

CLIMATE CRISIS NEWSLETTER

A fortnightly newsletter brought to you by XR Gairloch

ISSUE 139

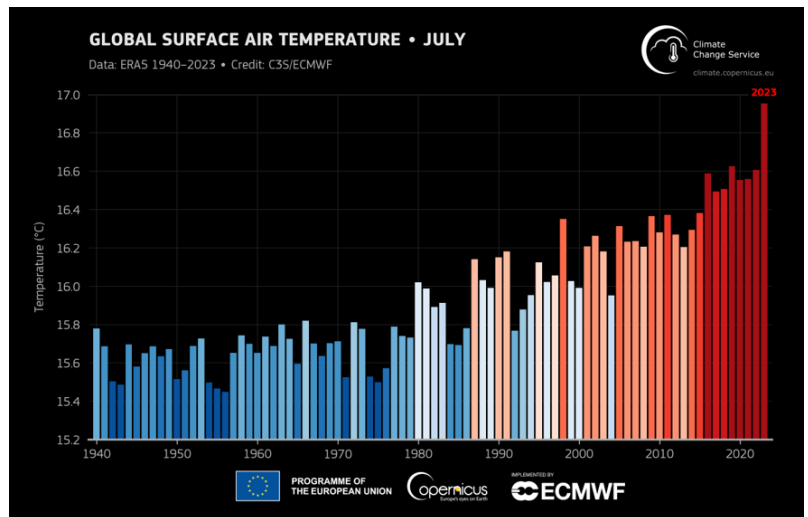
19/8/23

Editorial

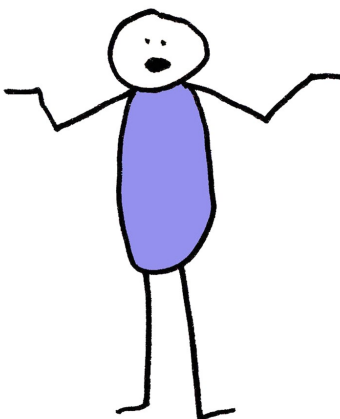
If we are complicit or compliant we are part of the problem,...

As the climate crisis happens all around us with heatwaves, droughts, floods, sea level rise and wild fires we (the mass of the population) still do nothing about it. We know what is causing the climate crisis. Scientists have known since the 1980's and so have the fossil fuel companies who are causing it.

So why are so many compliant and complacent, why are so few people actively trying to do something about it while the mass of the population just go about their business as usual as if these are just one off random events that won't affect us, our children and future generation for decades and centuries to come.



So what do most people say when you ask them in the street "are you concerned about the climate crisis":



- It's so far in the future
- It's too expensive
- It's the Governments problem
- I recycle and don't fly very often I'm doing my bit
- Going on protests isn't my thing
- I won't make a difference
- I'm too busy

Unfortunately the majority of people currently being directly affected by the climate crisis are the poorest and most vulnerable people on the planet and have little say in getting governments to sort it. But many of the fortunate ones who could do something about it don't.

Sunak government will go down in history as failing UK on climate, Greenpeace says. [Read article.](#)

What the Fossil Fuel Industry Doesn't Want You To Know by Al Gore. [See video.](#)

Public energy companies—the way forward.....

The UK's current energy system is broken, the last year and a half has only amplified this as energy prices have gone through the roof and energy companies have made record breaking profits.

UK's 'broken' energy system revealed as firms set to make £1.7bn in profit from customers. [Read article.](#)

As the climate crisis demands us to move all our energy needs across to renewable electrical energy, the way electricity is priced is flawed as electrical prices are dictated by international gas prices using a system called "marginal cost pricing" (where all units of electricity are sold at the price of the most expensive unit). Therefore electrical prices must be decoupled from gas prices as electricity produced from gas is hugely more costly to generate than electricity from renewable sources.

Renewable electricity has become increasingly cheap, with prices declining as capacity increases. Between 2010 and 2021, the global average cost of electricity generation for a renewable generator over its lifetime (including building and operating costs) declined by 88% for solar photovoltaic (solar panels), 68% for onshore wind and 60% for offshore wind.

Over the last 6 years suppliers have seen the annual profit they make from the average customer on a variable tariff rise from £27 in 2017 to £130 in early 2023, according to Warm This Winter - a coalition of anti-poverty and green groups.

Why is cheap renewable electricity so expensive? [Read article](#)

To further aggravate the price of renewable energy is the fact that the UK government are preparing to invest more in oil and gas which diverts money away from renewables, the electrical grid needs a massive upgrade and the millions of homes that currently run their heating systems on oil and gas need to be converted to electricity.

UK renewable energy investment lagging behind rest of world, data shows. [Read article.](#)

UK grid connections branded 'greatest obstacle' to net zero following landmark review. [Read article.](#)

UK risks wasting wind farms achievement without new links to grid, report warns. [Read article.](#)

So what is the best way forward?

Potential National, Regional or Community Energy Companies. Public energy companies (generating and retailing) could be set up on a national or regional level, with the UK, Scottish Government or local authorities being able to establish them .



National Energy Companies

France, Belgium, Germany, Denmark, Norway and Sweden all have public energy companies investing in building renewable energy projects. The UK is lagging behind in this type of energy investment. Public ownership is standard practice in many other European countries, where national or regional public energy companies have been set up to invest in the generation of renewable energy creating hundreds of thousands of high quality skilled jobs, with profits going to improving local infrastructure and ensuring householders get affordable energy.



Public ownership of clean power: lower bills, climate action, decent jobs. [Read article.](#)

The Scottish government looked at becoming an energy retailer (not a generator) but that has been put on hold and is unlikely to come to fruition anytime soon.

Giving Back Power to the UK Government that may prevent Scotland having its own energy company. [Read article.](#)

The Welsh government has been more forward thinking and has recently set up a national energy company.

Publicly owned energy company launched in Wales. [Read article.](#)

Wales launches publicly owned energy company with focus on community renewables. [Read article.](#)

Regional/Community Energy Companies

There is currently limited discussion going on with Regional Councils to start up energy companies but in Highland region very early discussions are starting to discuss the possibility of a Council or Community energy company. These discussions will start off with a Community Assembly in October to gauge the councils and the local populations thoughts of a Highland Renewable Energy Company proposal put together by Extinction Rebellion. [See proposal.](#)

Community Energy England has stated that just 23 new community-owned renewable energy generation assets were installed in 2021, the lowest number since 2017. It has been calling for more policy support for the community-owned approach.

But some communities have been forward thinking and are working up impressive community projects.

Plan for UK's largest community-owned 120-acre solar farm backed. [Read article.](#)

Community Councils set to benefit from Orkney's Community Wind Farm Project. [Read article.](#)

What we do next and when

WE CARED WHAT WE DID FOR SO LONG, BUT NOW IS THE TIME TO CARE WHAT WE DIDN'T DO.

Our ability to adapt to global warming will be impaired if the rate of change is too rapid. Approaching critical levels at a too fast rate of change will create new rate-induced tipping points, researchers have found.

This, in turn, will impact our capacity to meet the challenges posed by tipping points since tipping will occur earlier than expected.

For example, a slower or more gradual approach towards a critical level of climate change will allow humans, animals, and ecological systems more time to adapt and survive the outcomes once this level is reached. However, a more disruptive rapid approach risks the survival of species even before a critical level is reached. This disruption to ecosystems will, in turn, create new challenges and new tipping points in socio-ecological networks through so-called domino effect.

We don't have to be overwhelmed by climate anxiety. Feel the pain, then act. [Read article.](#)

Telling stories of our climate futures is essential to thinking through the net-zero choices of today. [Read article.](#)

Disruptive protest helps rather than hinders activists' cause, experts say. [Read article.](#)

Only one EU country thinks its government is doing enough on climate crisis, new survey finds. [Read article.](#)

Charge us with contempt too, say 40 people, if climate activist prosecuted. [Read article.](#)

Cheek of the Week.....

Ineos who own the oil refinery and plastic works at Grangemouth and have been confirmed by the Scottish Environment Protection Agency (SEPA) who are Scotland's environmental regulator named Ineos as the biggest polluter in Scotland. To find the words "Keep our rivers clean" on the side of one of their Dragon ships that transport fracked gas from America to power their refinery in Grangemouth is certainly a cheek never mind hypocrisy of the highest degree. But you wouldn't really expect anything less from Ineos.



Scotland's largest polluter Ineos has been stopped by the Belgium courts from expanding their pollution.

Belgium blocks mega plastics plant over lack of environmental data. [Read article.](#)

Greenwash, misinformation, hypocrisy and deceit

Business giants named and shamed for flouting science-based targets pledges. [Read article.](#)

UN climate summit host UAE failed to report methane emissions to UN. [Read article.](#)

Dozens of oil & industry lobbyists attended secretive shipping emissions talks. [Read article.](#)



Leading Think Tank Met With Minister Over North Sea Energy While Funded by Fossil Fuel Interests. [Read article.](#)

Group That Calls CO2 'Gas of Life' Praises Alberta's Renewables Moratorium. [Read article.](#)

The EPA's ambitious plan to cut auto emissions to slow climate change runs into skepticism. [Read article.](#)

Revealed: Media Blitz Against Heat Pumps Funded by Gas Lobby Group. [Read article.](#)

The Media's Anti-Wind Scare Campaign: "Wind Turbine Graveyards". [See video.](#)

Polluters Rely on Old Rhetoric to Block Clean Energy Future. [Read article.](#)

Mainstream economists accused of playing down climate threat. [Read article.](#)

Mike Huckabee's "Kids Guide to the Truth About Climate Change" Shows the Changing Landscape of Climate Denial. [Read article.](#)

Sir Tony Blair's institute continued to receive Saudi Arabian money after murder of Jamal Khashoggi. [Read article.](#)

Corrupt Politicians and Climate Criminals.....

Susan Hall, the Conservative Party candidate for London mayor, has opposed key climate policies, backed the reintroduction of fracking and promoted articles online which spread climate science denial.

She has been accused of trying to "undermine" climate science when the impact of human-caused climate change is making headlines amid a summer heat-wave in Europe.

Tory London Mayor Candidate Backed Fracking and Promoted Climate Science Denial. [Read article.](#)



EVENTS



Bring your thoughts and ideas to the

COMMUNITY ASSEMBLY

To discuss the possibility of Highland
Council setting up a Highland Renewable
Energy Company

All welcome at the
Spectrum Centre, Inverness
Saturday 7 October 2023 from 10.30 am till 3.30pm

For more information contact xrinverness@protonmail.com

Events/Actions/Education and Information

EVENTS

WARM PLANET, COOL MUSIC

SATURDAY 26 AUGUST 2023 7.30PM

THE BIKE SHED, 23 GRANT STREET, INVERNESS

Come for the information, stay for the music. Join us for a short talk by Extinction Rebellion followed by music by Alice, Conor and Levanah. Refreshments available. Donations to the Bike Shed. All welcome - bring a friend or three!

ENVIRONMENTAL RIGHTS SUMMIT

WED, 6 SEP 2023 10:00 - 16:30

SUMMERHALL 1 SUMMERHALL EDINBURGH

Want to find out more about Environmental Rights and why they matter?

Come and find out at our first Environmental Rights Summit! **Book event.**



FILM

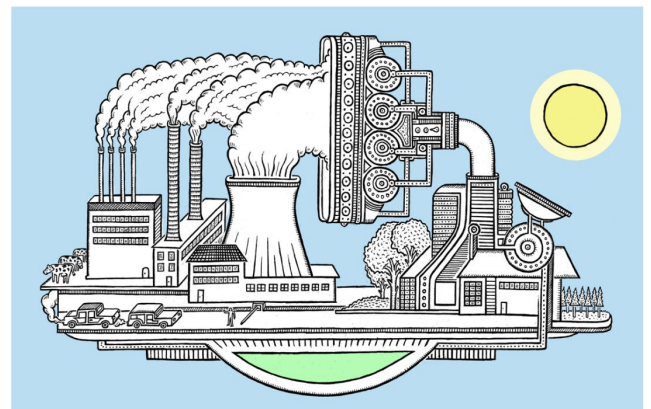
15 must-see films about the climate crisis. **Read article.**

Technological Advances

Scientists develop pineapple stem starch film for packaging fruits and vegetable. **Read article.**

Revolutionary concrete could transform roads and homes into giant batteries. **See video.**

New photoreactor technology could pave the way to a carbon-neutral future, researchers say. **Read article.**



Sustainable Farming/Food

Global heating likely to hit world food supply before 1.5C, says UN expert. [Read article.](#)

Climate impacts on UK food imports. [Read article.](#)

Flagship UN Food Systems Summit Accused of 'Selling the Corporate and Industrial Project'. [Read article.](#)



The Scales of Justice

Montana court rules for young people in landmark US climate trial. [Read article.](#)

One year old, US climate law is already turbocharging clean energy technology. [Read article.](#)

New law to make EV charging network 99% reliable. [Read article.](#)



Eco'omic Recovery—Building Back Better

New Zealand teams up with BlackRock in bid to unlock for almost £1bn climate action. [Read article.](#)

German government passes €212bn climate fund. [Read article.](#)

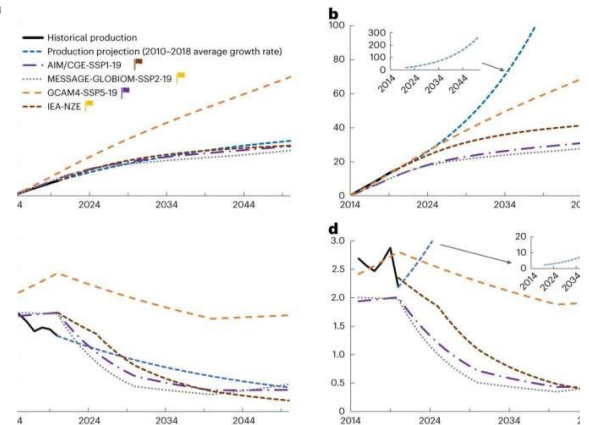


The Fight Against Fossil Fuels

Climate progress tracker reveals fossil fuel producers' shortfall. [Read article.](#)

Ghana's Fossil Fuel Gamble: Debt-Ridden Gas Lock-in Risks. [Read article.](#)

Experts fear US carbon capture plan is 'fig leaf' to protect fossil fuel industry. [Read article.](#)



The Amazon Rainforest Is Still Burning

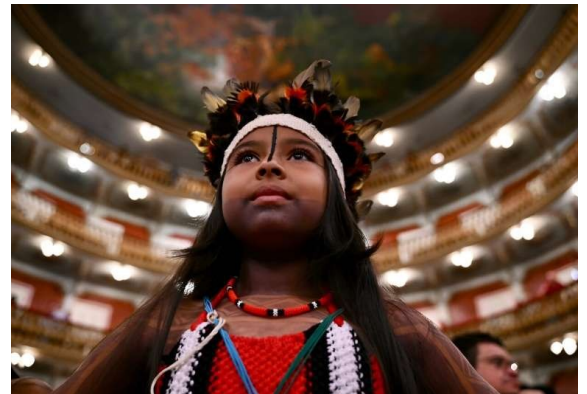
Brazil's Amazon Summit ends with a plan to protect the world's rainforests, but no measurable goals.

[Read article.](#)

Eight Latin American countries have met to talk about the Amazon - this is why it's so important to protect it. [Read article.](#)

Amazon deforestation falls over 60% compared with last July, says Brazilian minister. [Read article.](#)

As Guyana shows, carbon offsets will not save the Amazon rainforest. [Read article.](#)



The Circular Economy

Government urged to support circular economy as world hits Earth Overshoot Day.

Podcast: Seeing the How of Circular Customer Experience. [Listen to podcast.](#)

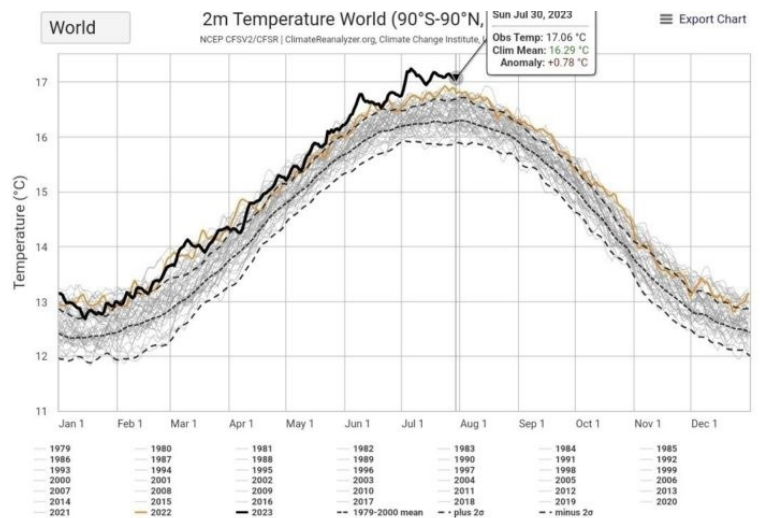


Heatwaves, wildfires and climate change

By Gareth Redmond-King

In a globalised world, heatwaves and wildfires that would have been impossible, or many times less likely, without climate change threaten more and more of us each year.

This July - likely the hottest month ever experienced by modern humans - has seen extremes of heat and wildfires blazing across southern Europe, northern Africa, north America, and China. They are wreaking havoc - triggering evacuations, causing deaths, destroying homes and businesses.



July's average worldwide temperature anomalies

It follows the hottest June, a succession of the hottest days ever recorded, hottest sea surface temperatures, and the lowest ever Antarctic sea-ice cover - by some way - as well as extreme storms, floods and other weird weather, like hailstones the size of grapefruit in Italy.

Yet still, on social and in traditional media, there are those who persist with it's 'normal,' what about 1976, and this is 'just summer - enjoy it', as well as insisting wildfires are solely the work of arsonists.

Climate caused highs

The heat is severe - with highs of 47°C in Sicily, over 48°C in Sardinia, and over 50°C in Algeria, China and the US - and wildfires tearing across parts of Greece, France, Spain, Croatia, Algeria, Italy, Tunisia, Turkey, and Portugal.

Such extreme temperatures in North America and southern Europe would've been virtually impossible without climate change, scientists from the World Weather Attribution (WWA) have found. The highs in China were made 50 times more likely by the 1.2°C of heating humans have caused since industrial times.

Wildfires have made temporary refugees of European holidaymakers. British tourists leaving Rhodes spoke of a terrifying orange hue in the air as they ran from fires and fled the island in small boats. French travellers in Algeria covered their children to protect them from falling ash. The pictures emerging have been hellish. Italy named one heatwave Cerberus after the mythical monster in Dante's Inferno that guards the gates of hell, and another after the boatman who ferries people to hell.

The WWA report that made clear such scenes would be impossible without human-made climate change also said: "unless the world rapidly stops burning fossil fuels, these events

will become even more common and the world will experience heatwaves that are even hotter and longer-lasting”.

Could it be arson?

Greece has been worst hit by wildfires. An average of 50 fires broke out daily for twelve consecutive days in July, according to a government spokesperson. It's not impossible that all the fires were deliberately started, but this would've made it a busy time for arsonists.

Some on social media are claiming the fires were set on purpose and therefore nothing to do with a warming planet. But, experts say, the source of the fire is beside the point. It's about condition, not ignition - wildfires only gather pace in certain tinder-dry conditions; conditions created by climate change.

Whether the blaze was sparked by a dropped match, a cigarette not snuffed out properly, an arsonist, or famously a couple of years ago in California from a firework accident at a gender-reveal party, it couldn't become a wildfire without long periods of dry hot weather. As Nasa explains: "Hot and dry conditions in the atmosphere determine the likelihood of a fire starting, its intensity and the speed at which it spreads."

Intense heat dries the soil and vegetation, making it highly flammable, and strong winds cause it to spread and become untameable. Since the 1980s, the wildfire season has lengthened across a quarter of the world's vegetated surface.

Such intense wildfires are likely to become more common as the world warms.

Normal summer?

Extreme heat is engulfing locations across the Northern hemisphere - those in summer - though it is not a normal summer. June 2023 was Earth's hottest on record; July the hottest month on record.

34 people were killed by fires that spread across the dry north of Algeria, in northern Africa, where temperatures reached 50°C in some regions. Forest fires have been reported across the Middle East in Syria, Tunisia and Jordan, where temperatures are above 40°C.

Xinjiang in China climbed to 52.2°C. And in Death Valley, in California, the mercury is nudging the hottest temperature ever recorded on Earth, 56.7°C, at around 55°C.

A few have been drawn to the risk of being in such extreme conditions. In Death Valley tourists posed for photographs beside a thermometer reading in the 50s!

What does heat do to the body?

People living in areas affected by insufferable heat may struggle to leave if they're not evacuated, but tourists choosing to go to these locations, once the extremes have hit, is highly inadvisable.

In extreme heat, the body's systems scramble to regulate, we sweat, the moisture in the sweat evaporates, blood rushes to the surface of the skin and we become flushed. Eventually the body becomes overloaded with heat and can no longer regulate, then the body's systems go haywire, leading to heatstroke, dizziness, passing out and death.

The NHS has advice on noticing the signs of heat exhaustion and how to cool down.

Europe's heatwaves of 2022 could have been responsible for 61,000 deaths, nearly 3,500 of which were in the UK. Last year was the deadliest on record for the US, with 1,708 heat-related fatalities.

This year, refugees on the border with Mexico, and workers and the elderly in Arizona and Texas are collapsing and dying in the heat as warm air and high pressure creates a heat dome across the southern states of the US. And 2023 is on track to have the highest number of hiker deaths in America's national parks.

Heat has become the deadliest kind of weather in the US, with more fatalities than hurricanes and floods.

Not only is heat hazardous, but smoke from wildfires is dangerous when inhaled and small soot particles enter the lungs. Long-term exposure is linked to respiratory and heart problems.

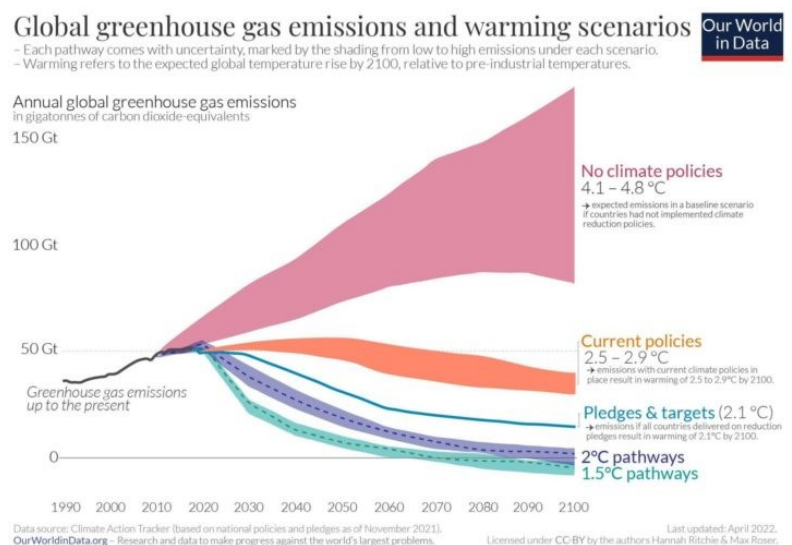
What next?

Scientists at the Intergovernmental Panel on Climate Change (IPCC) delivered a "final warning" in their latest, the sixth assessment report.

A heatwave like those of the last two years would occur every 2-5 years in a world that is 2°C warmer than the preindustrial climate.

As humans continue to burn fossil fuels, emitting greenhouse gases, the world will continue to warm. On current global promises made at the UN on climate, the world is on track for 2.8°C of heating, it currently stands at 1.1°-1.2°C above pre-industrial levels.

The IPCC affirms there is still a chance of staying within 1.5°C. Greenhouse gas emissions would need to peak very soon and then be brought rapidly down. The dangers of warming beyond 1.5°C are clear, we can see the devastation at just 1.1°C.



Net zero emissions by mid-century is the way of avoiding even worse impacts. The IPCC is clear that we have the tools we need - we're just not acting fast enough. Getting on track means hastening measures like the adoption of heat pumps, electric vehicles and renewable energy such as wind and solar.

Promises to support

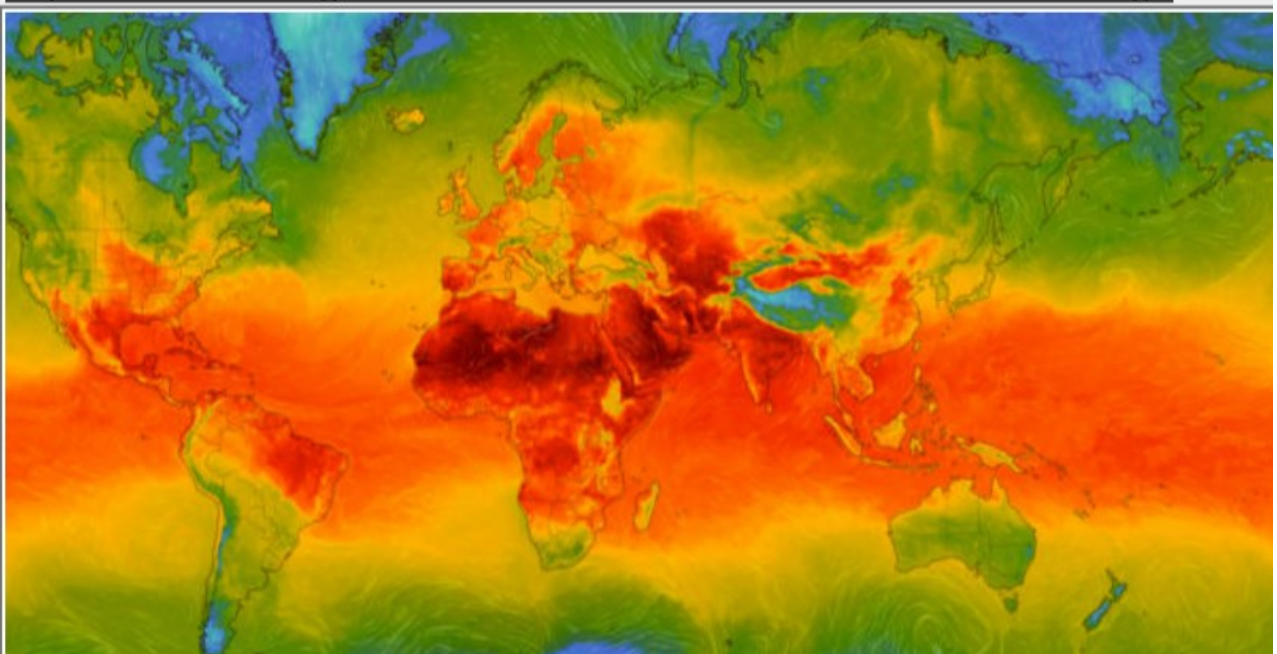
The IPCC found nearly half the planet - some 3.6 billion people - were living in areas "highly vulnerable" to climate breakdown. Communities on the frontlines need to be protected from heat, fires, floods, storms and droughts. Wealthy countries have promised \$100 billion a

year to lower income nations to adapt, recover from disasters and switch to clean energy. So far, this figure has not been met once. Much more will be needed soon.

It is not just a matter of charity. Even though the heat has not been on the UK in summer 2023 - as it was at over 40°C in 2022 - we still feel the effects. Half the food we eat is imported and half of that comes from climate change hotspots. It's estimated that increased energy prices and climate impacts put more than £400 on food bills in 2022.

That will only intensify as yields of staples fall. Take rice, for instance - extreme floods and heat in Pakistan and India, the two biggest sources of rice imports to the UK, have hit harvests. India has even imposed export limits on some classes. All of which constrains supply and hikes prices.

Increasingly, by protecting these nations, we're protecting our food supply. And the UK neglects its own self-interests if it doesn't act on its promises.



The temperature the human body cannot survive

By Daniel Lawler

Scientists have identified the maximum mix of heat and humidity a human body can survive.

Even a healthy young person will die after enduring six hours of 35-degree Celsius (95 Fahrenheit) warmth when coupled with 100 percent humidity, but new research shows that threshold could be significantly lower.

At this point sweat—the body's main tool for bringing down its core temperature—no longer evaporates off the skin, eventually leading to heatstroke, organ failure and death.



This critical limit, which occurs at 35 degrees of what is known "wet bulb temperature", has only been breached around a dozen times, mostly in South Asia and the Persian Gulf, Colin Raymond of NASA's Jet Propulsion Laboratory told AFP.

None of those instances lasted more than two hours, meaning there have never been any "mass mortality events" linked to this limit of human survival, said Raymond, who led a major study on the subject.

But extreme heat does not need to be anywhere near that level to kill people, and everyone has a different threshold depending on their age, health and other social and economic factors, experts say.

For example, more than 61,000 people are estimated to have died due to the heat last summer in Europe, where there is rarely enough humidity to create dangerous wet bulb temperatures.

But as global temperatures rise—last month was confirmed on Tuesday as the hottest in recorded history—scientists warn that dangerous wet bulb events will also become more common.

The frequency of such events has at least doubled over the last 40 years, Raymond said, calling the increase a serious hazard of human-caused climate change.

Raymond's research projected that wet bulb temperatures will "regularly exceed" 35C at several points around the world in the coming decades if the world warms 2.5C degrees above preindustrial levels.

'Really, really dangerous'

Though now mostly calculated using heat and humidity readings, wet bulb temperature was originally measured by putting a wet cloth over a thermometer and exposing it to the air.

This allowed it to measure how quickly the water evaporated off the cloth, representing sweat off of skin.

The theorized human survival limit of 35C wet bulb temperature represents 35C of dry heat as well as 100 percent humidity—or 46C at 50 percent humidity.

To test this limit, researchers at Pennsylvania State University in the United States measured the core temperatures of young, healthy people inside a heat chamber.

They found that participants reached their "critical environmental limit"—when their body could not stop their core temperature from continuing to rise—at 30.6C wet bulb temperature, well below the previously theorized 35C.

The team estimated that it would take between five to seven hours before such conditions would reach "really, really dangerous core temperatures," Daniel Vecellio, who worked on the research, told AFP.



People who have to work outside are more at risk

The most vulnerable

Joy Monteiro, a researcher in India who last month published a study in *Nature* looking at wet bulb temperatures in South Asia, said that most deadly heat waves in the region were well below the 35C wet bulb threshold. Any such limits on human endurance are "wildly different for different people," he told AFP. "We don't live in a vacuum—especially children," said Ayesha Kadir, a pediatrician in the UK and health advisor at Save the Children.

Small children are less able to regulate their body temperature, putting them at greater risk, she said. Older people, who have fewer sweat glands, are the most vulnerable. Nearly 90 percent of the heat-related deaths in Europe last summer were among people aged over 65. People who have to work outside in soaring temperatures are also more at risk. Whether or not people can occasionally cool their bodies down—for example in air conditioned spaces—is also a major factor.

Monteiro pointed out that people without access to toilets often drink less water, leading to dehydration.

"Like a lot of impacts of climate change, it is the people who are least able to insulate themselves from these extremes who will be suffering the most," Raymond said.

His research has shown that El Niño weather phenomena have pushed up wet bulb temperatures in the past. The first El Niño event in four years is expected to peak towards the end of this year.

Wet bulb temperatures are also closely linked to ocean surface temperatures, Raymond said.

The world's oceans hit an all-time high temperature last month, beating the previous 2016 record, according to the European Union's climate observatory.

Why action on the climate crisis is all hot air

By Jonathan Cook

Capitalism's endless growth paradigm can't be squared with sustainability. But no one - from politicians to the protest movement - is willing to admit the truth.

The debate about the climate crisis should have been settled in the early 1990s. And yet, three decades later, the extent, imminence and even existence of a looming catastrophe are still hotly disputed. That is not by accident.

David Attenborough is on social media pleading, once more, for mankind to do something before tipping points are surpassed that cannot be reversed and temperatures begin to rise inexorably, whatever we do.

In the same vein, Antonio Guterres, the United Nations' secretary general, warned late last month that humanity has shifted from the era of global warming to "global boiling". Record temperatures keep being broken, while wildfires and floods have become a news staple.

Scientists' updated models now predict the first breach of the limit of 1.5C mean temperature rise for the globe, set by the 2015 Paris Agreement, in a matter of a few years, rather than decades. This week it was announced that July had been the hottest month globally on record, a jump of 0.33C above the previous record.

The Middle East is likely to feel the worst effects early, with large parts of the region least able to cope with the heavy costs of adapting.

Water scarcity, extreme heat, food insecurity and desertification will make life increasingly tough, triggering migration and conflict.

And yet inaction on curbing fossil fuel use continues.

'Max out' oil reserves

Recent figures show that the United States and China - responsible for the bulk of global emissions - are burning more fossil fuel than ever.

Oil industry executives fearmonger the public by claiming oil production cuts will intensify the cost of living crisis. Driven by the same apparent logic, western governments are rapidly walking back their green pledges.

In Britain, Prime Minister Rishi Sunak vows to "max out" the UK's oil and gas reserves through new North Sea drilling, presumably believing it's a vote winner. Fearing job losses, his business secretary, Kemi Badenoch, indicates that the Tories may water down commitments to mandate the switchover to electric vehicles.

Keir Starmer, the Labour opposition leader, has nothing but vitriol for climate protesters, the only people publicly demanding something urgently be done. This week he called Just

Stop Oil protesters "contemptible" as they demanded a future Labour government revoke Sunak's new oil drilling licences.

The European Union's proposed €620bn annual Green Deal budget is so far largely unfunded. Member states have other financial priorities, it seems, not least arming Ukraine. Similarly, the UK is preparing to ditch its £11.6bn climate pledge, made in 2019, to help developing countries.

And the Cop climate summit of world leaders later in the year - the 28th - is set to be captured once more in broad daylight by the oil lobby. The summit is to be hosted, and its agenda most likely controlled, by the United Arab Emirates, whose economy is completely dependent on oil production.

Reality slap in the face

So how did we reach this point of abject failure: where the greater the scientific consensus, and real-world evidence, the smaller the impact that consensus has on decision-making?

The astonishing disjunct between threat and response is possible only because the oil lobby has historically shaped, and continues to shape, popular understanding of the gravity of what lies ahead. Cognitive dissonance reigns.

It is true that the establishment media has, very belatedly, started to diagnose more unpredictable and extreme weather patterns as symptoms of a wider climate crisis. It is hard to deny reality when reality keeps slapping you in the face.

But otherwise, the media has been, and continues to be, the core of the problem. It still plays cover both for the oil lobby and for the global corporations whose bottom line depends on a continuing addiction to over-consumption and "economic growth".

That should be no surprise, because media corporations, whose job it is to frame our understanding of the world, are themselves deeply embedded in corporate profiteering at the planet's expense.

They have done sterling work obfuscating both our collective fate and their own role in perpetuating the deception.

The truth is that scientists knew at least 70 years ago that a warming world would be a major concern down the road if the human economy continued to grow through the burning of carbon.

That understanding only deepened through the late 1960s into the 1980s, as modellers developed more sophisticated ways of measuring and predicting the effects of greenhouse gas emissions.

Forecasts kept secret

Sadly for humanity, most of the early research on this subject was financed by the oil corporations.

In 1968, a research institute at Stanford concluded: "There seems to be no doubt that the potential damage to our environment could be severe." Its findings, however, were delivered in private to the American Petroleum Institute.

According to recent revelations, in 1978 researchers working for the Italian oil major Eni predicted accurately global emission trends and their likely impact. Eni's in-house magazine made repeated references to climate change even as the company publicly championed its fuels as "clean".

By 1982, the best minds on climate science had plotted the future course of global warming for ExxonMobil.

They predicted the critical moment would arrive 37 years hence - in 2019 - when carbon dioxide levels would reach 415 parts per million (ppm) in the atmosphere. That would result in a dangerous rise in mean global temperatures of 0.9C.

Within a year, by 2020, they warned, it would no longer be possible for the oil corporations to dissimulate by dismissing climate change as simply normal weather fluctuations.

As we now know, their predictions were bang on target. The threshold of 415ppm was breached in May 2019. And in the past few years it has become ever harder to ignore the unprecedented nature of weather events.

The scientists' only error was to be slightly conservative about when the resulting temperature rise would cross the threshold of 0.9C: it occurred two years earlier than they had forecast.

Responding to a draft of the report in 1981, Roger Cohen, head of strategic planning at ExxonMobil until his retirement in 2003, proposed that it might be more accurate to describe the likely effects of fossil fuel burning as "catastrophic" by 2030 rather than the intended text of "well short of catastrophic".



Once again, ExxonMobil's scientists were contractually obliged to keep their terrifying forecasts from the public.

Return to dark ages?

The accuracy of these predictions is hard to explain for those arguing that the man-made climate emergency is a hoax, a conspiracy either to return us to the dark ages or to advance a globalist agenda of "authoritarian eco-socialism", supposedly led by Amazon and Elon Musk.

Why did western corporations work so hard to hide this critically important information about climate change from the public for so long, if they were always intending to use it to take away our liberties and deprive us of our mobile phones?

The real answer is to be found in what happened over the past 30 years.

Scientists who weren't in the pocket of the oil industry eventually caught up with their captured colleagues. That culminated in a scientific report to the United Nations in 1990, which warned in stark language of the dangers posed by man-made climate change. The climate threat finally went mainstream.

For a brief while, Big Oil seemed to fear that the game was up. It assumed that there would be a popular and political backlash as the data leaked out.

In 1989, Shell plotted two future scenarios. In one, which it termed "Sustainable World", carbon burning would peak in 2000 and then drop off, leading to a manageable 1C rise in temperatures. The other, what it called continued "Global Mercantilism" - or business as usual - would lead to disastrous outcomes.

"There would be more violent weather - more storms, more droughts, more deluges. The mean sea level would rise at least 30cm. Agricultural patterns would be most dramatically changed," Shell's 1989 report concluded.

A worldwide refugee problem would be unleashed too, as people fled hotspots where famine and drought hit first. "Conflicts would abound. Civilisation could prove a fragile thing."

In response, public relations campaigns were organised to show how seriously the oil industry was taking the problem. In 1991, for example, Shell funded a half-hour video on the dangers of climate change for screening in schools and colleges.

Irrational faith in eternal growth

Averting a crisis for all mankind that the industry knew was coming may have been a moral duty, but it was not a legal one.

In fact, as explained previously by Middle East Eye, the exact reverse happened. Throughout the 1990s, Big Oil successfully sabotaged meaningful climate action by pressuring western states to sign an energy treaty tying their hands on cuts to fossil-fuel use.

That was for a good reason. Under the capitalist system, the primary duty of oil corporations - like other corporations - is to maintain profitability and guarantee value for investors and stockholders. Ethics never got a look-in.

So the fossil-fuel industry spent part of its vast profits pursuing a twin-track: first, muddying the waters about the climate science, then channelling attention towards largely meaningless, small-scale fixes that fell to the public to implement.

For the critical years when urgent, state-backed action was needed on a massive scale, climate denial, funded by dark money from Big Business, was given regular airtime on influential media channels like the BBC. Ordinary people were left, as they were supposed to be, confused and unsure.

Meanwhile, the burden of doing something was intentionally shifted away from governments to western publics. Small, private actions, we were told, would have big impacts.

Ordinary people were encouraged, for example, to convert, very gradually, from using wasteful, short-life lightbulbs to more efficient, long-lasting versions - lightbulbs that had

been around for decades but kept out of production because they were far less profitable.

Now the cost-benefit analysis had changed for Big Business: the humble lightbulb was a weapon in the fight to placate a public and policymakers keen to do something about climate change.

Similarly, responsible citizens were advised to commute to work on a bike, even as governments exclusively prioritised road infrastructure improvements for motorists, not cyclists, and a wider culture was fostered vilifying bike riders, one that persists to this day.

It did not end there. The fossil-fuel lobby intensified its capture of the public space.

Corporate money in politics meant the political class was in no mood to take on the oil industry, whatever the scientists were saying. In any case, politicians, desperate for re-election, were not about to start questioning the precepts of capitalism in a two-party system in which both parties were expected to worship the model of endless economic growth.

The establishment media was embedded in the same network of interconnected corporations that profited from an oil-based economy. Their own short-termist goals depended on shoring up an irrational faith among the public in eternal economic growth on a finite planet.

Giant psyop

The bottom line was that no one with a public platform had any interest in warning the public that advanced societies were structured in a way that was hurtling us towards extinction. The profit-driven, over-consumption model of capitalism was never in question.

Instead, the fossil-fuel companies set themselves a deadline of the 2010s - the point at which, as their scientists had warned, climate disruptions would be hard to conceal from the public. By that time, the oil industry would need to have ready a new script that the oil industry was integral to saving the planet.

Which is exactly what it did. Recent reports show that ethical and green investment funds have poured money into fossil-fuel companies after those firms rebranded themselves. The oil giants' profits have again hit record levels.

Under the so-called Green New Deals, nothing fundamentally changes. We still drive our own cars in pretty, individualised colours. We still holiday abroad. We still shop in large supermarkets with everything - including year-round exotic fruit flown in from abroad - wrapped and protected in oil-based plastics.

We are still encouraged through advertising to consume as much as possible and throw away items of new technology - from personal computers to phones - every few years through planned obsolescence.

But this individualised, competitive, wasteful way of life is being given a makeover. Cars are now hybrids or electric. Holidays are "carbon offset" somehow. Plastic on our food is described as recyclable. Advertising now explains to us how all the stuff we buy is saving the planet.

Living ever more of our lives online supposedly helps too, because it reduces our carbon footprint. It is a green revolution in which everything stays pretty much the same

- including the ability of giant corporations to make massive profits.

Armed with warnings - decades in advance - from their own scientists, the oil industry had enough of a head-start to invent a self-serving narrative. It's one in which ordinary people are encouraged to consume as much as before, while being persuaded either that they are making a difference or that the damage they are causing will be reversed by imminent technologies.

The new watchword is "net zero". But in truth, it is a giant psyop, as climate scientists have gradually started to appreciate.

In 2021 a group of three leading academics admitted that for years they had been duped into championing the promises of the Green New Deal.

Technological fixes, such as carbon capture, offsetting and geoengineering, were "no more than fairy tales", they warned. Net zero policies "were and still are driven by a need to protect business as usual, not the climate".

One, James Dyke, an expert in global systems at Exeter University, observed: "It's astonishing how the continual absence of any credible carbon removal technology seems to never affect net zero policies. Whatever is thrown at it, net zero carries on without a dent in the fender... I've now realised that we have all been subject to a form of gaslighting."

Unhealthy cynicism

This has turned out - whether intentionally or not - as a win-win-win for Big Business.

Much of the public is wrongly persuaded that the climate crisis is still some way off, and that the action necessary to avert it is in hand through technological advances like carbon capture. As a consequence, they have little truck with an increasingly noisy climate protest movement.

Significant sections of the protest movement itself have been hoodwinked into believing the Green New Deal offers good-faith solutions - despite the fact that it has been hijacked to disguise business as normal.

As a result, the elephant in the room - the inherent, self-destructive tendencies of capitalism - is pushed by protesters to the sidelines or out of sight completely. Protests are invariably restricted to policy failures or government U-turns.

Even the protest movement's figurehead, Greta Thunberg, who last year finally came out against capitalism with the publication of *The Climate Book*, has found it hard not to drift back into supporting business as normal.

In recent months she has become an increasingly high-profile partisan in the Ukraine war, effectively greenwashing the West's cynical proxy fight against Russia on behalf of its war and energy industries.

The Ukraine war, provoked all too predictably by Nato expansion to Russia's borders, has offered enormous profiteering opportunities for the West's military, weapons and oil industries.

That has served not just as a welcome distraction from the urgent need to tackle the climate crisis. The war's collateral damage - from the Nord Stream pipeline explosions to the Kakhovka dam rupture - is wreaking an enormous ecological toll. The war itself, and the refusal to consider peace talks, is fuelling the very forces most responsible for environmental destruction.

Trapped in the middle is a third camp. It has grown terminally cynical. Some deny any kind of climate emergency. Others write off the green agenda, arguing that the deadline to save the planet has been missed and any action is now futile.

Western publics are confused, embittered and divided - the ideal conditions in which inertia reigns and Big Oil can carry on as normal.

Growth paradigm

With no one in the mainstream grappling with the reality of what lies ahead, leading financial institutions have been free to pretend that capitalism's relentless growth paradigm can be squared with sustainability.

A 2017 report, for example, by the Organisation for Economic Co-operation and Development, a world trade body comprising the world's 38 most developed states, is titled simply: "Investing in Climate, Investing in Growth".

The World Bank champions continuing growth - for western corporations - under the deceptive rubric of "development" for the Global South.

The market cheerleaders of the British government trumpet their green credentials. "Our transition to a green and sustainable future will provide new opportunities to grow and level up the UK economy," a 2023 policy paper says. Such claims are being made, as noted earlier, even as the government and opposition scramble to reverse policies that are the prerequisite for a sustainable future.

The European Commission, meanwhile, calls its Green Deal "Europe's new growth strategy", even as it fails to fund it.

The exclusive focus on climate change has served too as a kind of sinkhole, into which much wider problems of ecological degradation through human activity can be disappeared. While Big Business is busy promising fairytale tech fixes like carbon capture, attention is diverted from the things for which no fixes are being offered. They include a massive, global loss of biodiversity, shortages of fresh water, soil degradation, deforestation, air and water pollution, microplastics, ocean acidification, the over mining of rare minerals. The list goes on.

Ecologist William Rees, professor emeritus at the University of British Columbia, has referred to modern techno-industrial culture as "fundamentally dysfunctional". It "is systematically - even enthusiastically - consuming the biophysical basis of its own existence." He describes humanity's relationship to the planet as analogous to a "malignant parasite".

Heads in the sand

Behind the scenes, politicians and officials appear less sanguine than their public, simple-minded declarations.

Though they refuse to face up to the inherent contradictions between ecological and economic demands, they are recognising the heavy costs certain to be inflicted on each nation's finances by more extreme weather events and rising oceans.

In late 2021, a US Treasury panel concluded that the climate crisis was an "emerging threat" to the country's financial stability, with the potential to wipe out trillions of dollars of assets.

Nonetheless, when faced with a choice between addressing the climate emergency or pursuing growth, the economic imperative triumphs every time.

In January, at a meeting of central bank chiefs in Stockholm, the head of the US Federal Reserve, Jerome Powell, urged his western colleagues to prioritise short-term goals like fighting inflation rather than address the long-term need to fight climate change. "We are not, and will not be, a climate policymaker," he said.

The climate emergency, and the wider ecological crisis, will put this kind of neoliberal orthodoxy under ever greater strain. Without a meaningful response, something will have to give. Already, the twin pillars of the West's liberal democratic order are starting to crumble: the commitment to free speech and the right to protest.

Ahead lie ever more unaffordable energy bills, empty supermarket shelves, floods and heat-waves, wasted expenditure on resource wars, and the more general symptoms of ecological collapse.

Burying our heads in the sand a little longer won't make the coming battle go away. It will just make survival even less likely.

Other regular stories in this newsletter



Good and Bad News



Reports and Research



Plastic and Pollution



Land, Sea and Ecology

Good and Bad News

Good News



- India slashes emissions rate by one-third in 14 years, putting it on track to reach UN goal. [Read article.](#)
- Small-scale wind and solar now generate 13% of the UK's total daily energy demand when running at peak conditions. [Read article.](#)
- One EV registered every minute in the UK. [Read article.](#)
- Energy transition: Government backs new masterplan to halve grid infrastructure delivery times. [Read article.](#)
- Authors walk out of Edinburgh book festival event in protest at fossil fuel link. [Read article.](#)

Bad News

- One of 2023's most extreme heat waves is happening in the middle of winter. [Read article.](#)
- Ocean surface hits highest ever recorded temperature and set to rise further. [Read article.](#)
- Antarctic sea ice at record lows as global temperatures rise. [See video.](#)
- Morocco breaks heat record. [Read article.](#)
- Climate summit host country misses own clean power target - but 'continues to embrace' transition. [Read article.](#)
- Northern Ireland misses deadline for environmental plan. [Read article.](#)

Reports and Research



- 'Dark brown carbon' in wildfires may have even bigger climate impacts than previously thought. [Read article.](#)
- Government has 'mountain to climb' in fulfilling nature crisis pledge. [Read article.](#)
- Air pollution linked to rise in antibiotic resistance. [Read article.](#)
- Report: EU must treble pace of low-carbon energy transition to meet climate pledges. [Read article.](#)

Plastic and Pollution



- In a first, scientists detect microplastics in human hearts. [Read article.](#)
- How microplastics are making their way into our farmland. [Read article.](#)
- Australia's annual plastic consumption produces emissions equivalent to 5.7m cars, analysis shows. [Read article.](#)
- Plastic pollution threatens birds far out at sea, according to new research. [Read article.](#)

Land, Sea and Ecology



- Marine heatwaves causing mass seabird deaths in Pacific North America. [Read article.](#)
- Five species face immediate concern of extinction, scientific committee warns Labour. [Read article.](#)
- Red Admiral butterflies: Climate change sees migratory species stay in UK. [Read article.](#)
- Plantwatch: many of Scotland's arctic-alpine plants on brink of extinction. [Read article.](#)

Thanks again to everyone who supplied information/links/articles and please feel free to send more to xrgairloch@protonmail.com