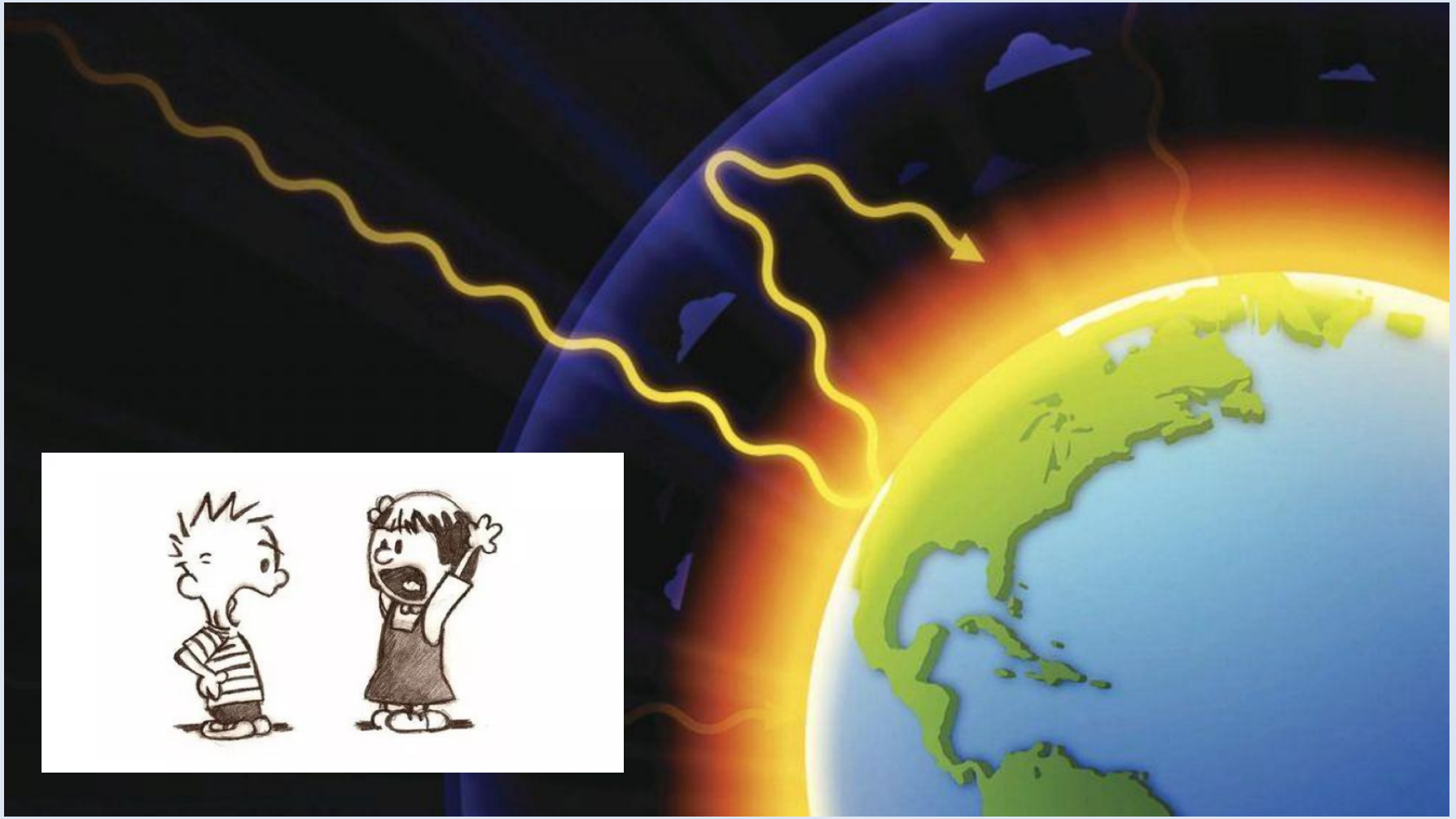
Current Sociology, Politics, and Science of Global Warming

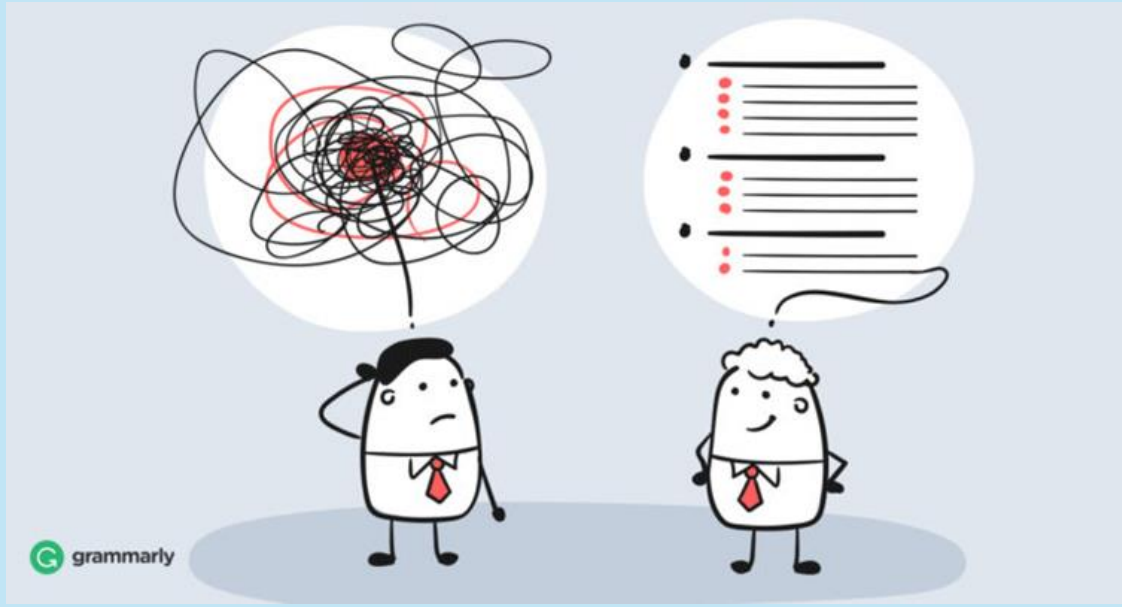


Jerry Osborn, Dept. of Earth, Energy, and Environment, University of Calgary

The current situation
- Culture war
- Decreasing social and political interest in climate issues
- Emissions still increasing
- Obstacles to renewables
- Role of the oil industry
- Magical thinking
- Current climate consequences

Mainstream science
- Observations
- Modeling
- Projections
- Perceived consequences for latter 21st century

Conclusion: the disconnect



Forbes

INNOVATION > SUSTAINABILITY

Time To Tackle Humanity's Greatest Challenge: Climate Change

By David Carlin, Former Contributor. ⓘ Helping you to understand and thrive in our changing world

Published Apr 20, 2020, 10:03pm EDT, Updated Apr 21, 2020, 11:37am EDT

ABOUT WWF-UK

We're WWF, the leading global environmental charity, and we're
our world back to life.

Climate change is the greatest environmental challenge the world has ever faced

United Nations | UN75 2020 AND BEYOND

Shaping our future together

Climate change is the defining crisis of our time



This “climate change”, it’s the biggest con job ever perpetrated on the world…

Economic progress must not be sacrificed for sustainability

Pieter Elbers
CEO, Indigo



Pieter Elbers, the chief executive officer of IndiGo, says it's refreshing to work in India where the government is backing the aviation sector Credit: Anindito Mukherjee/Bloomberg

CURRENT SITUATION: *THE CULTURE WAR*



Stanford SOCIAL INNOVATION Review
Informing and inspiring leaders of social change

Fall 2012

Climate Science as Culture War

The public debate around climate change is no longer about science—it's about values, culture, and ideology.

RIGHT-WING





Charlie Kirk

“Climate change is the wrapper around Marxism. You have Marxism at its core and you have climate change on the exterior. Climate change activism…. we call it a Trojan horse.”

Yale Climate Connections



….the agenda for climate action is part of a socialist plot to undermine the American way of life.

LEFT-WING





Annals of Global Health

Review article ● Open access Under a Creative Commons license ↗ Get right

Review

Climate Change, Human Rights, and Social Justice

Barry S. Levy MD, MPH *, Jonathan A. Patz MD, MPH † Show more

View PDF Download full issue Cite Add to Mendeley

The environmental and health consequences of climate change, which disproportionately affect low-income countries and poor people in high-income countries, profoundly affect human rights and social justice.

Protect the poor from being penalised by carbon taxes

Torsten Bell

Green economists will never get the public on their side until they factor in the cost to lower-income households



Young climate demonstrators in Sweden, among the first countries in the world to introduce a carbon tax. Photograph: Anders Wiklund/EPA

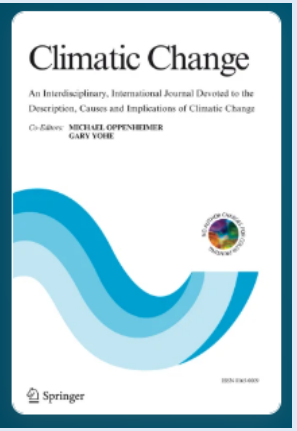
The Guardian
October 4, 2020

Home > Climatic Change > Article

Institutionalizing delay: foundation funding and the creation of U.S. climate change counter-movement organizations

Published: 21 December 2013

Volume 122, pages 681–694 (2014) Cite this article



Conservative groups spend up to $1bn a year to fight action on climate change

- Author: 'I call it the climate-change counter movement'
- Study focuses on groups opposing US political action

The Guardian 2013

CURRENT SITUATION:
DECLINING INTEREST IN CLIMATE MITIGATION

The Paris Agreement

Progress tracker: Work programme resulting from the relevant requests contained in decision 1/CP.21 (version of 22 October 2018)

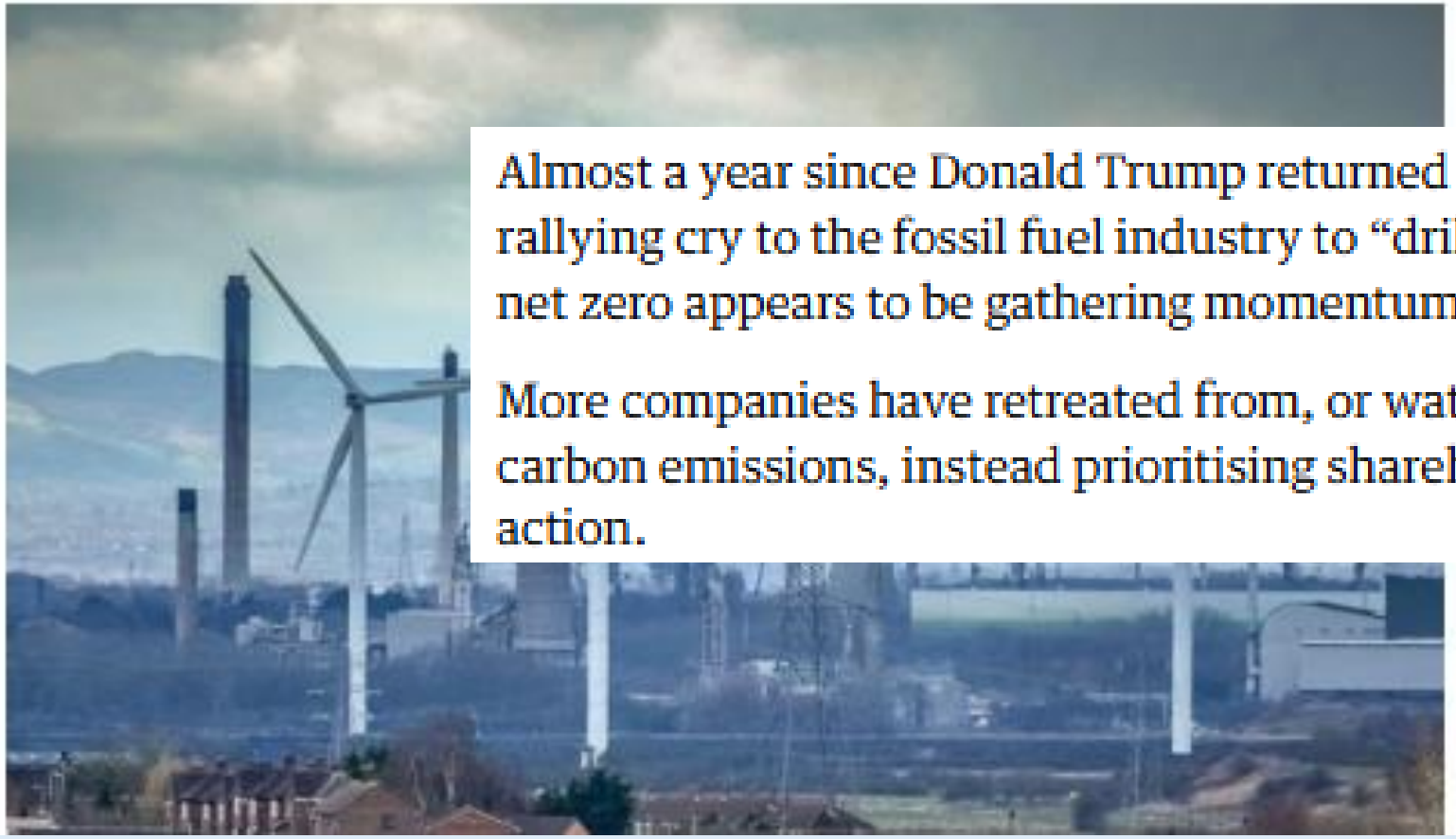
Paris Agreement: essential elements

The Paris Agreement builds upon the Convention and for the first time brings all nations into a common cause to undertake ambitious efforts to combat climate change and adapt to its effects, with enhanced support to assist developing countries to do so. As such, it charts a new course in the global climate effort.

The Paris Agreement central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. Additionally, the agreement aims to strengthen the ability of countries to deal with the impacts of climate change. To reach these ambitious

Was 2025 the year that business retreated from net zero?

From retailers to banks, carmakers to councils, the bold pledges for carbon-neutral economies are being watered down or scrapped



Almost a year since Donald Trump returned to the White House with a rallying cry to the fossil fuel industry to "drill baby, drill", a backlash against net zero appears to be gathering momentum.

More companies have retreated from, or watered down, their pledges to cut carbon emissions, instead prioritising shareholder returns over climate action.

The Guardian
December 21, 2025

The Washington Post
Democracy Dies in Darkness

Oil and gas executives roll back green energy pledges as they celebrate Trump

Big energy firms that once leaned into aggressive climate targets celebrate Washington's shift at Houston gathering.

Yesterday at 9:03 p.m. EDT

6 min 166



Energy Secretary Chris Wright displays a signed order approving an LNG permit extension for the Delfin LNG project on the Louisiana Coast at CERAWeek, an energy conference, in Houston on Monday. (F. Carter Smith/Bloomberg/Getty Images)

March 10, 2025

Hedge funds bet big against green energy future

October 22, 2024 - 9:19 am

RELATED TOPICS

INTEL MANAGERS

Hedge funds are taking significant short positions against clean energy and green technology, a trend that could be more detrimental to the green transition than political opposition to "woke" capitalism, according to a report by Bloomberg.

Hedgeweek

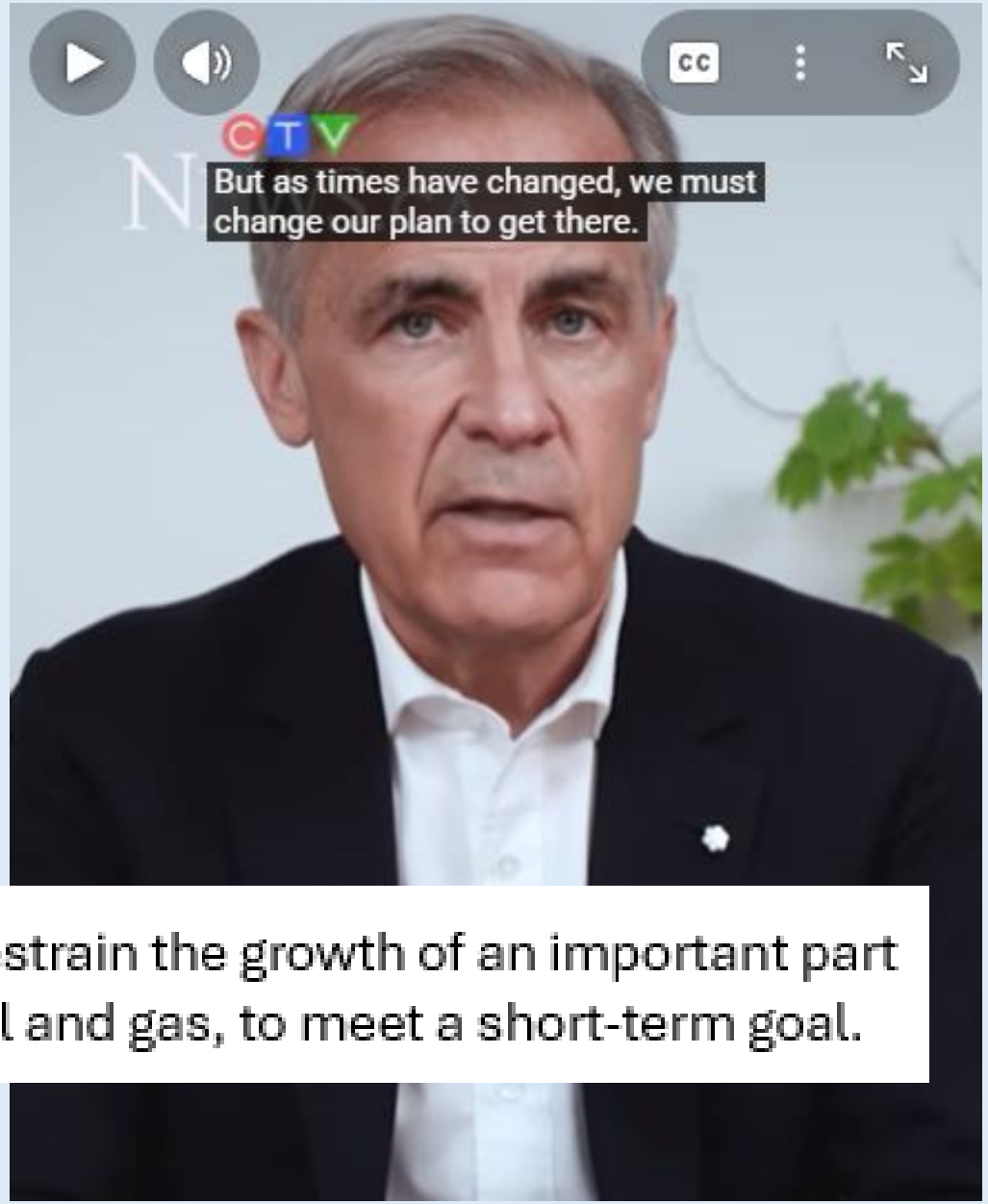
EDITORIAL

Le Monde

France's government has abandoned its climate plans

With planning on environmental projects at a standstill since 2023, France's political leaders are only reinforcing the idea that they are unable to think long-term, even when it comes to such crucial issues as climate change and biodiversity collapse.

October 28, 2025


CTV
But as times have changed, we must change our plan to get there.
We can't afford to restrain the growth of an important part of our energy mix, oil and gas, to meet a short-term goal.

June 30, 2026

Economic progress must not be sacrificed for sustainability

Pieter Elbers
CEO, Indigo



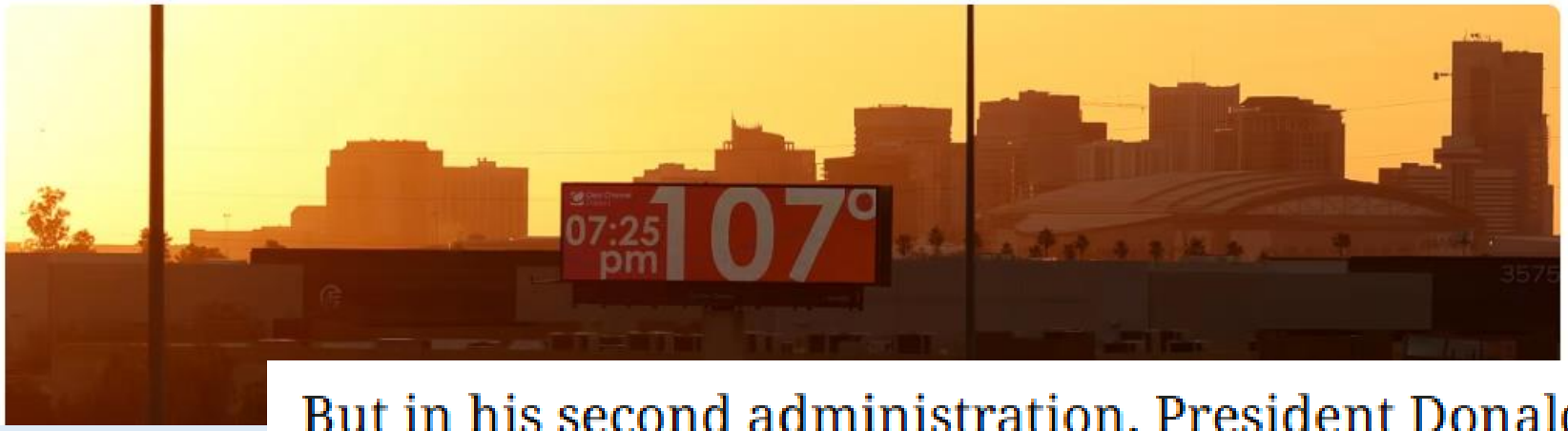
Pieter Elbers, the chief executive officer of IndiGo, says it's refreshing to work in India where the government is backing the aviation sector Credit: Anindito Mukherjee/Bloomberg

The US government has declared war on the very idea of climate change

August 1`, 2025

UPDATED 4 HR AGO

Analysis by Zachary B. Wolf



But in his second administration, President Donald Trump is not just approaching climate science with skepticism. Instead, his administration is moving to destroy the methods by which his or any future administration can respond to climate change.

RIGHT-WING CELEBRATION

THE WALL STREET JOURNAL.

NEWSLETTERS | FREE EXPRESSION

Is the Climate Freak Out Over?

A 'stunning' decline in fervor for the green agenda.



By *Jack Butler* Follow

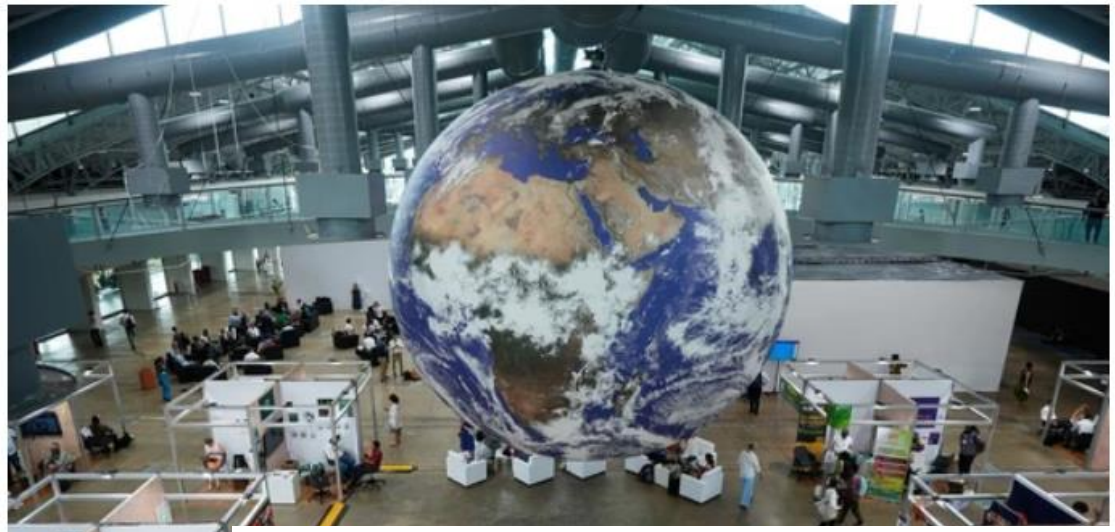
Jan. 15, 2026 6:50 am ET

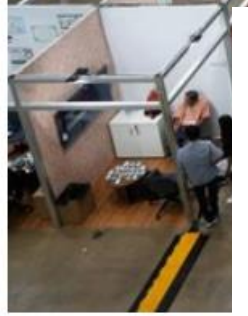
Terence Corcoran: The ‘existential’ climate crisis is fading away

Once billed as the threat that could destroy much of life on Earth, climate change has moved to the back-burner of policy-making

By Terence Corcoran

Published Jan 14, 2026 4 minute read 45 Comments





Attendees sit under a globe
2025, in Belem, Brazil. PHO

Financial Post

As the world spins into what appears to be a new global order, one of the dominant movements of the past half century has been pushed to the sidelines. Once billed as the threat that could destroy much of life on Earth, climate change driven by human consumption of fossil fuels has moved to the back-burner of national and global policy-making.

FIRST READING: And just like that, nobody cares about climate change anymore

Sudden Canadian disinterest in emissions matching global trends

By **Tristin Hopper**

Published Jun 01, 2026 6 minute read 610 Comments

National Post

And the story of Guilbeault's ignominious last 12 months is pretty emblematic of his life's cause as a whole. Climate change — once the animating mission of Western policymakers — has been sidelined and deprioritized with stunning speed.

OIL COMPANY CELEBRATIONS

More chance of Elvis speaking than energy transition plans succeeding, Aramco CEO says

By **Arathy Somasekhar** and **Maha El Dahan**

March 10, 2025 8:23 AM MDT · Updated a day ago



President and CEO of Saudi's Aramco, Amin H. Nasser, speaks during the Future Investment Initiative (FII) in Riyadh, Saudi Arabia October 29, 2024. REUTERS/Hamad I Mohammed/File Photo Purchase Licensing Rights

LEFT-WING PESSIMISM

POLITICO

‘We've lost the culture war on climate’

The U.S. government has long recognized greenhouse gases as a threat, but major rules to address them have failed to stick.



Failing to curb power plants' pollution, scientists say, means temperatures will continue to rise and bring more of the floods, heat waves, wildfires, supply chain disruptions, food shortages and other shocks that cost the U.S. hundreds of billions of dollars each year. | Apu Gomes/Getty Images

(Jody Freeman, Obama climate change counselor)

June 11, 2025

The New York Times

Oct. 2, 2025

Has the World Given Up on Fighting Climate Change?

At a Climate Forward event, David Wallace-Wells explores why global momentum on climate action is faltering, even as clean energy technology rapidly advances.

It Isn't Just the U.S. The Whole World Has Soured on Climate Politics.

How do we think about the climate future, now that the era marked by the Paris Agreement has so utterly disappeared?

Polls show that voters don't actually prioritize decarbonization and, crucially, aren't willing to pay much to bring it about.

But climate politics is in undeniable withdrawal, and far from ushering in a new era of cooperative global solidarity, Paris has given way to something much more old-fashioned: an atavistic age of competition, renewed rivalry and the increasingly naked logic of national self-interest, on energy and warming as with everything else.

New York Times Magazine
September 16, 2025

Fury after Exxon chief says public to blame for climate failures

Darren Woods tells Fortune consumers not willing to pay for clean-energy transition, prompting backlash from climate experts



The Guardian
March 4, 2024

Woods argued that big oil is not primarily responsible for the climate crisis.
The real issue, Woods said, is that the clean-energy transition may prove too expensive for consumers' liking

nature climate change

May13, 2026

Review article

https://doi.org/10.1038/s41558-026-0

Understanding and reducing the intention–behaviour gap in climate action

"Climate-friendly intentions often fail to translate into action"

It may be that people are 'cool' and far-sighted when they express their intentions, but when engaging in behaviour they are influenced by the 'hot' emotional system, which sensitizes them to its short-term costs (money, effort)

Temporal discounting… the tendency to devalue outcomes that occur in the future relative to those that occur immediately

Experimental evidence shows that people are less likely to choose a pro-environmental option when the non-environmental option is associated with greater financial benefit, takes less of their time and involves less effort

Humans are embedded in social and cultural groups and these group contexts have a powerful influence on intentions and behavior

Structural features such as convenience, affordability and reliability play a central role in shaping whether climate-friendly intentions translate into action.



July 2, 2024

Will things change soon enough? Not on today's trajectory. Worse, the politics, always difficult, have become even more so: people just do not want to pay the price of decarbonising the economy.



When policies focused on economic growth confront policies focused on emissions reductions, it is economic growth that will win out every time.

Leger

ABOUT SERVICES PUBLICATIONS EVENTS

Canada's Climate Change Policy

Posted on September 28th, 2023



Economic growth now tops environment as priority in energy policy, poll suggests

Story by David Baxter • 5h • 3 min read Summarize



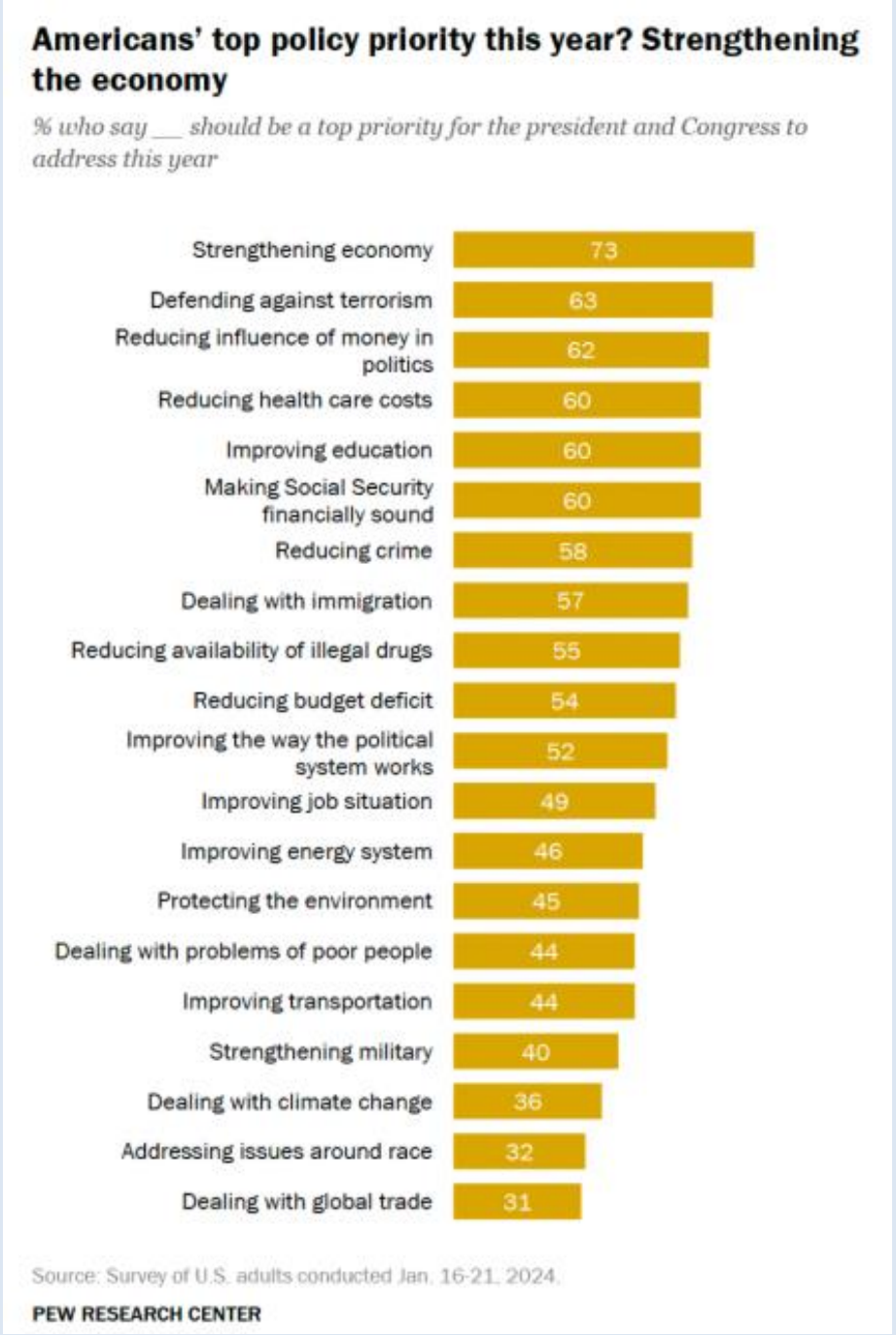
The Canadian Press
May 11, 2026

More Canadians now say economic growth should be a bigger priority in Canada's energy policy than protecting the environment, a new Angus Reid Institute report suggests.

The pollster released a report Monday indicating 61 per cent of Canadians now see economic growth as the biggest priority in energy policy. That's a shift in public opinion since seven years ago, when the same question had 55 per cent of Canadians saying the environment should be the top priority in energy policy.

Americans' Top Policy Priority for 2024: Strengthening the Economy

Growing shares of Republicans rate immigration and terrorism as top priorities





ZERO INTEREST Brits care four times as much about cost of living as they do about climate change

Threat of climate change is still seen as the fifth most important issue to Brits

Ashley Armstrong, Business Editor

Published: 23:42, 8 Oct 2024 | **Updated:** 23:43, 8 Oct 2024


WHAT,
ME WORRY?

CURRENT SITUATION:

INCREASING ENERGY DEMAND AND OIL/GAS PRODUCTION → INCREASING EMISSIONS

DATA CENTERS
AIR CONDITIONING
WARS
DEVELOPING NATIONS
POPULATION INCREASE



2024

Master Award | Membership

The Renewable Energy Institute

Promoting accredited professional training, best practice and research since 1975

REI

Home | Our Activities | Training Courses | Qualifications & Accreditations | Articles & Rese

DAILY NEWS

91% of New Renewables Now Cheaper Than Fossil Fuels

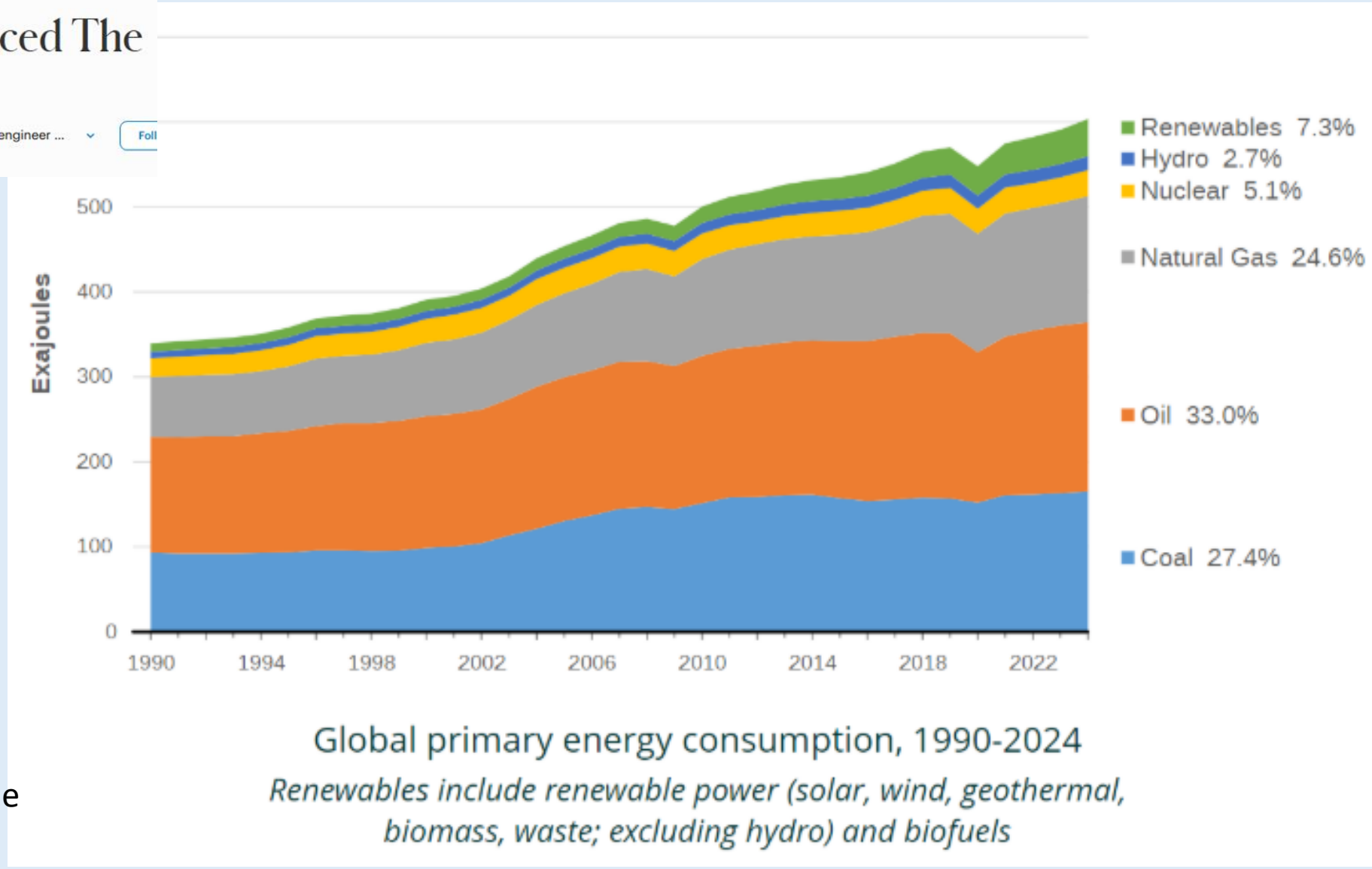
Forbes

BUSINESS > ENERGY

Energy Demand Outpaced The Transition In 2025

By Robert Rapier, Senior Contributor. ⓘ Robert Rapier is a chemical engineer ... Foll

Published Jul 01, 2026, 06:00am EDT



Global primary energy consumption, 1990-2024

Renewables include renewable power (solar, wind, geothermal, biomass, waste; excluding hydro) and biofuels

Energy Institute 2025

‘No sign’ of promised fossil fuel transition as emissions hit new high

Despite nations’ pledges at Cop28 a year ago, the burning of coal, oil and gas continued to rise in 2024



There is “no sign” of the transition away from burning fossil fuels that was pledged by the world’s nations a year ago, with 2024 on track to set another new record for global carbon emissions.

Steam billows from a power station at sunset in New Delhi. Coal burning is increasing in India as its economy grows strongly, leading to a 4.6% rise. Photograph: Kamal Kishore/REUTERS

The Guardian
November 13, 2024



Photo by Markus Spiske / Unsplash

Dear White Environmentalists: Demanding Fossil Fuel Phase Out is Not Enough



Nafeez M Ahmed

Creator of the Age of Transformation, a newsletter offering systems-thinking for the global phase-shift. Director, Unitas Futures Lab. Founder, System Shift Lab.

https://ageoftransformation.org/dear-white-environmentalists-a-fossil-fuel-phase-out-is-not-enough/

Many Western climate activists have overlooked the complex interlinkages between these issues. Whatever one thinks of Sultan Al Jaber, one statement he's made repeatedly makes perfect sense: "We cannot unplug the world from the current energy system before we build a new energy system."

The focus, then, has to shift. Instead of focusing on dismantling the incumbent system, we need to focus on accelerating the deployment of the new system that will replace it (both in terms of technological transformations across key sectors, as well as related socio-economic transformations): because that's the only way that demand for oil and gas can be eliminated.

DATA CENTERS



INCREASING USE OF AIR CONDITIONING



EMBER

Explore Lo

Air conditioner use during 2024 heatwaves doubled electricity demand growth in major markets during some months, increasing fossil fuel generation

5 Mar 2025

London, 5th March – A new report from energy think tank Ember finds that extreme heat events in 2024 in the world's three largest electricity markets – India, China and the US – caused a surge in air conditioner usage, causing electricity demand growth to double in some heatwave months. There was a significant increase in coal generation (and gas in the US) to meet the additional demand.

WAR

US and Israel's war on Iran is a disaster for the environment, analysis shows

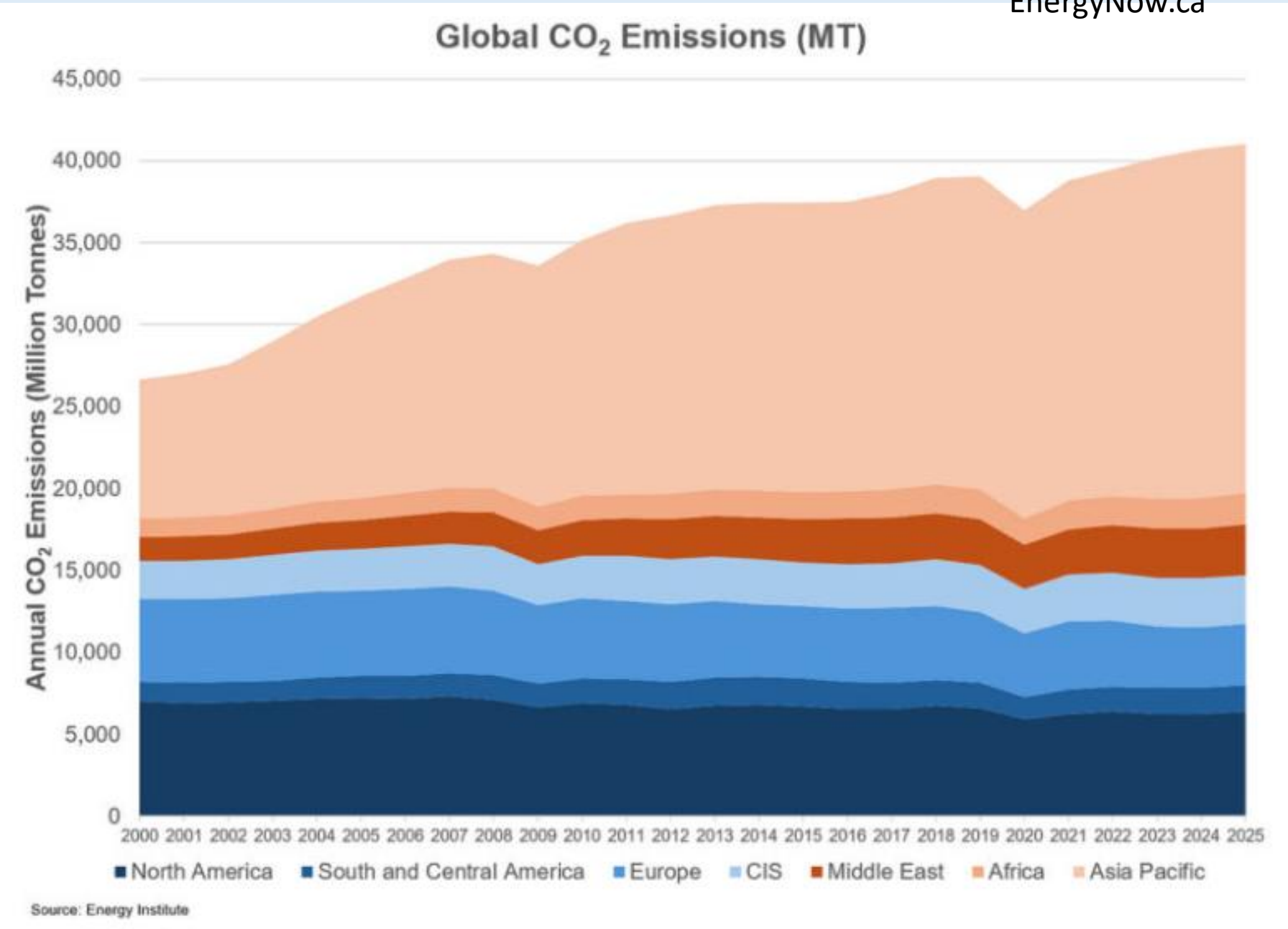
Exclusive: War has led to 5m tonnes of greenhouse gas emissions in two weeks and is draining the global carbon budget faster than 84 countries combined



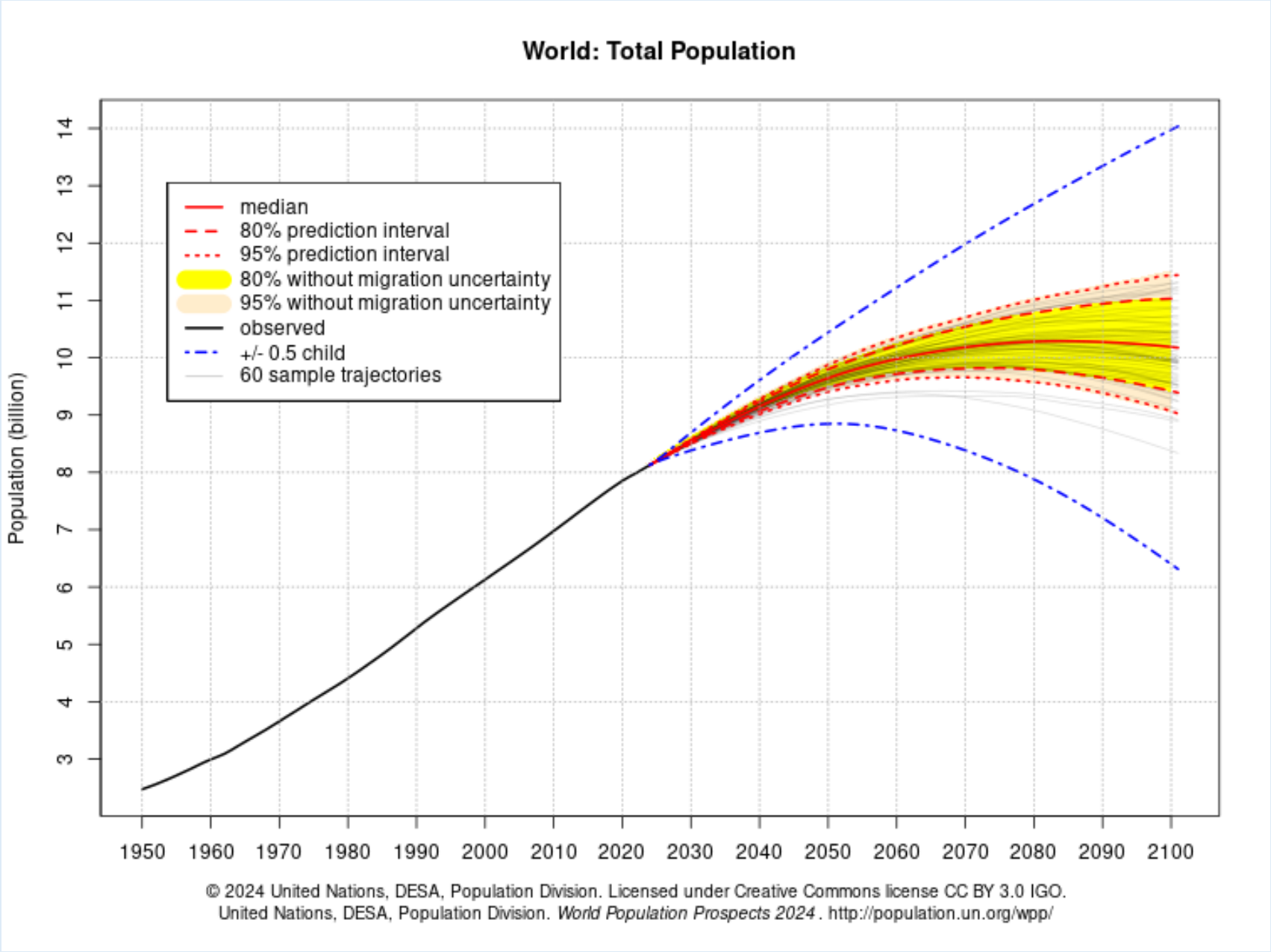
Shahran oil refinery in north-west Tehran on 8 March after an overnight airstrike. Photograph: AFP/Getty Images

EnergyNow.ca

ASPIRATIONS OF DEVELOPING NATIONS

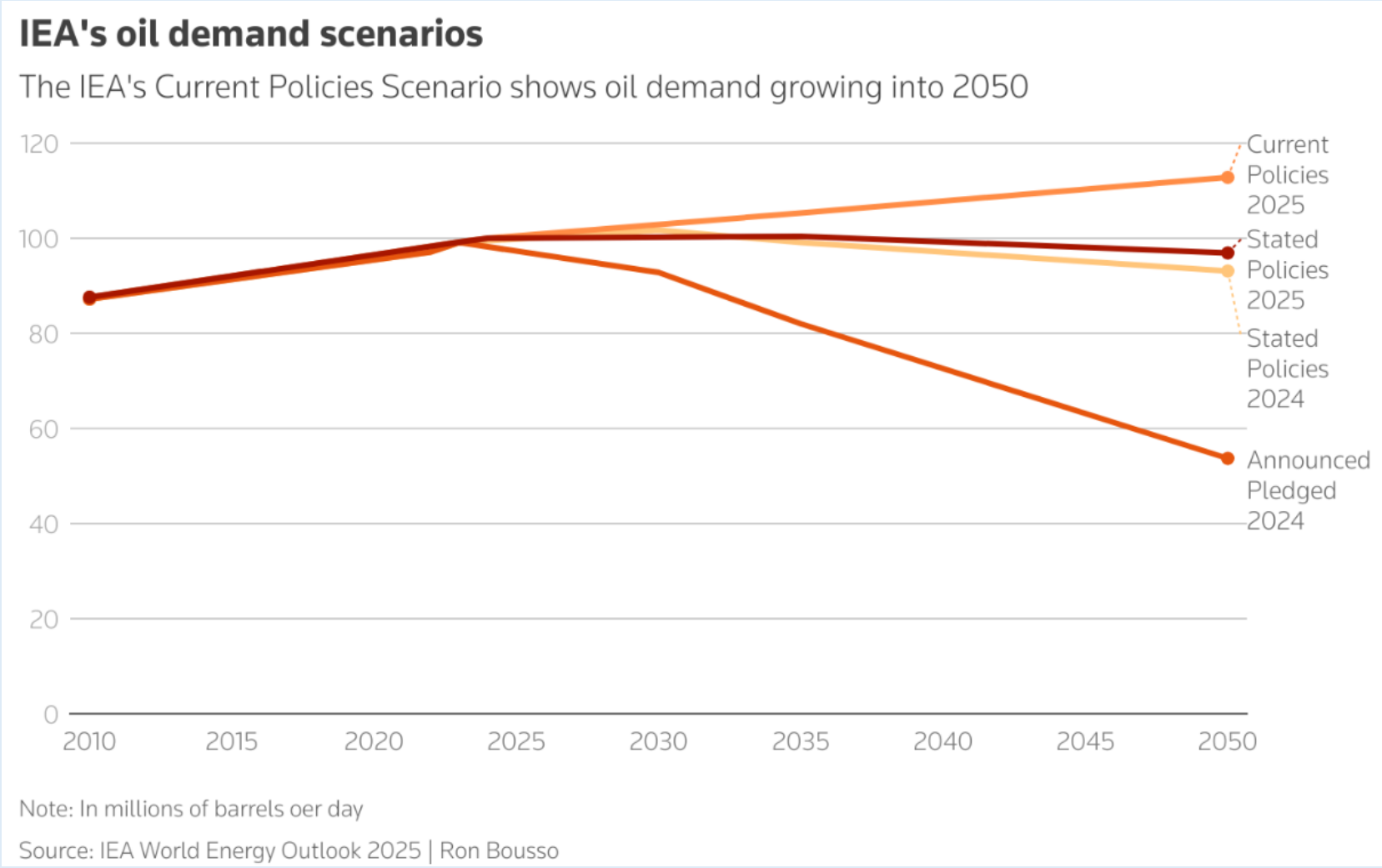


INCREASING POPULATION



NO SIGNIFICANT DECREASE IN FOSSIL FUEL DEMAND COMING SOON

World Energy Outlook 2025
April 2025



CURRENT SITUATION:
OBSTACLES TO RENEWABLES

ENVIRONMENTALISTS



INSUFFICIENT GRID



CONSERVATIVE POLITICIANS







CURRENT SITUATION:
ROLE OF THE OIL INDUSTRY

1. Responsible for climate change because they produce oil?

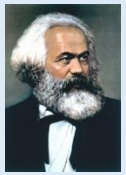
2. Figured out climate consequences of fossil fuel consumption in the 70's, but kept that in-house and downplayed the connection for decades thereafter?

3. Have helped block climate action by contributing large donations to denial think-tanks and to conservative politicians?

CURRENT SITUATION:
ROLE OF THE OIL INDUSTRY

1. Responsible for climate change because they produce oil?

NO



"Consumption creates the motive for production"

2. Figured out climate consequences of fossil fuel consumption in the 70's, but kept that in-house and downplayed the connection for decades thereafter?

YES

Exxon accurately predicted global warming from 1970s – but continued to cast doubt on climate science, new report finds

By Laura Paddison, CNN
Published 2:00 PM EST, Thu January 12, 2023

1. Have helped block climate action by contributing large donations to denial think-tanks and to conservative, anti-regulation politicians?

YES

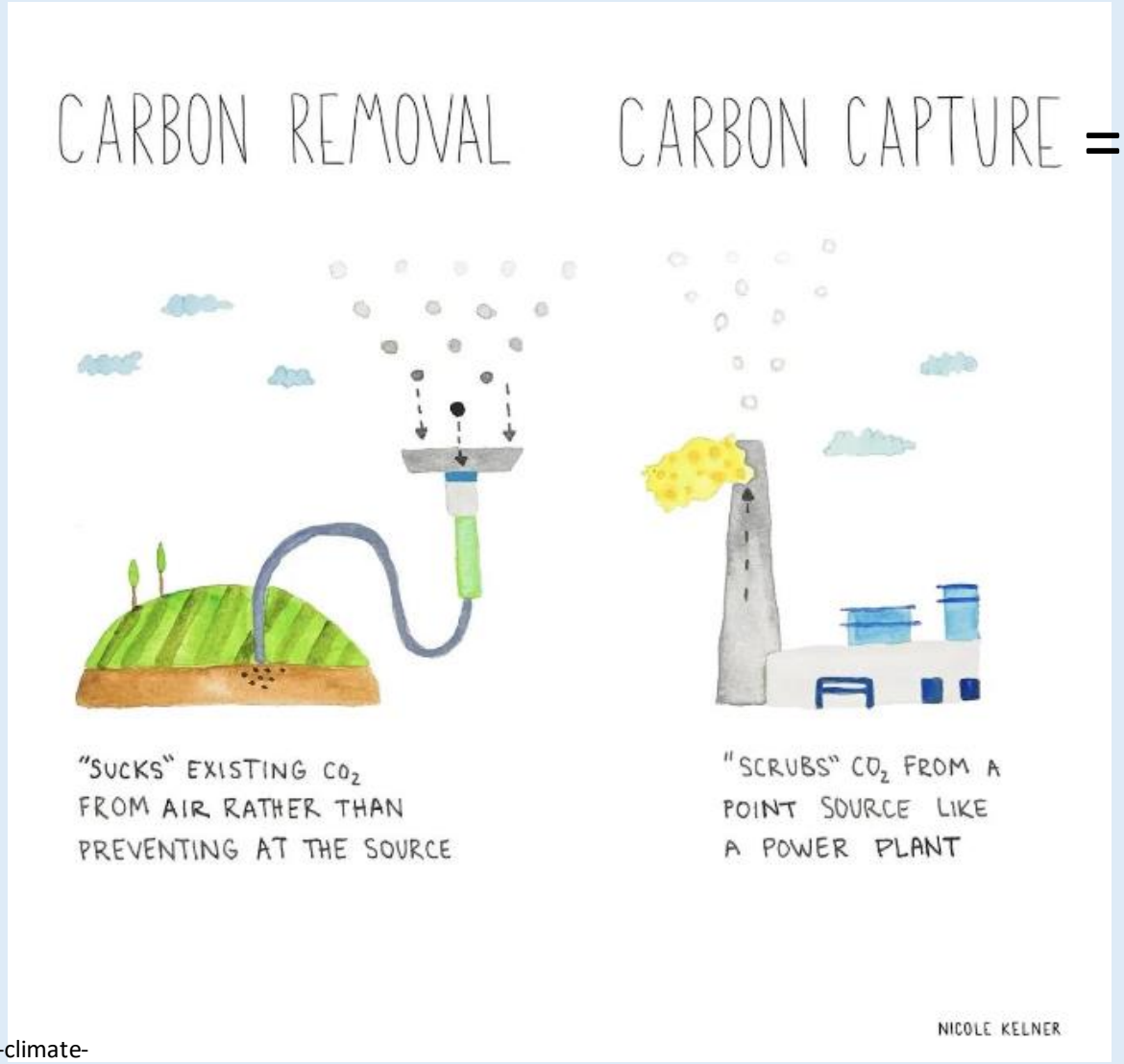
U.S. oil and gas production is booming. So are the industry's donations to its GOP allies

CURRENT SITUATION:
MAGICAL THINKING/END RUNS

BY LEFT, RIGHT, GOVERNMENTS, OIL INDUSTRY, BUSINESS IN GENERAL



CCS, CDR, SOLAR GEO-ENGINEERING



= carbon sequestration

https://carbonremoval.ca/decoding-climate-solutions/#:~:text=As%20Nicole%20Kelner's%20illustration%20above,dioxide%20from%20a%20point%20source.

Q&A: Does the world need 'carbon capture and storage' to reach net-zero?

03.08.26 | TECHNOLOGY

Influential organisations, including the Intergovernmental Panel on Climate Change (IPCC), describe CCS as "critical" for cutting emissions from key sectors – and for helping to avoid dangerous global warming.

Inside Climate News

Pulitzer Prize-winning, nonpartisan repor
biggest crisis facing our planet.

Fossil Fuels

Fossil Fuel Companies Are Quietly Scoring Big Money for Their Preferred Climate Solution: Carbon Capture and Storage

The industry has been pushing through policies devoting billions of dollars to the technology, and much more is likely to come with legislation pending before Congress.



By Nicholas Kusnetz
August 17, 2021



Over the last year, energy companies, electrical utilities and other industrial sectors have been quietly pushing through a suite of policies to support a technology that stands to yield tens of billions of dollars for corporate polluters, but may do little to reduce greenhouse gas emissions.

EnergyNow.ca
Breaking News, Data & Events

Canada is Embracing Carbon Capture and Storage (CCS) to Reduce Emissions and Sustain its Energy Industry

August 14, 2024 EnergyNow Media

Back in 2007, the Alberta and federal governments established a task force on carbon capture and storage (CCS) as a way of reducing emissions from oil, gas, and energy operations. That led to a report in 2008 that said: “CCS is seen as a technological solution that allows Canada to continue to increase its energy production while reducing (carbon dioxide) emissions from these activities. “

ENVIRONMENTAL RESEARCH
LETTERS

LETTER • OPEN ACCESS

Explaining successful and failed investments in U.S. carbon capture and storage using empirical and expert assessments

Ahmed Abdulla[1,2], Ryan Hanna[2,3], Kristen R Schell[1], Oytun Babacan[4] and David G Victor[2,5,6]

Published 29 December 2020 • © 2020 The Author(s). Published by IOP Publishing Ltd

The record of CCS project development is overwhelmingly one of failure.

The New York Times

OPINION

GUEST ESSAY

Every Dollar Spent on This Climate Technology Is a Waste

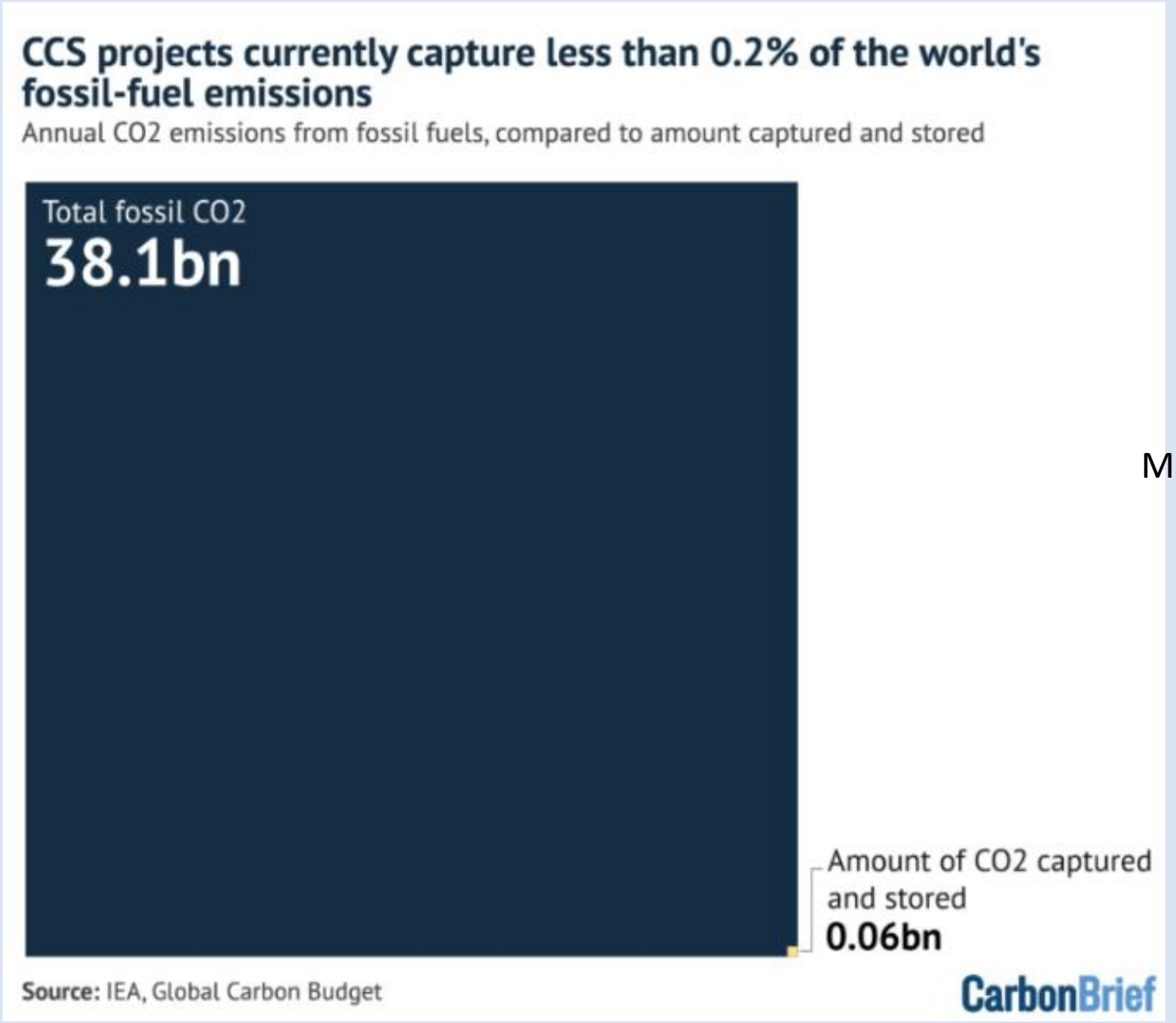
Aug. 16, 2022

By Charles Harvey and Kurt House

Dr. Harvey is a professor of environmental engineering at the Massachusetts Institute of Technology. Dr. House is the chief executive officer of KoBold Metals, a metals exploration company.

"Every dollar invested in CCS rather than renewable energy is a wasted dollar ... It's a scam," said Charles Harvey, professor of environmental engineering at the Massachusetts Institute of Technology. Harvey co-founded the first private CCS startup 15 years ago but has since said that he was wrong - that CCS technology is inefficient and cannot deliver.

The Guardian
July 29, 2024



March 26, 2026

Vaclav Smil

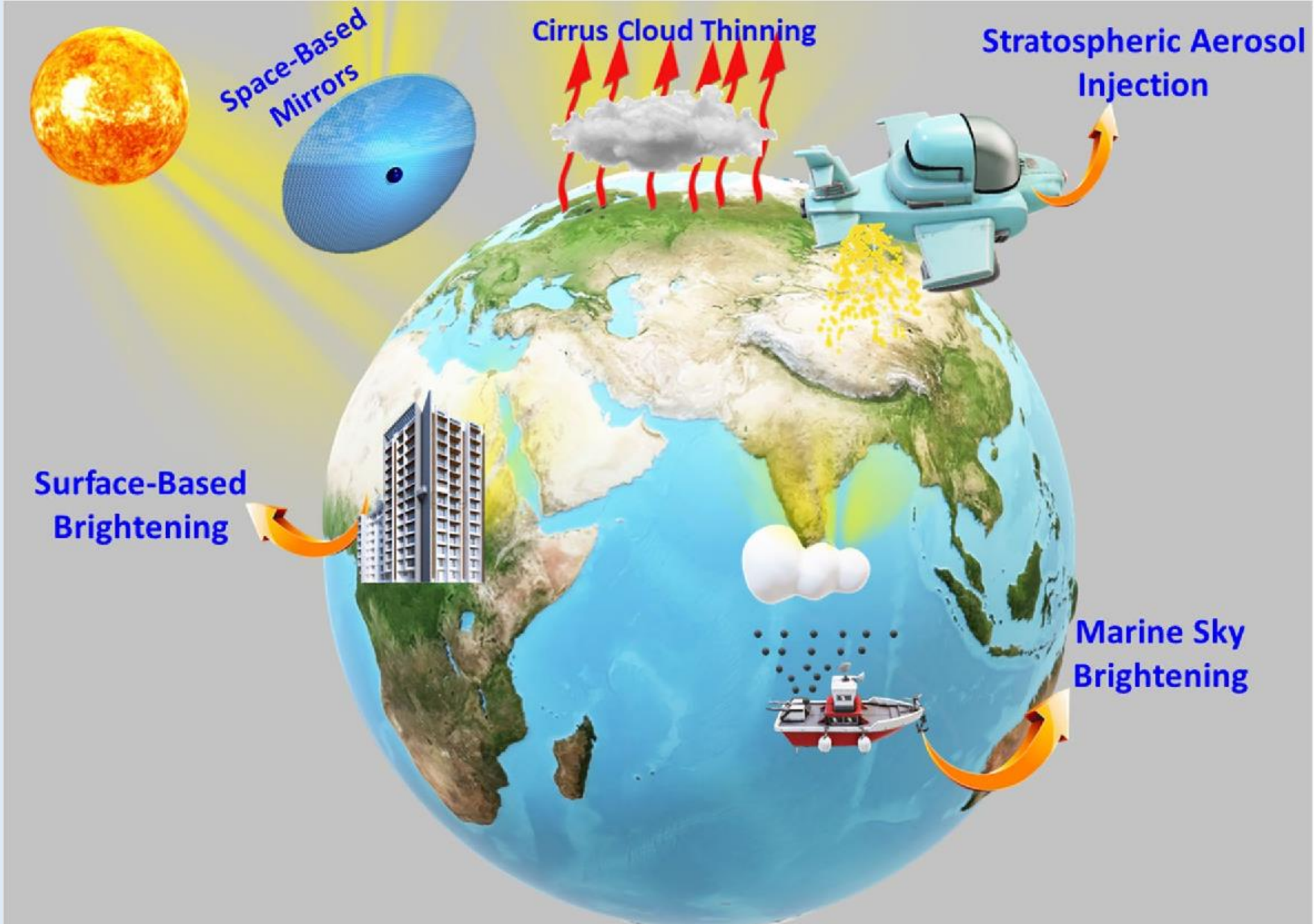


Mark my words, there will be no massive sequestration of carbon…..Simply on the matter of scale, carbon sequestration is simply dead on arrival.

Interview with The Intelligencer, September 2019

Science journal: “the world’s foremost thinker on energy”

Solar geo-engineering



Fawzy et all, 2020

CURRENT SITUATION: *CLIMATE-CHANGE CONSEQUENCES ALREADY FELT*

Roads buckling
Railroad tracks buckling
European rivers drying up
Shutdown of European nuclear power plants
3 lions die in Tokyo zoo
3 million chickens die in France
Beehives melting in Arizona
Monkeys collapsing, bats dropping dead in India
Burns on people falling to ground in Arizona
Passengers on departing Las Vegas flight pass out
Soda cans explode on SW Airlines flight
10,000 “excess deaths” in European heat wave
Pteropods (snails) dissolving in southern oceans
14 of 200 inhabited islands of Maldives now below SL
Summers smoky in Canada; health being affected
Smoke blamed for 24,000 U.S. deaths per year
AMOC (including Gulf Stream) weakening
Declining productivity of wheat, rice, soybean, maize
Lyme disease rising in Canada
Dengue fever rising in world
Some insurance companies have pulled out of CA, FL
World now expecting $~450 billion/yr in losses from natural disasters
Canada lost half a year of economic growth in 2025



“We are now living in the future that climate scientists have been warning us about for more than half a century.”

--John Valliant
NYT October 12, 2026

SCIENCE: OBSERVATIONS

SIGNIFICANCE OF A FEW DEGREES OF CHANGE

A few degrees of mean annual temperature change = big deal



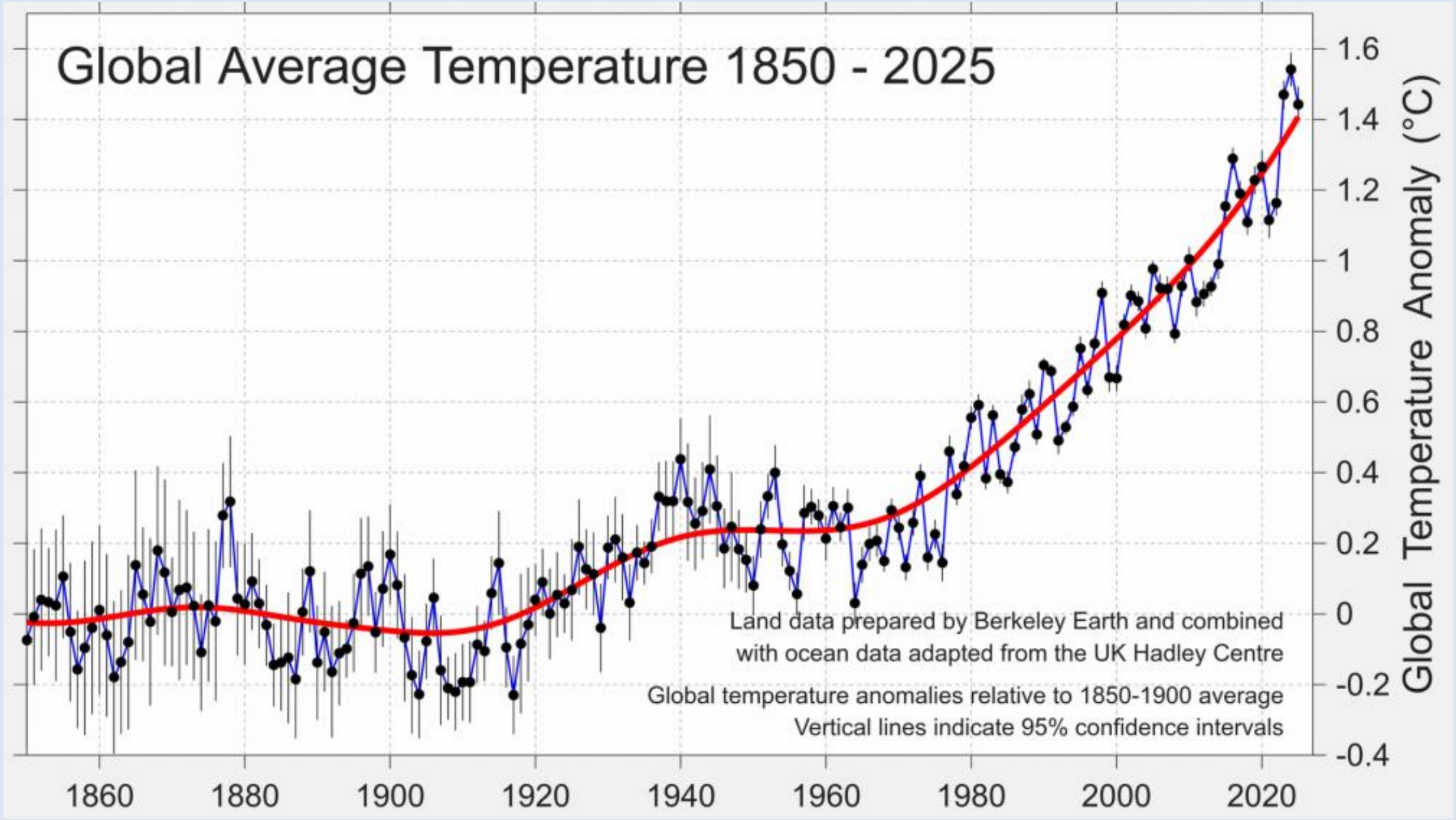
Difference in global mean temperature between glacial period and interglacial period (e.g., now):

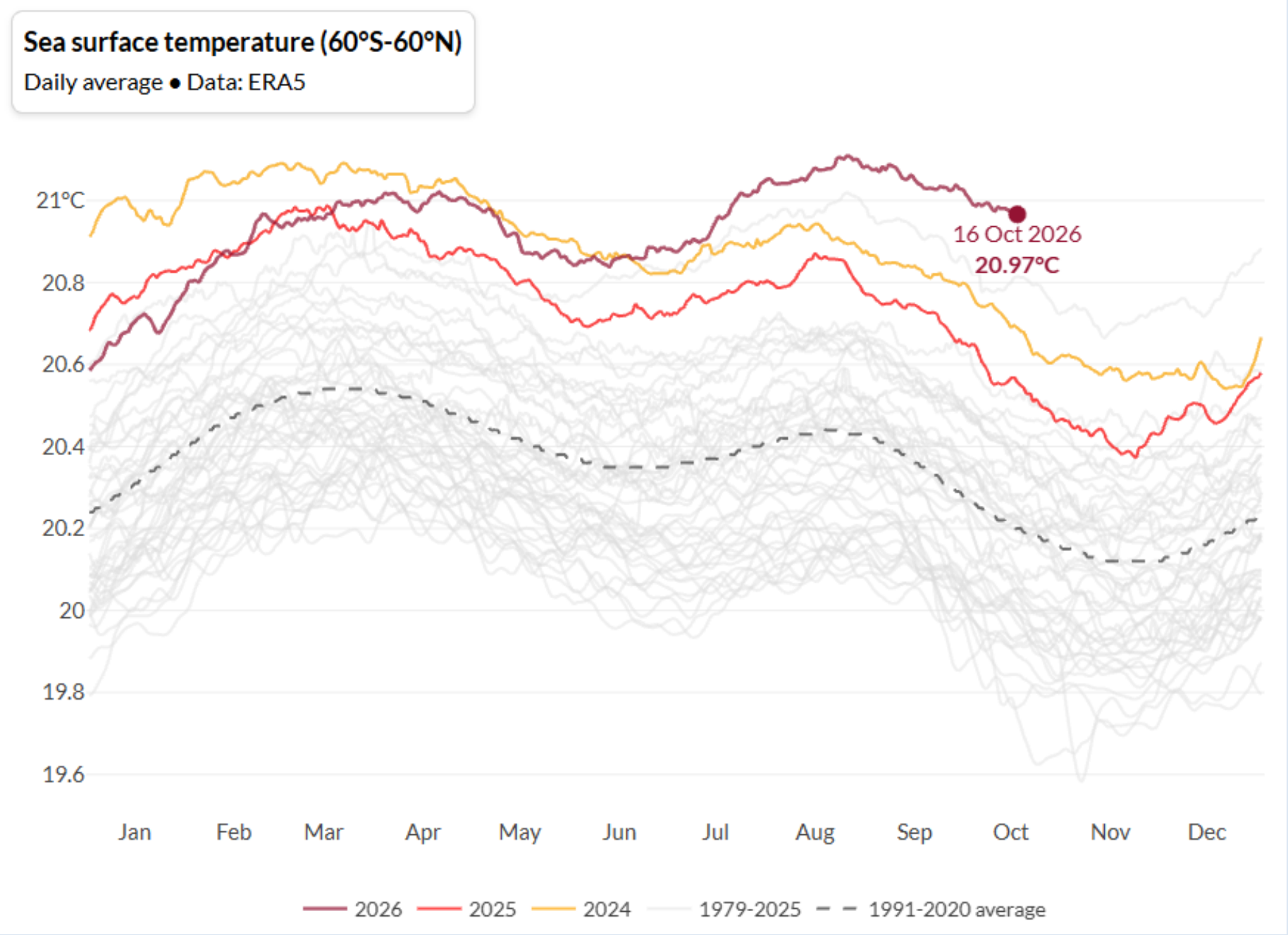
4°C

Annan and Hargreaves, 2013

6°C

Tierney et al., 2020


Global Average Temperature 1850 - 2025
Land data prepared by Berkeley Earth and combined
with ocean data adapted from the UK Hadley Centre
Global temperature anomalies relative to 1850-1900 average
Vertical lines indicate 95% confidence intervals
Global Temperature Anomaly (°C)
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
1860
1880
1900
1920
1940
1960
1980
2000
2020



Copernicus Climate Pulse

WATER VAPOR

State of the Climate
American Meteorological Society
August 2026

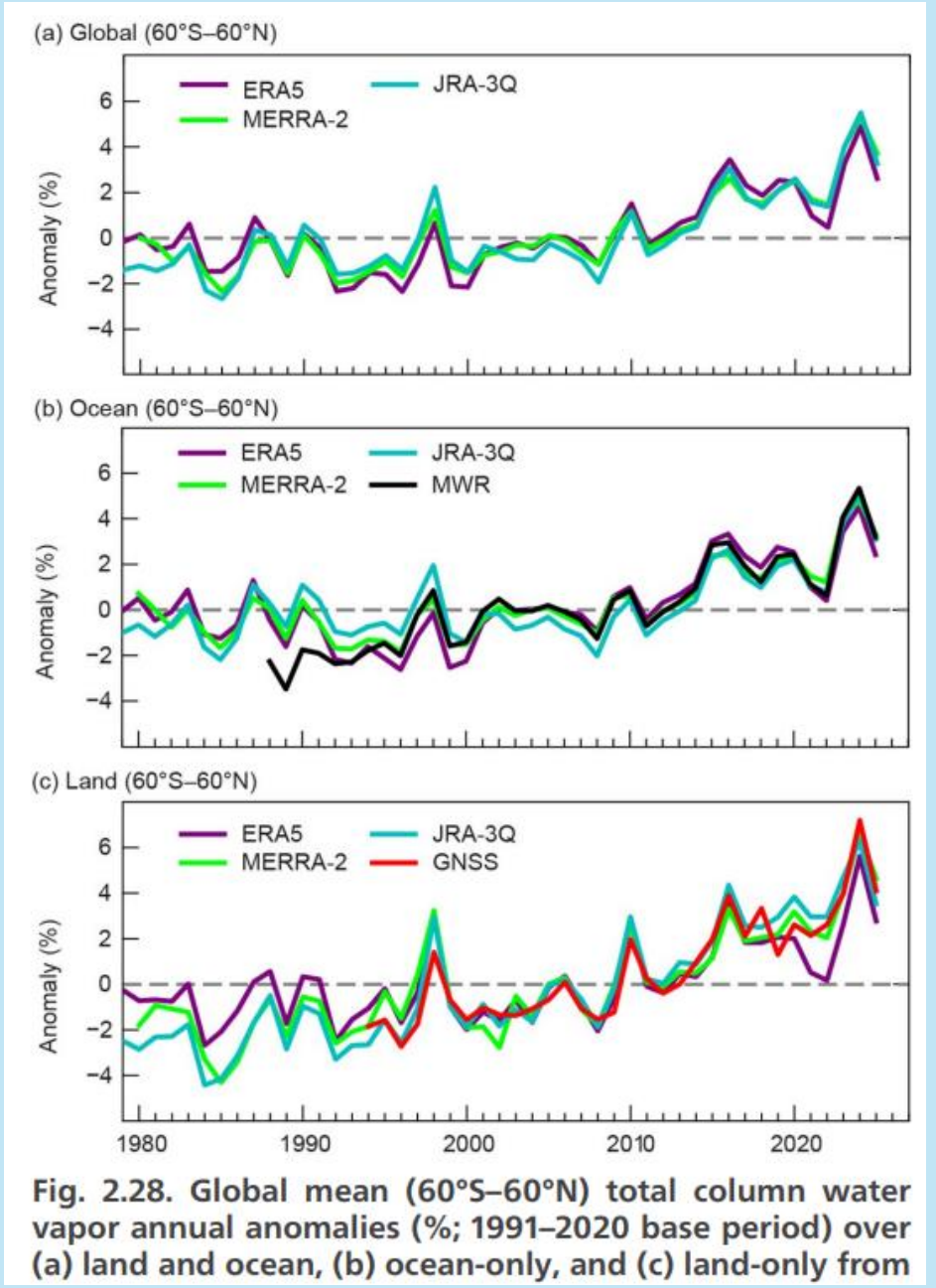


Fig. 2.28. Global mean (60°S–60°N) total column water vapor annual anomalies (%; 1991–2020 base period) over (a) land and ocean, (b) ocean-only, and (c) land-only from

SCIENCE: VIABILITY OF MODELING

NOVEMBER 7, 2012

The limitations of climate models

by Fabio Bergamin, ETH Zurich



Even with the latest climate models, temperature projections are fraught with uncertainty (light areas ar…

(Phys.org)—How accurate is the latest generation of climate models? Climate physicist Reto Knutti from ETH Zurich has compared them with old models and draws a differentiated conclusion: while climate modelling has made substantial progress in recent years, we also need to be aware of its limitations.

Phys.org

Geophysical Research Letters

Research Letter

Evaluating the performance of past climate model projections

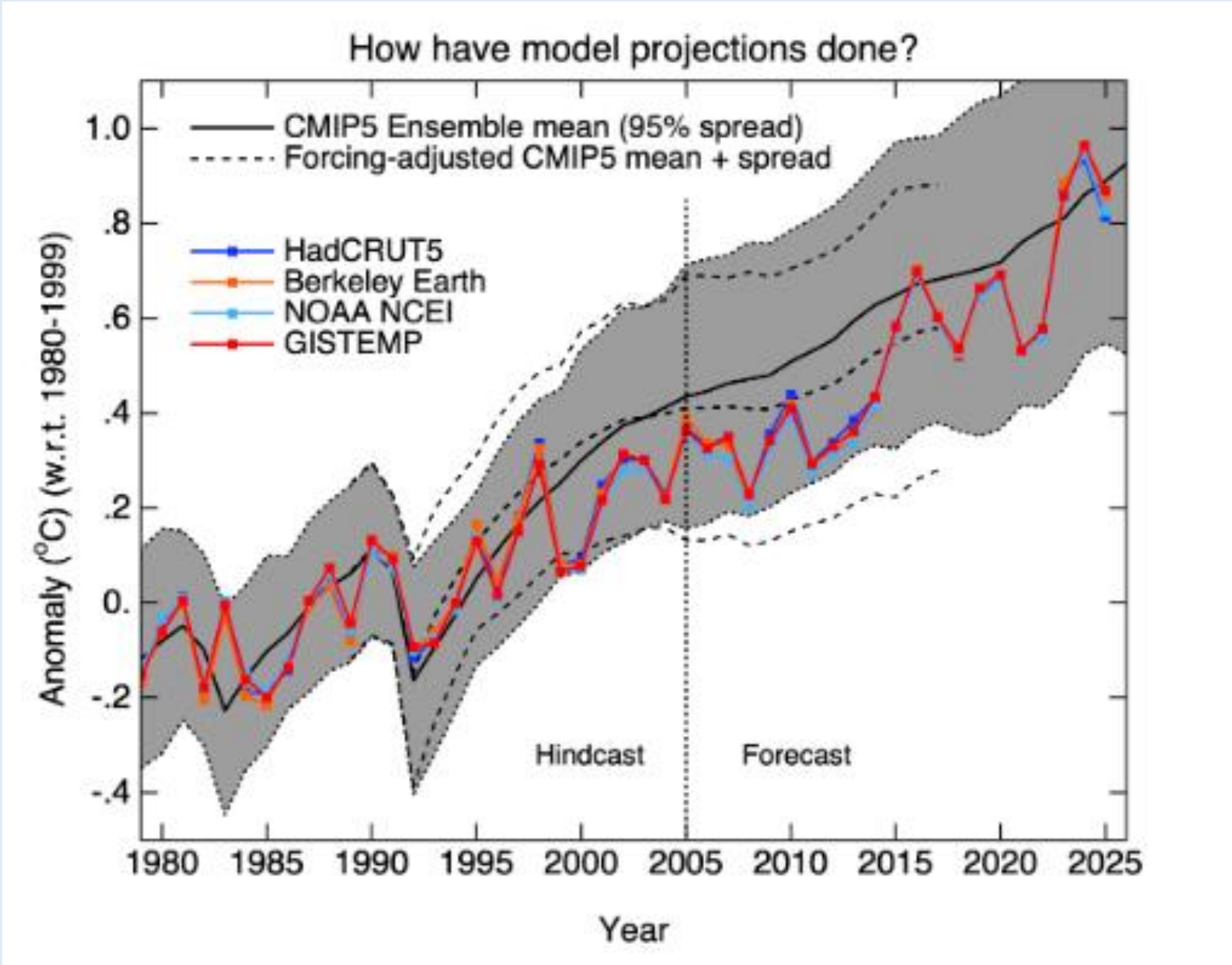
Zeke Hausfather, Henri F. Drake, Tristan Abbott, Gavin A. Schmidt

First published: 04 December 2019 | https://doi.org/10.1029/2019GL085378

We found that climate models – even those published back in the 1970s – did remarkably well, with 14 out of the 17 projections statistically indistinguishable from what actually occurred.

Abstract

Retrospectively comparing future model projections to observations provides a robust and independent test of model skill. Here we analyse the performance of climate models published between 1970 and 2007 in projecting future global mean surface temperature (GMST) changes. Models are compared to observations based on both the change in GMST over time and the change in GMST over the change in external forcing. The latter approach accounts for mismatches in model forcings, a potential source of error in model projections independent of the accuracy of model physics. We find that climate models published over the past five decades were skillful in predicting subsequent GMST changes, with most models examined showing warming consistent with observations, particularly when mismatches between model-projected and observationally-estimated forcings were taken into account.

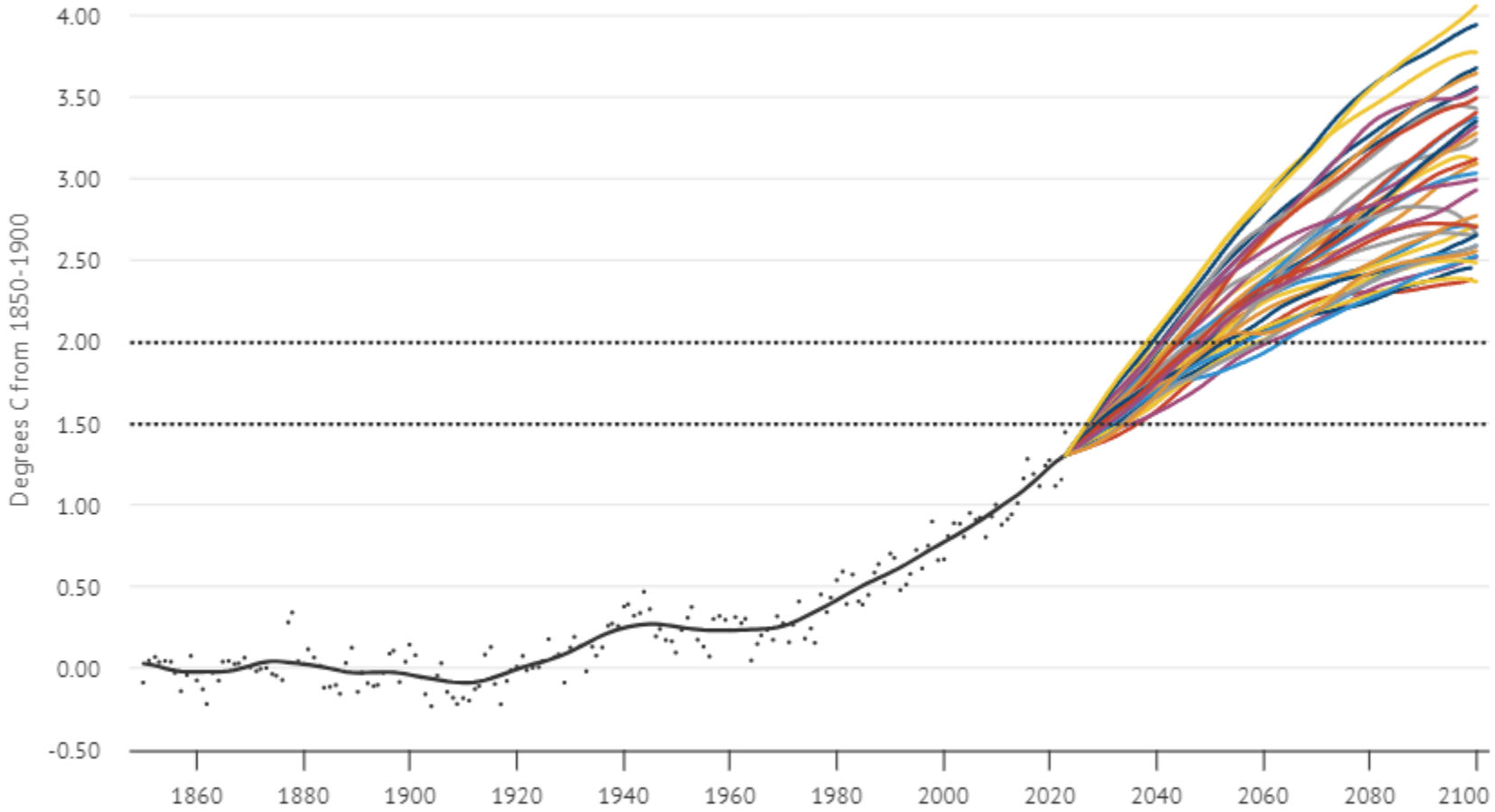


Realclimate.org
(GISS/NASA)

SCIENCE: PROJECTIONS

Combining observations and models to assess when the world will pass 1.5C and 2C

Observations from 1850-2023 and all CMIP6 SSP2-4.5 models after 2023



Sources: Berkeley Earth, GISTEMP, NOAA GlobalTemp, HadCRUT5, and CMIP6 models

CarbonBrief
CLEAR ON CLIMATE

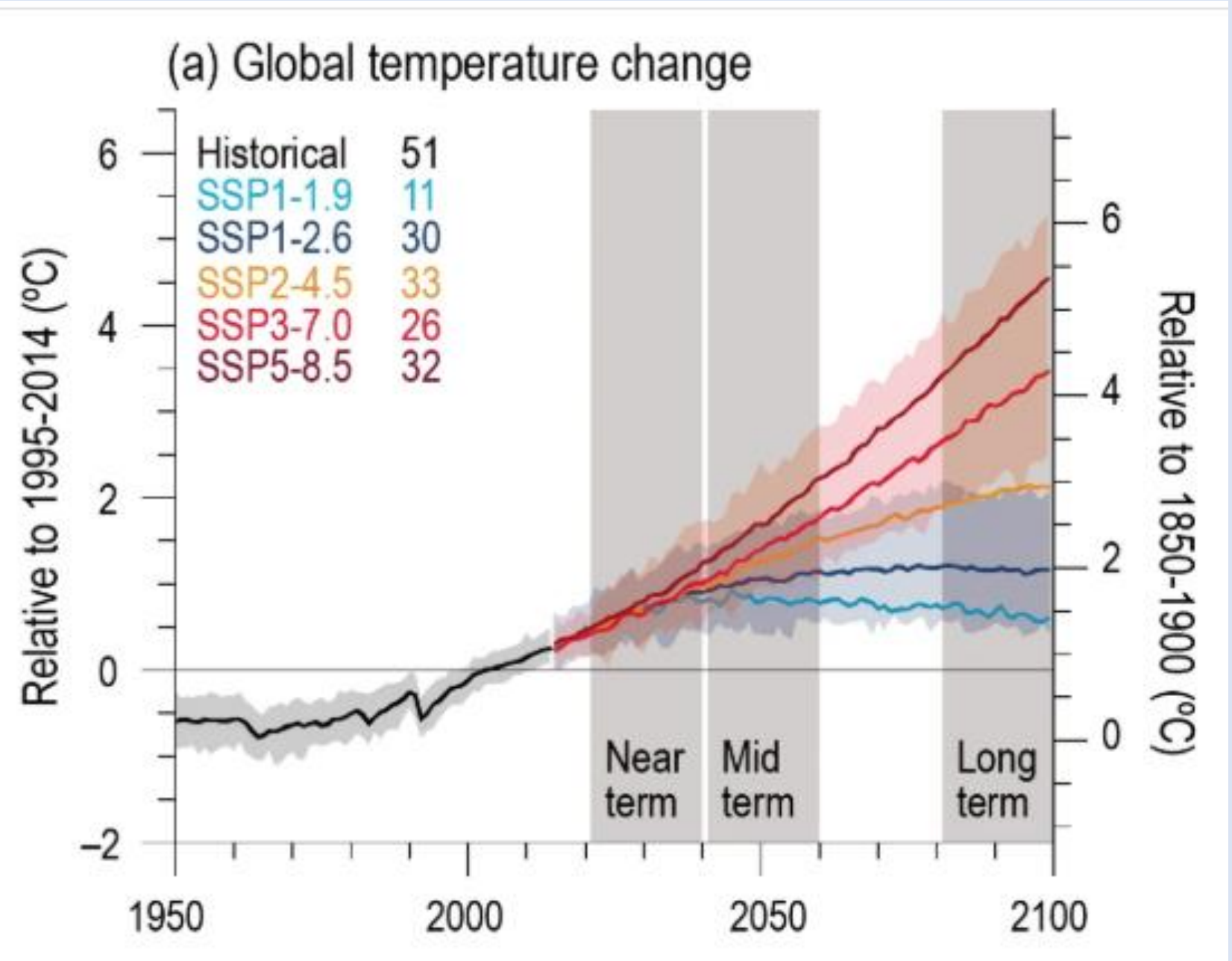
Annual global average surface temperatures from the composite average (black dots) along the 30-year LOWESS fit (black line), combined with 37 CMIP6 models smoothed using the same 30-year LOWESS fit. Models and observations are aligned using the smoothed average values for 2023. Chart by Carbon Brief.

June 2024

npj | climate and atmospheric science

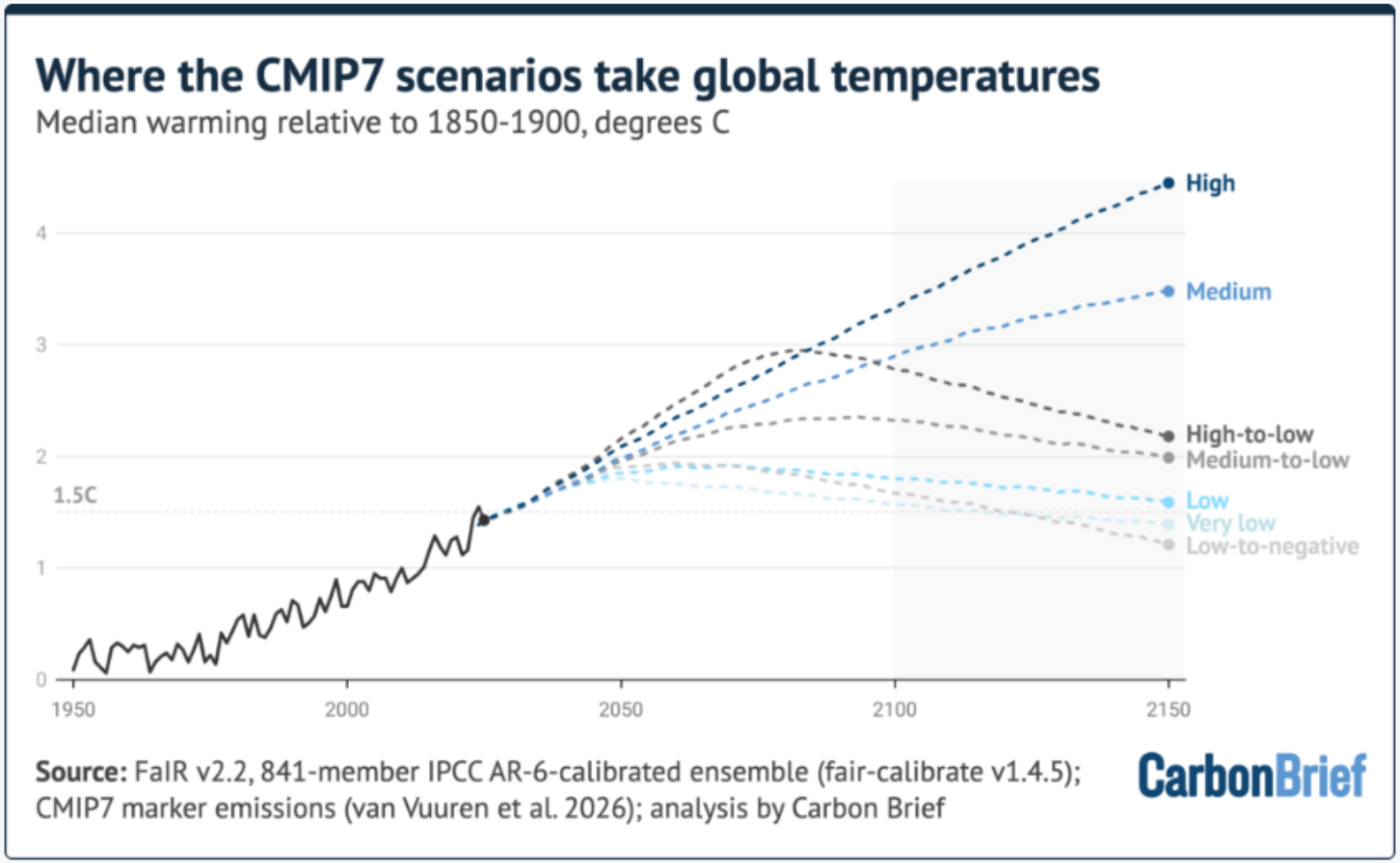
Article | Open access | Published: 08 October 2026

A recent doubling of global warming rate signals a 1.5 °C breach by 2028


(a) Global temperature change
Historical 51
SSP1-1.9 11
SSP1-2.6 30
SSP2-4.5 33
SSP3-7.0 26
SSP5-8.5 32
Relative to 1995-2014 (°C)
Relative to 1850-1900 (°C)
6
4
2
0
−2
Near term
Mid term
Long term
1950
2000
2050
2100

IPCC AR6

INITIAL CMIP 7 TEMPERATURE PROJECTIONS



Solid black line shows observations to 2025 and dashed lines show projected warming under the CMIP7 scenarios to 2150. Chart by Carbon Brief.

2100: 2.9°

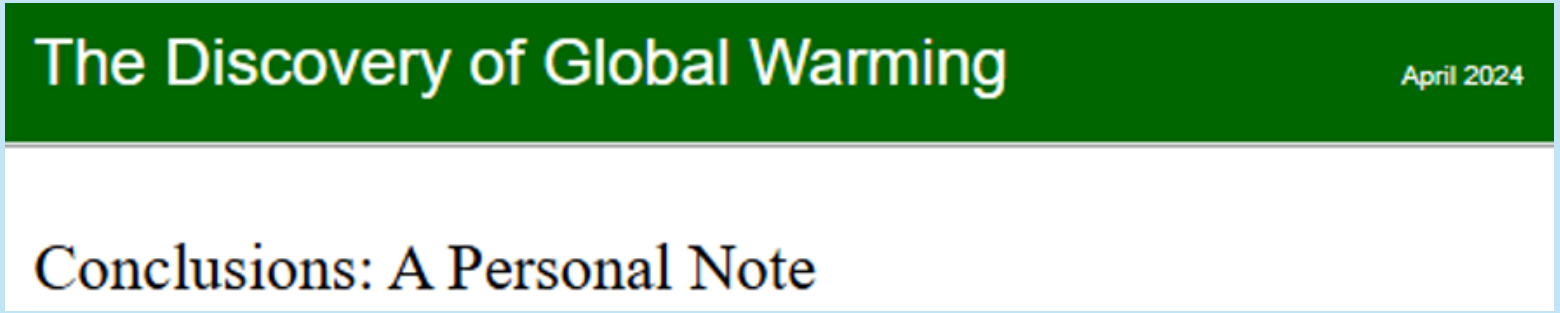
2150: 3.5°

ANALYZED CONSEQUENCES FOR LATTER 21ST CENTURY



- Sydney and Melbourne: days above 50° C “regular occurrence”
- $1.5 trillion in U.S. home values obliterated
- More desertion of insurers → ruin of some homeowners → less tax revenue
- “The damage at 3°C will be so great that governments will be unable to provide financial bailouts” (Allianz)
- “States and enterprises will not have enough funds to compensate for the global losses that will accrue” (Spier et al. 2012)
- Impact on human health: $12.5 trillion in economic losses by 2050 (World Economic Forum)
- $2.1 trillion cumulative cost of wildfires in Canada by 2100 (at 3-4° warming)
- 14-32% of macroscopic species (incl. 3-6 million animal/plant species) lost in next 50 years
- Possible drop in suitable crops in half of global croplands at 2° warming
- 200 million people drop below high tide line by 2100
- 15-34% drop in GDP at 3° warming (BCG, U of Cambridge)
- Humans forced out of equatorial regions at 4° warming

CONCLUSION



Stewart Weart

We, you and I, the people now active, are making the most consequential decisions in the entire history of the human race.

AUTHORS | CONTENTS

The Renewable Energy Transition Is Failing

August 1, 2025

Renewable energy isn't replacing fossil fuel energy—it's adding to it.



BY



Richard Heinberg

Richard Heinberg is senior fellow at the Post Carbon Institute and the author of Power: Limits and Prospects for Human Survival.

SOURCE

Post Carbon Institute; Earth Food Life Project



Without a broader consensus on climate change in the United States, Americans and people around the globe will be unable to formulate effective social, political, and economic solutions to the changing circumstances of our planet.

FINANCIAL TIMES

July 2, 2024

Opinion **Climate change**

Market forces are not enough to halt climate change

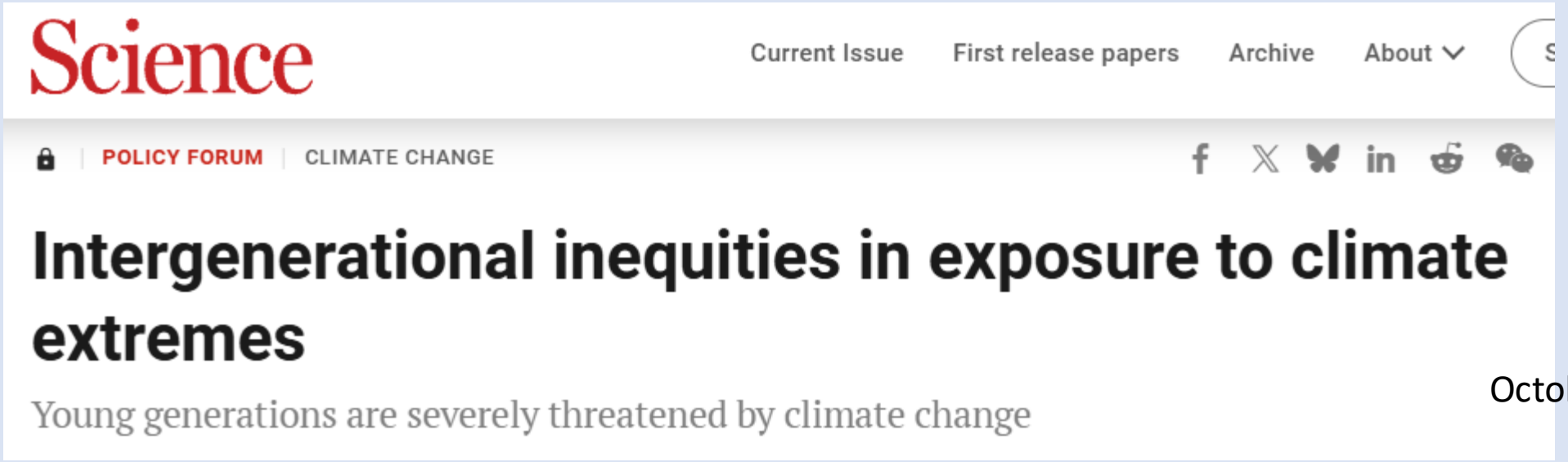
Investor returns imply that the welfare of future human beings is close to irrelevant



MARTIN WOLF + Add to myFT



A hundred years from now, people are likely to remember our era as the time when we knowingly bequeathed a destabilised climate. The market will not fix this global market failure. But today's political fragmentation and domestic populism make it almost inconceivable that the needed courage will be forthcoming either. We talk a lot. But we find it effectively impossible to act on the needed scale. This is a tragic failure.



October 2021

Our results highlight a severe threat to the safety of young generations and call for drastic emission reductions to safeguard their future.

FINANCIAL TIMES

July 2, 2024

Opinion **Climate change**

Market forces are not enough to halt climate change

Investor returns imply that the welfare of future human beings is close to irrelevant

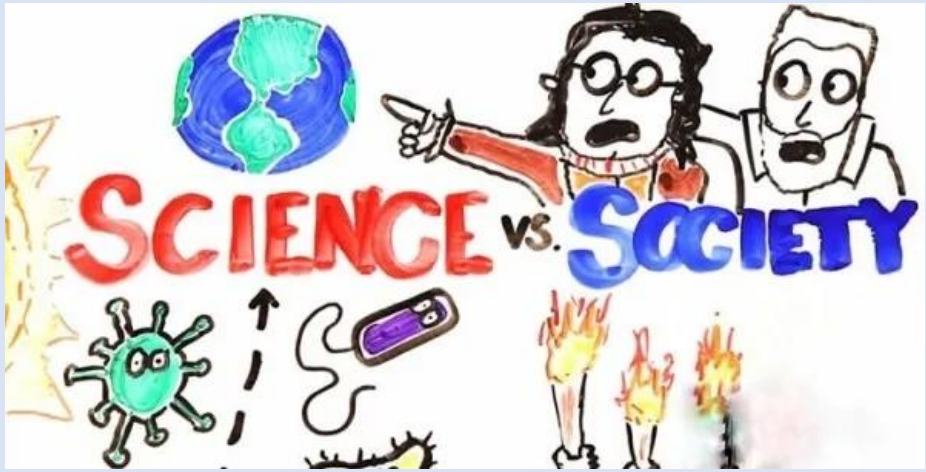


MARTIN WOLF + Add to myFT



A hundred years from now, people are likely to remember our era as the time when we knowingly bequeathed a destabilised climate. The market will not fix this global market failure. But today's political fragmentation and domestic populism make it almost inconceivable that the needed courage will be forthcoming either. We talk a lot. But we find it effectively impossible to act on the needed scale. This is a tragic failure.

Climate change, according to....



severe threat to
the safety of young
generations

the welfare of future
human beings is close
to irrelevant



OPTIMISM VS PESSIMISM

the pessimist says "I'm fucked"
the optimist says "yeah... you're fucked"


That's all Folks !