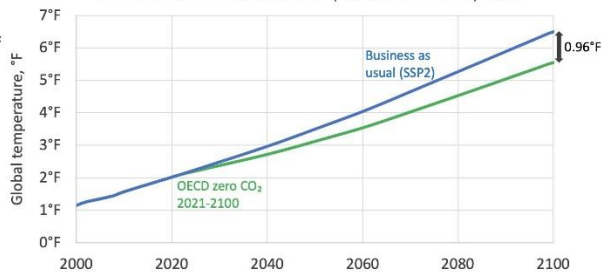
Bjorn Lomborg on [Twitter](#): "Even if entire US went net-zero today and stayed net-zero for the rest of the century impact rather small, reducing temperature rise in 2100 by 0.3°F (0.16°C) Because vast part of 21st century emissions come currently poor world Using UN climate model MAGICC ([magicc.org](#))"

If US goes net-zero today
and stays net-zero for the rest of the century
UN Climate Model: temperature reduced by **0.3°F**



Model is MAGICC, <http://live.magicc.org/>, used by UN Climate Panel for all of their reports. Based on SSP2, the UN's middle-of-the-road scenario, <https://tntcat.iiasa.ac.at/SSPDb>, and deducting total 2019 US emissions of 5,769 million metric tons CO₂e every year from 2021-2100, <https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks>, EIA estimate energy GHG emissions to be about unchanged until 2050 with no policy, <https://www.eia.gov/energyexplained/energy-and-the-environment/outlook-for-future-emissions.php>, twitter.com/bjornlomborg

If rich world net-zero today
If the entire rich world goes net-zero today and stays net-zero for rest of the century – USA, EU, UK, Canada, Australia, Japan, New Zealand, Turkey etc.
— standard UN Climate Model: temperature reduced by **0.96°F**



Model is MAGICC, <http://live.magicc.org/>, used by UN Climate Panel for all of their reports. Based on SSP2, the UN's middle-of-the-road scenario, with and without rich world emissions, <https://tntcat.iiasa.ac.at/SSPDb>; rich world is OECD90 plus EU and candidates: Albania, Australia, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Canada, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Guam, Hungary, Iceland, Ireland, Italy, Japan, Latvia, Lithuania, Luxembourg, Malta, Montenegro, Netherlands, New Zealand, Norway, Poland, Portugal, Puerto Rico, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, North Macedonia, Turkey, UK and USA, twitter.com/bjornlomborg

**“If a lie is only printed often enough, it becomes a quasi-truth,
and if such a truth is repeated often enough, it becomes an article of belief, a dogma,
and men will die for it.”**
—Isabella Blagdan (1816-73), 1869

**“Historically, the claim of consensus has been the first refuge of scoundrels;
it is a way to avoid debate by claiming that the matter is already settled.
Whenever you hear the consensus of scientists agrees on something or other, reach for your wallet,
because you’re being had.”-- Michael Crichton**

Note: since the industrial revolution, solar irradiance has increased from approximately **1360W/m² to 1361W/m²**

While that **1 W/m²** is a relatively minor change, considered across the surface of the earth’s **6,378,137m radius** (127,792,714,086,000m² surface area of illuminated disk) yields 127,792,714,086,000Watts, or Joules per second, for every one of the 31,600,000 seconds in a year, or **4,038,249,765,117,600,000Joules per year**

while the global energy use is about **580,000,000,000,000,000 Joules/yr**

that **1 W/m²** equates to **7 times** the energy released from the total combustion of hydrocarbons.

It might be that.

“We need to get environmentalism out of the sphere of religion.
we need to stop the mythic fantasies, and we need to stop the doomsday predictions.
We need to start doing hard science instead”
-- Michael Crichton

(iLectureOnline.com videos explaining spectral absorption (approx. 5min each))

<https://youtu.be/XIBsjBvRTew>

<https://youtu.be/pgoR7dCPc8w> (Water vapor 90%)

<https://youtu.be/lsMWUK4WGkk>

<https://youtu.be/umS5aUka91Q>

[A biblical and scientific approach to climate change \(creation.com\)](#)

		78	66			144 W/m ²
		evap	IR			
atmospheric energy	54%		46%			
			vapor	CO2		
Spectral absorption			90%	10%		
				combustion	natural	
CO2 Source				1%	99%	
				US	GLOBAL	
Source				15%	85%	
		54%	41.250%	0.007%	0.0390%	4.538%
						100.0%

8

0.0/1.0 point (graded)

On average, which one of these processes is primarily responsible for cooling the Earth's surface, to balance incoming absorbed sunlight?

☒ Net infrared radiation

☐ Turbulent flux of sensible heat away from the surface

☐ Evaporation from the surface



☐ Ocean currents



On average, evaporation of water from the surface carries away 66 W m^{-2} and the sensible heat flux is about 24 W m^{-2} . net infrared radiation carries away 78 W m^{-2} .

[Climate Change: Atmospheric Carbon Dioxide | NOAA Climate.gov](#)

Since the middle of the 20th century, annual emissions from burning fossil fuels have increased every decade, from an average of 3 billion tons of carbon (11 billion tons of carbon dioxide) a year in the 1960s to 9.5 billion tons of carbon (35 billion tons of carbon dioxide) per year in the 2010s, according to [the Global Carbon Update 2021](#). That little bit of extra **sunlight** caused a little bit of warming. As the oceans warmed, they outgassed carbon dioxide—like a can of soda going flat in the heat of a summer day. The extra carbon dioxide in the atmosphere greatly amplified the initial, solar-driven warming.

By the time continuous observations began at Mauna Loa Volcanic Observatory in 1958, global atmospheric carbon dioxide was already 315 ppm.

[1ppm = 7.8 Gigatonnes](#) of Carbon Dioxide in the atmosphere.

400ppm = 3120 gigatons of CO2 in the atmosphere.

35gigatons = 4.5ppm

35/3120 = 1%

[How much carbon dioxide does the United States and the World emit each year from energy sources? | U.S. Geological Survey \(usgs.gov\)](#)

in 2019, the [United States](#) emitted 5,130 million metric tons of energy-related carbon dioxide, while the [global emissions](#) of energy-related carbon dioxide totaled 33,621.5 million metric tons.

5130/33621 = 0.1525 = 15%

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If the entire 120 ppm addition to the 280ppm (400ppm total) is considered man-made, then the US CO2 contribution to atmospheric heat energy is 0.2%

		78	66			144	
		evap	IR				
atmospheric energy		54%	46%				
			vapor	CO2			
Spectral absorption			90%	10%			
				manmade (120ppm)	280ppm	tot: 400ppm	
CO2 Source				30%	70%		
				US	GLOBAL		
Source				15%	85%		
		54%	41.250%	0.206%	1.1688%	3.208%	100.0%

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“Carbon” not “Carbon Dioxide”

[Humans Release 40 To 100 Times As Much Carbon As Do Earth’s Volcanoes \(forbes.com\)](#)

[Revoke Carbon Dioxide Status As A Pollutant | Colorado General Assembly](#)

The atmosphere contains only 1.4% of all surface **carbon**, almost **590 to 780 gigatons**, (180 and 280 parts per million) mostly in the form of gaseous carbon-dioxide.

Avg 685gigatons

[Climate Change: Atmospheric Carbon Dioxide | NOAA Climate.gov](#)

Co2 measurements taken from atop a volcano in the middle of the pacific.

Warming water outgasses Co2

[What to Make of John Kerry's Statements at the World Economic Forum - YouTube](#) “\$\$\$\$\$\$\$”