- ENGLISH
- ESPAÑOL
- DEUTSCH
- FRANÇAIS
- CATALÀ
- EAAHNIKA
 - <u>ITALIANO</u>
 - PORTUGUÊS
 - TÜRKÇE

The Ocean Heat Bomb Ignites

13.05.23 - Los Angeles, USA - Robert Hunziker



The Heat Cometh. Glowing sunrise in the middle of the Pacific ocean. It gets hot in a hurry. Photo by Terry Lucas in Wikimedia Commons.

-For the first time that scientists can recall, sea surface temperatures that always recede from annual peaks are failing to do so, staying high-

Global warming and extensive overfishing have damaged ocean ecosystems well beyond recognition from only a few decades ago. Still, on its own accord, the ocean stood tall for over 3 billion years. But, alas, in less than one human lifetime it is teetering like never before, and credible studies claim the world's oceans could be devoid of life within only three decades. This is one of the most troubling transformations of all time, nothing compares to it, absolutely nothing!

The ocean heat bomb is all about the impact of global warming and overfishing, neither of which is high enough on to-do lists of countries to help sustain ecosystems. It

should be noted that Wall Street's embrace of *going green for a profit* won't come close (not enough scale soon enough) to solving the global warming problem, but there's plenty of green to be made. By all appearances, the love affair with fossil fuels is a permanent fixture, according to IEA data, fossil fuels constitute ~80% of energy over the past 50+ years with no change as of 2023. And a reality check: "Big banks and investment firms have joined the ranks of companies making 'net-zero' pledges. But their huge stakes in oil and gas projects are undermining their climate promises." (Source: How Wall Street's Fossil-Fuel Money Pipeline Undermines the Fight to Save the Planet, Fortune, February 2, 2023)

Moreover, as if an overheated ocean is not enough of a headache, overfishing is totally out of control, nearly wiping out several species, e.g., over 11,000 sharks killed per hour at risk of extinction in part for a brew of tasteless shark fin soup.

The oceans are a gigantic heat sponge, absorbing 90% of planetary heat, enabling life to go on within its 10,000-yr Goldilocks Holocene cycle, not too hot not to cold. But times are changing very rapidly. For the first time that scientists recall, sea surface temperatures that always recede from annual peaks are failing to do so, staying high "with scientists warning that this underscores an underappreciated but grave impact of climate change." (Source: Record Sea Surface Heat Sparks Fears of Warming Surge, Phys.org, May 4, 2023)

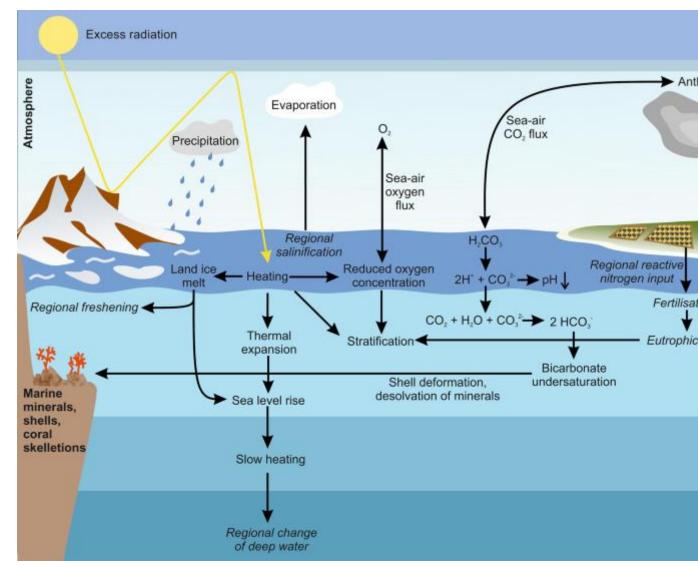
"Year by year ocean warming is increasing at an absolutely staggering rate," Jean-Baptiste Sallée, Research Scientist, CNRS (French National Center for Scientific Research), Ibid.

Scientists are now warning that human-generated greenhouse gases are demonstrably exposing the worst possible scenario with the ocean turning into a global warming "heat bomb." What goes around comes around. It appears that the ocean heat bomb has ignited.

According to US NOAA observatory recordings, in early April 2023 average surface temperatures of the oceans, excluding polar waters, hit an all-time high of 21.1° C (70° F). More than a passing interest, that all-time high might be goosed much higher by an upcoming El Niño weather phenomenon, triggering the ocean heat bomb by loading more onto the climate system. As such, the 2022 unprecedented disaster year,

whacking every continent with destabilizing floods, droughts, heat, and fire may be bush-league when compared to what's in store for 2023-24.

For perspective, it's important to recall that 2022 was influenced by La Niña, a natural cooling cycle, yet near-record heat consumed the planet. La Niña didn't help, which can only register as a telling disappointment. According to NASA, if the cooling impact of La Niña is factored into the equation, 2022 was the warmest year on record.



Overview of climatic changes and their effects on the ocean. Wikimedia Commons.

The most immediate consequence of too much ocean heat will be more severe marine heat waves which are comparable to terrestrial wildfires of rainforests. These underwater fire-equivalents degrade/destroy underwater kelp forests, e.g., West

Coast Pacific kelp losses, and Great Barrier Reef coral bleaching, while also negatively altering key life-giving nutrients and oxygen needed for all sea life. Poof, the basic ingredients of a major ecosystem gone! This comes as the world's oceans are already reeling from overfishing, chemical/plastic pollution, and acidification whilst overly stimulated by too much heat.

The ocean heat bomb threatens the lifeblood of civilization in a multifaceted manner and is expected to push back at some juncture by transferring heat back out. Could this spark a runaway overheated planet? Of course, it's not only the human heat machine at work; it's also human insatiableness, a glutinousness that ignores sustainability, destroying world fishing stock with remarkable speed and efficiency as the modern fishing fleet literally clobbers sea life.

The Overfishing Dilemma

Overfishing is a direct threat to future human consumption of seafood. According to research conducted by The World Counts (a source for 'state of the planet' real-time data): "The world's oceans could be virtually emptied for fish by 2048. A study shows that if nothing changes, we will run out of seafood in 2048. If we want to preserve the ecosystems of the sea, change is needed."

The four-year study of 7,800 marine species concluded that the long-term trend is clear and predictable. It's on a steep downward slope.

"Almost 90 percent of global marine fish stocks are now overfished, and wild capture fisheries struggle without sound regulatory frameworks and strong enforcement." Globally, data on fishing and fish stocks are insufficient to support proper management. A concerted national and international effort is needed to collect, analyze, and interpret fishing data for policymaking." (Source: Life Below Water, The World Bank, 2017)



Nevertheless, according to The World Counts: As for fish stocks, roughly 80% of world fisheries are overly exploited, depleted or in a state of collapse. Worldwide, 90% of large predatory fish, e.g., sharks, tuna, marlin, and swordfish are already gone. For example, according to the International Tuna Conservation Commission, the stock of Atlantic bluefin tuna has plummeted to 13% from its 1950 level. And according to Sci/Dev.net and the UN Food & Agri Org, Pacific bluefin tuna is estimated to be 4%-t0-5% of its 1950 levels.

The ocean's problems are known. The solutions escape authorities. Today's world fishing fleet has enough capacity to cover four (4) Earth-like ocean systems. It's high-tech and eerily similar to strip mining on land. According to Canadian journalist Michael Harris, we are "using the black magic of technology to make a desert of the sea." (Source: When Too Many Boats Chase Too Few Fish, PEW Trust, October 19, 2022)

Almost totally unregulated, the oceans are open prey for massive technologically advanced fishing fleets that literally scoop up everything, tossing aside bycatch, e.g., sharks. Mostly, these are Chinese vessels that prowl the seas. The Overseas Development Institute claims China's distant-water fishing fleet has 17,000 vessels. The United States distant-water fleet numbers 300.

"Having depleted the seas close to home, the Chinese fishing fleet has been sailing farther afield in recent years to exploit the waters of other countries, including those in West Africa and Latin America, where enforcement tends to be weaker as local governments lack the resources or inclination to police their waters. Most Chinese distant—water ships are so large that they scoop up as many fish in one week as local boats from Senegal or Mexico might catch in a year." (Source: How China's Expanding Fishing Fleet is Depleting the World's Oceans, YaleEnvironment360, August 17, 2020)

According to the IUU (Illegal, Unreported, Unregulated) Fishing Index, China is ranked as the world's worst abuser of sea laws, especially shark finning. China's gigantic refrigerated vessels referred to as "Motherships" upload the catch of the Chinese

fleet, thus allowing an entire fleet of trawlers to fish 24/7 without returning to port for weeks on end.

The ocean heat bomb fuse has been ignited. The question is whether it can be extinguished before it's too late. The most likely answer is: *No, it cannot be extinguished,* not because it is impossible but rather because there is no coordinated worldwide plan to do so. After all, it's underwater where nobody sees, and statistics about the status of ocean fishing stock are suspect and subject to considerable conjecture and easily criticized.

Where is a credible world-coordinated plan to sustain ocean ecosystems? Where is a credible world-coordinated Marshall Plan-type of a concerted effort to combat global warming with the funding in place and the wherewithal to make a difference? These do not exist in the face of abundant factual evidence of a planet that's screaming "help me!"

However, there simply is not enough focus or enough scale committed to controlling or ameliorating the deleterious impact of human-caused global warming that's changing the climate 10xs faster than seen in any paleoclimate study of Earth's history going back a billion years. Furthermore, cleaning up the mess is an overwhelming task from the get-go.

Meanwhile, greenhouse gases set new records by the year, every year without fail. "The observations collected by NOAA scientists in 2022 show that greenhouse gas emissions continue to rise at an alarming pace and will persist in the atmosphere for thousands of years, said Rick Spinrad, Ph.D., NOAA administrator." (Source: *Greenhouse Gases Continued to Increase Rapidly in 2022*, National Oceanic and Atmospheric Administration, April 5, 2023)

Year over year, there's more and more degradation, more and more greenhouse gases, more and more lip service to "hold the line at 1.5° C" by toothless global conferences, and more and more distortions of the truth, which is at epidemic levels. Distorting the truth has been, and still is, one of the biggest impediments to addressing the global warming issue.

In the recent past, telltale evidence of a profound change in how society approaches existential issues reared its ugly head four days following Donald Trump's inauguration, which boldly and falsely claimed: "the largest audience to ever witness an inauguration." Immediately thereafter sales of George Orwell's *Nineteen Eighty-Four* (published in 1949) rocketed by 10,000%, making it a No. 1 bestseller overnight. People sensed a putrid rot lingering in the air, burning nostrils.

Nineteen Eighty-Four remains the go-to source for people when "truth is mutilated… language distorted… power is abused… and when we want to know how bad things can get." (Source: Nothing but the Truth: The Legacy of George Orwell's Nineteen Eighty-Four, The Guardian, May 19, 2019)

Just think how unfortunately coincidental it is that (1) Orwell (2) global warming (3) overfishing and (4) Trump, the avatar of disinformation, should intersect at the same moment in history. The upshot is people question the credibility of facts and refuse to accept the truth when it matters most, thus crippling a public understanding of crucial scientific studies that should educate, not distract.

As a result, the world community doesn't seem to know which way to turn next. It's directionless and possibly paralyzed by the overwhelming scope of a very sticky climate problem that's starting to haunt existence. Additionally, most people don't live where climate change shows up first and thus find it difficult to accept the reality of the danger. For example, who lives on the Siberian permafrost or Antarctica, or Greenland? Until only recently, daily life has not been impacted by the hidden reality of a fierce and rapidly changing climate system far from urban life which has only recently started encroaching upon all continents, in 2022. Then, for the first time, the public finally saw and/or felt the impact of global warming's influence, as trucks delivered drinking water to more than 100 parched towns and villages in the world's most developed countries France and Italy and commercial barges sputtered in mud on commercial waterways of the Rhine, the Danube, the Po, whilst flash floods in China leveled 9,000 homes (payback for concrete supplanting wetlands) and trapped subway riders with water up to their chins. These eye-popping events happened in 2022. None of it is normal.

Meanwhile, according to a recent interview of Noam Chomsky in Boston Review: *The Proto-fascist Guide to Destroying the World*, "A brutal class war has devastated

much of the world and led to tremendous anger, resentment, contempt for institutions... The United States is leading the way to a kind of proto-fascism."

A primary target of proto-fascism is intelligentsia's handwringing over climate change.

"In recent years, right-wing populists have positioned themselves as Europe's staunchest defenders—against immigration and threats to national sovereignty; against pandemic restrictions and the influence of global institutions; and against what they regard as national governments' hysteria over climate change, which populists have described as 'degenerate fearmongering 'at best and 'totalitarian' at worst." (Source: *The Far-Right View on Climate Politics*, The Atlantic, August 10, 2021)

The populist right, or in Chomsky's words proto-fascists, claim green policies such as fuel taxes and decarbonization incentives represent an elitist attack on the lives of regular people, thus telegraphing the issue beyond its root cause of human-generated greenhouse gases like CO2, which is becoming too obvious for outright dismissal. In a similar fashion, they'll brush off the overfishing issue, assuming it ever rings a bell with mainstream America, which is doubtful.

How is it possible to assemble a worldwide collective effort to tackle the thorny issues of climate change when disinformation muddies the waters beyond recognition?

And when is it too late to do anything?

And, at its root cause, what's fundamentally wrong with a socio-economic system that causes, and chooses to ignore, ecosystem imbalances leading to collapse?

A major scholarly study of the cause/effect of dangerous ecosystem imbalances concludes: "The evidence is clear. Long-term and concurrent human and planetary well-being will not be achieved in the Anthropocene if affluent overconsumption continues, spurred by economic systems that exploit nature and humans. We find that, to a large extent, the affluent lifestyles of the world's rich determine and drive global environmental and social impact. Moreover, international trade mechanisms allow the rich world to displace its impact on the global poor. Not only can a sufficient decoupling of environmental and detrimental social impacts from economic growth not

be achieved by technological innovation alone, but also the profit-driven mechanism of prevailing economic systems prevents the necessary reduction of impacts and resource utilization per se. (Source: Thomas Wiedmann, et al, *Scientists' Warning on Affluence*, Nature Communications, June 19, 2020)

In other words, neoliberal capitalism's premise that a profit—driven free market best serves society needs a major overhaul, maybe go in reverse. Evidence of its failure to account for and respect and husband a livable planet is found throughout the world with out—of—the—ordinary heat, floods, fires, and drought on every continent, all of it beyond anything normal, beyond anything resembling a normal occurrence in nature. Ipso facto, Milton Friedman's richly decorated legacy (*Neo-Liberalism and its Prospects*, 1951 and *The Social Responsibility of Business Is to Increase Its Profits*, 1970) enacted by Ronald Reagan and Margaret Thatcher is a bust!

Neoliberalism's not working for the planet!

There's gotta be a better way.

Categories: Ecology and Environment, International issues, North America

Tags: global warming, ocean warming, Overfishing



Robert Hunziker

MA, economic history DePaul University, awarded membership in Pi Gamma Mu International Academic Honor Society in Social Sciences is a freelance writer and environmental journalist who has over 200 articles published, including several translated into foreign languages, appearing in over 50 journals, magazines, and sites worldwide. He has been interviewed on numerous FM radio programs, as well as television.

Newsletter