

Disrupting Climate Policymaking

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26th March, 2024

de Volkskrant

Opinie: Een geslaagde energietransitie begint met minder in plaats van meer



Een optimistisch klimaatverhaal kunnen we goed gebruiken, maar het moet wel kloppen

Onze leiders doen veel te weinig voor het klimaat. Daarom zijn wij nu zelf aan zet

Het Parool Vrij, Ongecensurd

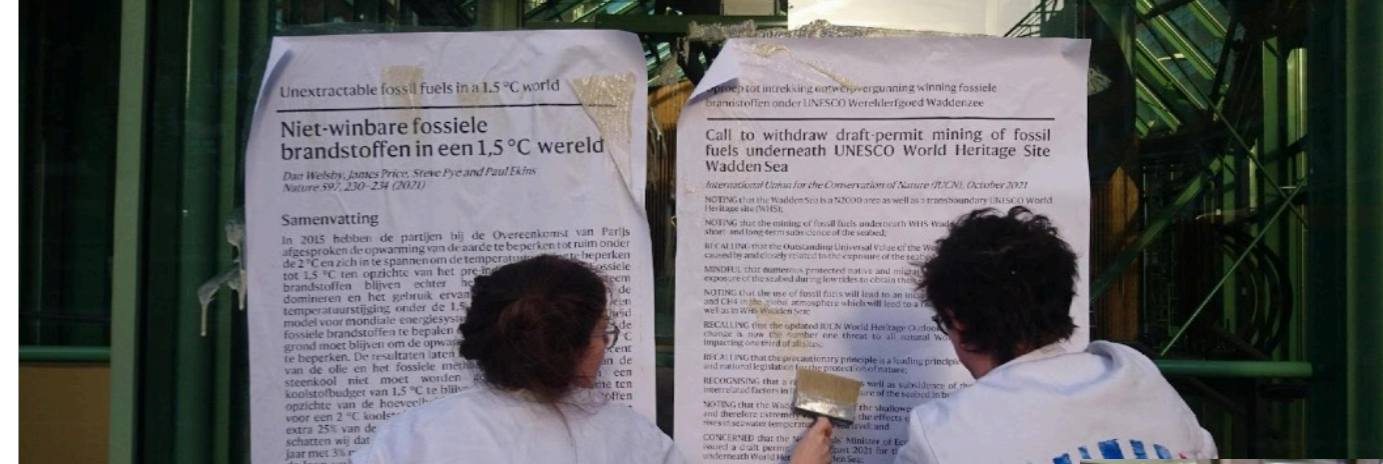
Opinie: 'Er is geen koolstofbudget meer voor rijke landen, stop met koolstofgraaien'

nature

Scientists skip COP28 to demand climate action at home



More than 1,000 climate scientists urge public to become activists





POLicy Decision-support and Evidence-based Reasoning

Polder Approach



Co-Creation

Group model building with
Policymakers



Computational Modeling



What-if scenarios

A “virtual playground” for
policymakers

Outline

- Part I: Climate Emergency
 - Part II: Climate Policymaking
-

} 40 min

- Part III: Disrupting Climate Policymaking
-

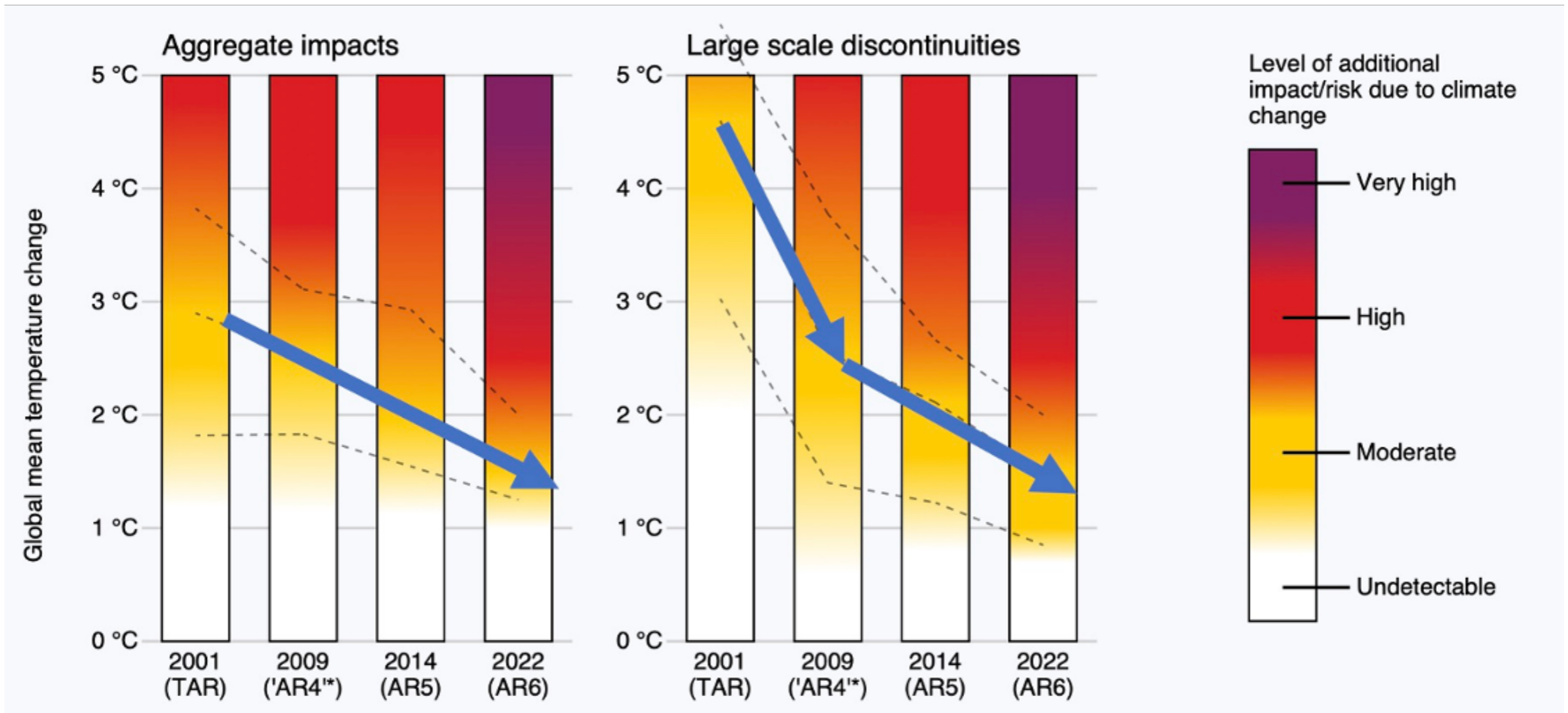
} 40 min

- Part IV: What Now?
- Part V: Q&A & Discussion

} 20 min

Part I:
Climate Emergency

**Things are worse
than we thought**



RESEARCH ARTICLE | CLIMATE CHANGE

Exceeding 1.5°C global warming could trigger multiple climate tipping points

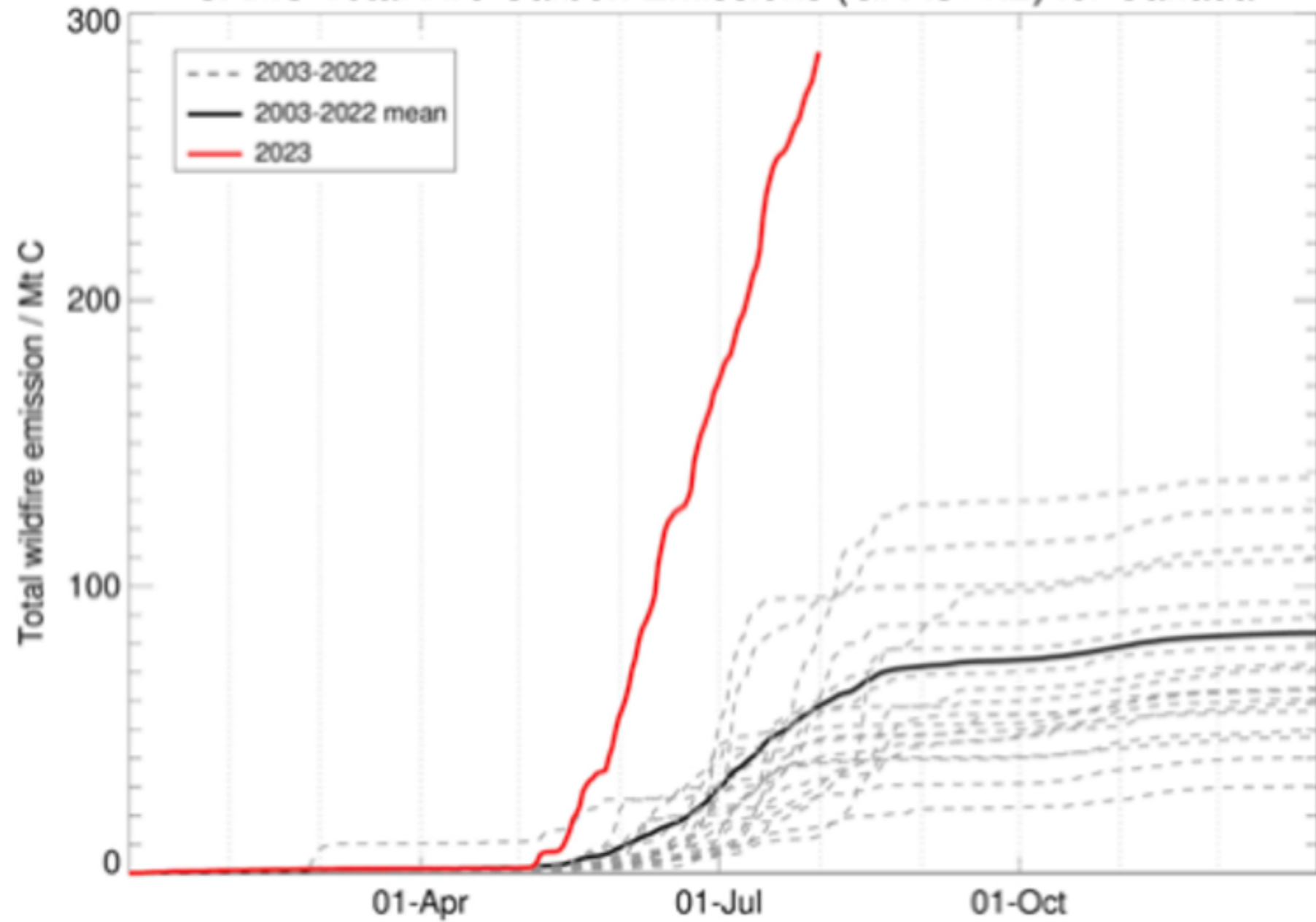
DAVID I. ARMSTRONG MCKAY , ARIE STAAL , JESSE F. ABRAMS , RICARDA WINKELMANN , BORIS SAKSCHEWSKI , SINA LORIANI , INGO FETZER ,

SARAH E. CORNELL , JOHAN ROCKSTRÖM, AND TIMOTHY M. LENTON 

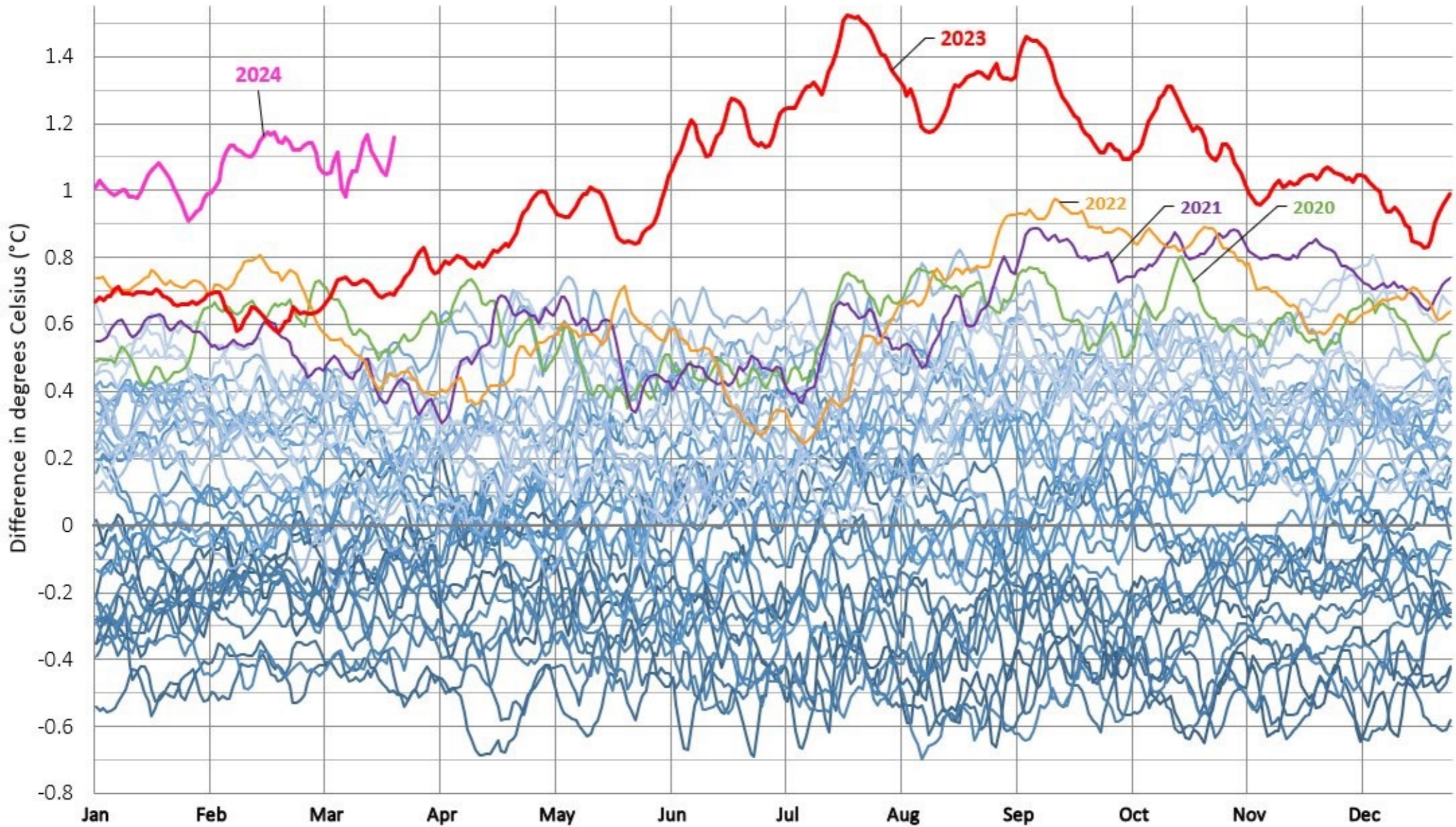
fewer

[Authors Info & Affiliations](#)

CAMS Total Fire Carbon Emissions (GFASv1.2) for Canada

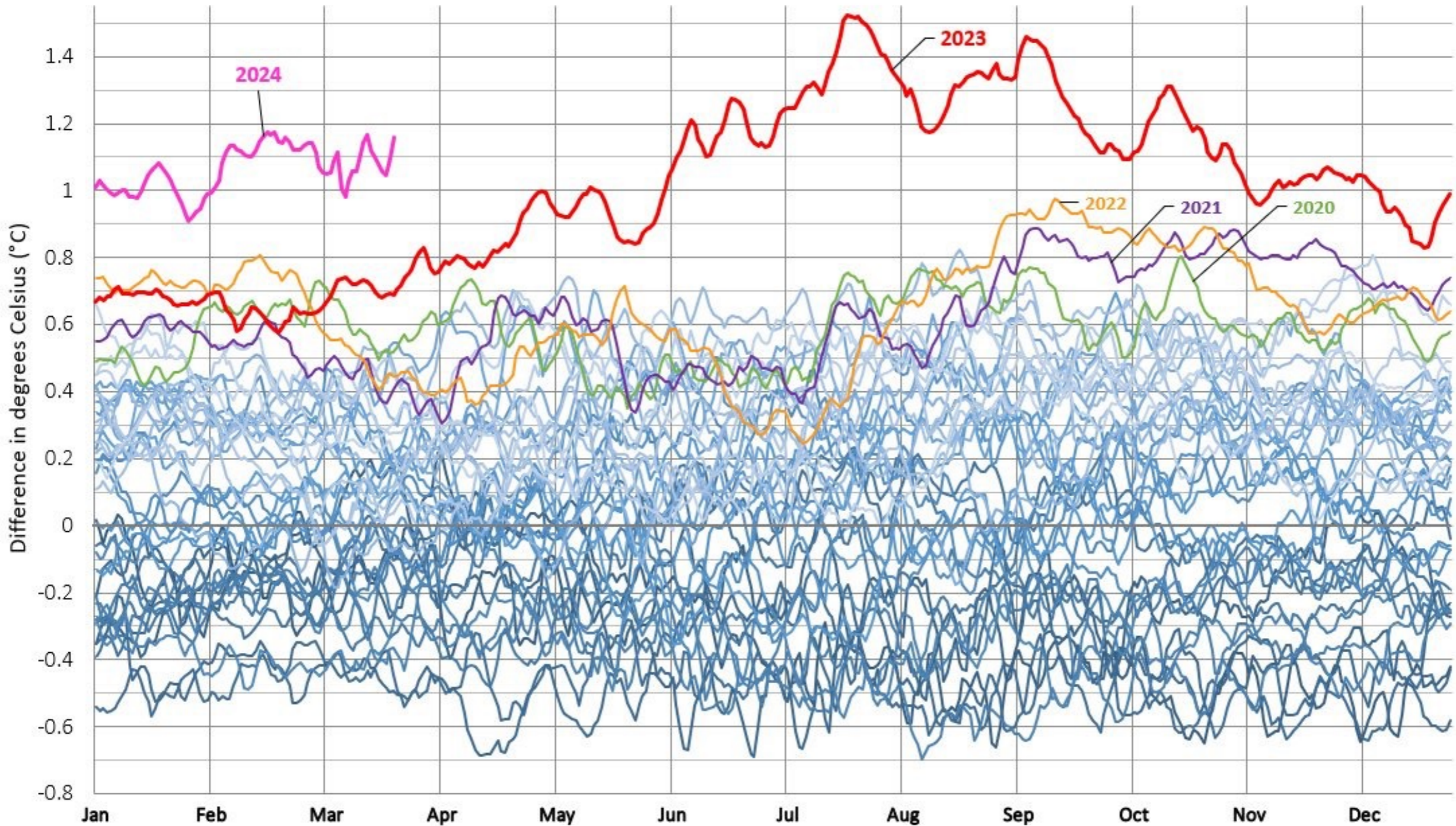


North Atlantic (0-60N) Sea Surface Temperature Anomaly (SSTA) from 1982-2011 mean



©Leon Simons - Data source: NOAA Optimum Interpolation SST (OISST) dataset version 2.1 - Data up to March 21, 2023
Trough https://climatereanalyzer.org/clim/sst_daily/, Climate Change Institute University of Maine.

North Atlantic (0-60N) Sea Surface Temperature Anomaly (SSTA) from 1982-2011 mean



©Leon Simons - Data source: N
Trough <https://climati>

RESEARCH ARTICLE | OCEANOGRAPHY

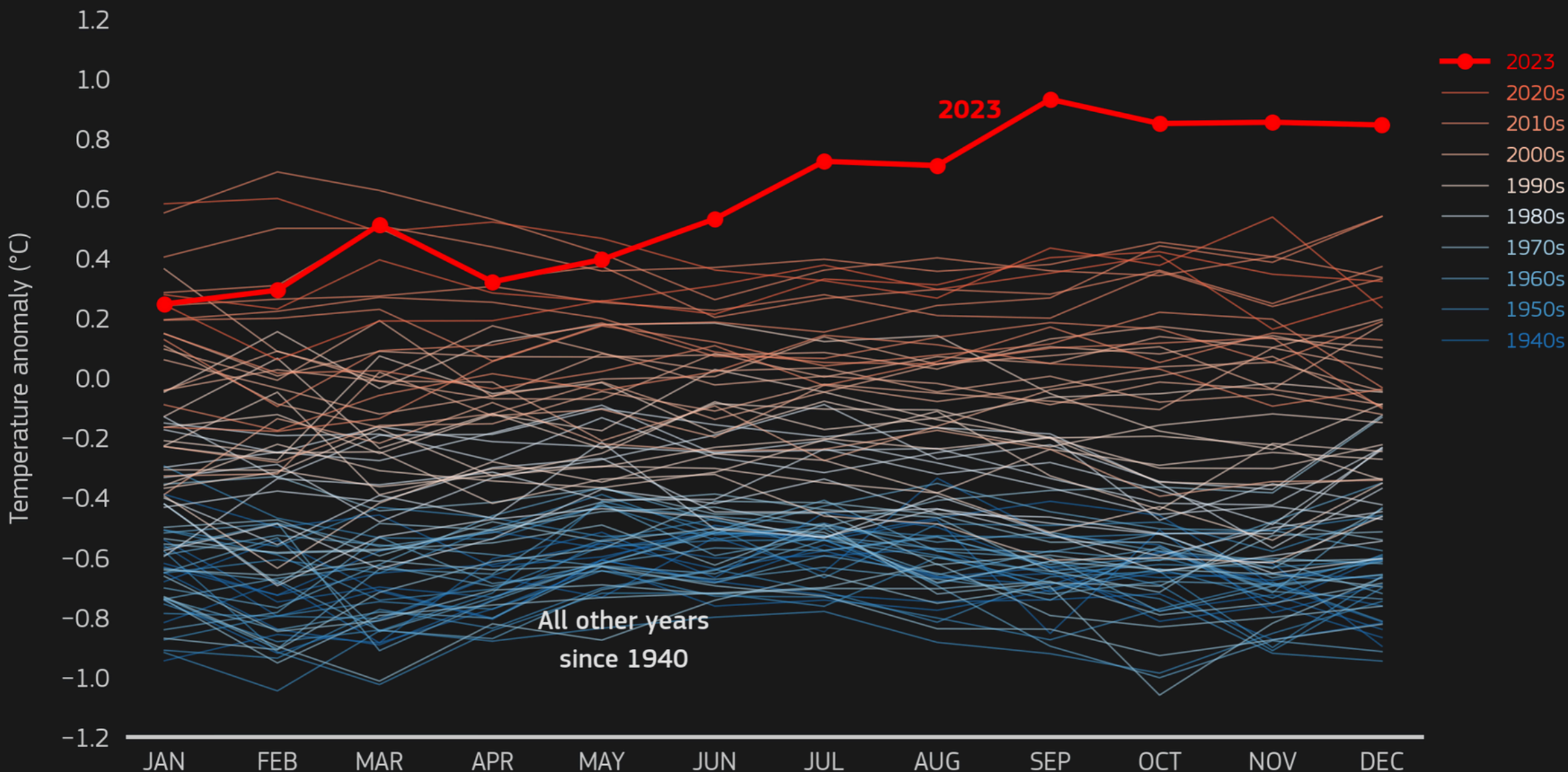


Physics-based early warning signal shows that AMOC is on tipping course

RENÉ M. VAN WESTEN ^{ID}, MICHAEL KLIPHUIS, AND HENK A. DIJKSTRA [Authors Info & Affiliations](#)

GLOBAL SURFACE AIR TEMPERATURE ANOMALIES

Data: ERA5 1940–2023 • Reference period: 1991–2020 • Credit: C3S/ECMWF



PROGRAMME OF THE EUROPEAN UNION



Climate Change Service
climate.copernicus.eu

WORLD VIEW | 19 March 2024

Climate models can't explain 2023's huge heat anomaly – we could be in uncharted territory



Taking into account all known factors, the planet warmed 0.2 °C more last year than climate scientists expected. More and better data are urgently needed.

Europe is not prepared for rapidly growing climate risks

Press release | Published 11 Mar 2024



“Many risks have already reached critical levels and could become catastrophic without urgent and decisive action.”

European climate risk assessment
Executive summary

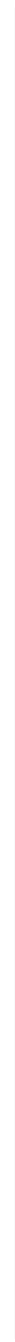
**Part II:
Climate
Policymaking**

History

[Franta Talk](#)
[Franta Interview](#)
[The Corporation](#)
[The Power of Big Oil](#)

Society's Understanding & Actions

Big Oil's Understanding & Actions



Franta (2018a,b); Franta (2021a,b); Farrell (2016); Supran & Oreskes (2017,2021a,b); Rahmstorf (2009); McKibben (2015); Bonneuil et al. (2021); Franta & Supran (2017); Supran, Rahmstorf, & Oreskes (2023)



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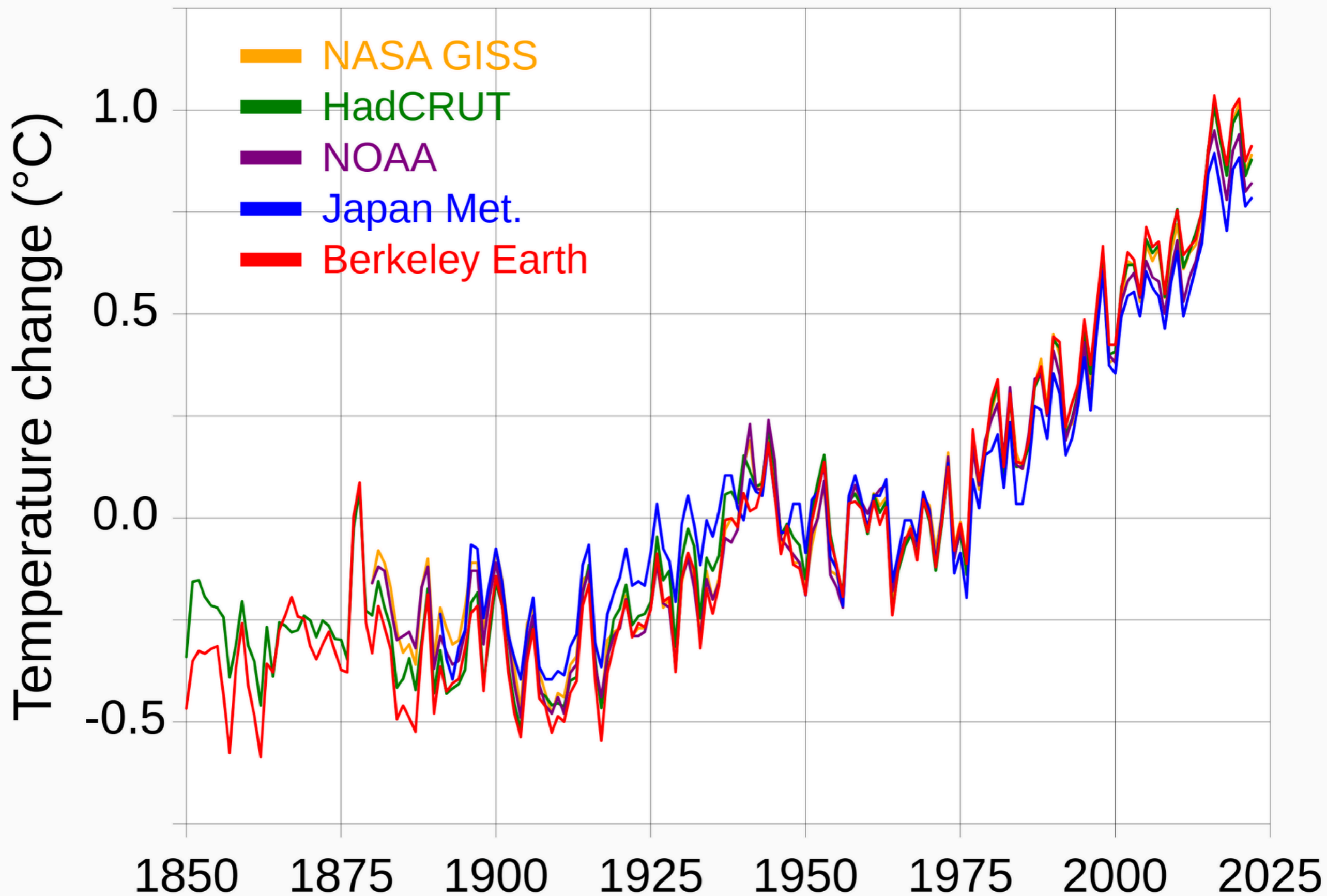
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- 1988: IPCC forms
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- 2015: Paris Agreement

Big Oil's Understanding & Actions



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Global average temperature change



Guest post: The challenge of consensus decision-making in UN climate negotiations



- “All Parties must agree on every word, every comma, every full stop.”
- “What we agree is going to be so weak, so ineffective, that it is not going to be anywhere near [meeting] the challenges of today.”
- The oil and gas lobbied for decision-making based on consensus!

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Big Oil's Understanding & Actions

- 1959: Edward Teller warns Big Oil
- 1965: President of API warns Big Oil
- 1979-83: Exxon internal research programme
- 1980: API argues for tripling coal
- 1987: IPIECA Strategy meeting
Emphasise uncertainties
Stress the cost of action
Focus on policies that do not threaten fossil fuels
Insist on 'detection before action'
- 1989-2002: Global Climate Coalition
- 2000-now: Greenwashing



Shell, BP, Exxon: Seized emails reveal 'deceptive' climate tactics and greenwashing

Oil firms have internally dismissed swift climate action, House panel says

Documents show the fossil fuel industry 'has no real plans to clean up its act' and took steps to continue business as usual

GREEN NEWS

'Pure greenwashing': Shell reports highest ever profits while labelling fossil gas as 'renewable'

DAILY BRIEFING | February 3, 2023. 🕒 10:11am

Shell hits the brakes on growing renewables unit after record 2022 profit

Why are BP, Shell, and Exxon suddenly backing off their climate promises?

"If we see value, we'll do it. If we don't, we won't."

“Let me be, I think, categorical in this. We cannot justify going for a low return. Our shareholders deserve to see us going after strong returns. If we cannot achieve the double-digit returns in a business, we need to question very hard whether we should continue in that business. Absolutely, we want to continue to go for lower and lower and lower carbon, but it has to be profitable.”

Wael Sawan, Shell’s CEO, February 2nd, 2023

Source

Christophers (2022)





Fossil fuel firms could be tried in US for homicide over climate-related deaths, experts say

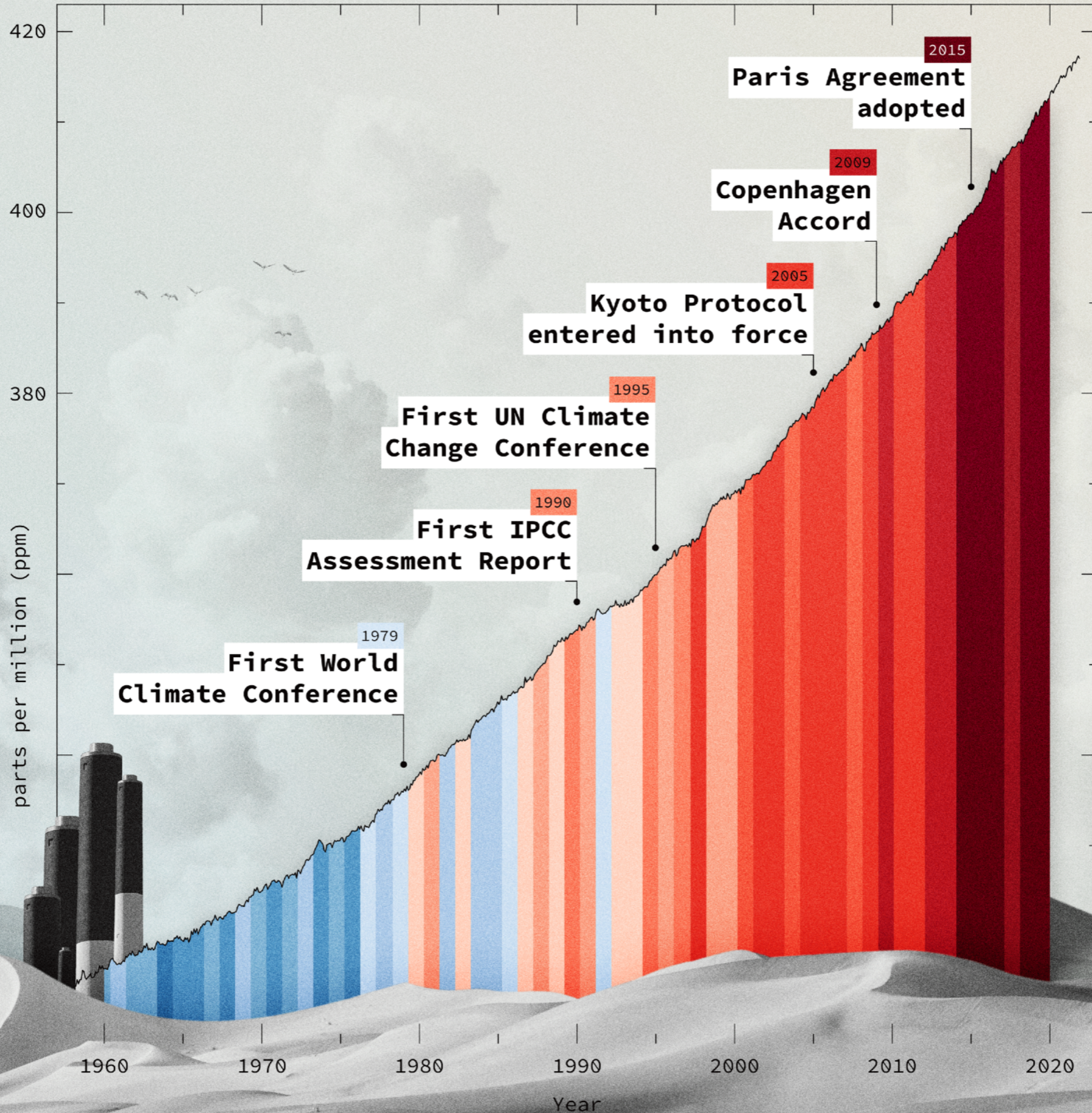
Public Citizen, a non-profit group, proposed the idea last year to prosecute companies for millions of deaths due to climate crisis

Dharna Noor

Thu 21 Mar 2024 12.00 CET

Trends in Atmospheric CO₂ vs Global Temperature Change

#climateINACTIONstripes



Composite Graph of: Atmospheric CO₂ at Mauna Loa Observatory, December 2021 – Scripps Institution of Oceanography & NOAA Global Monitoring Laboratory | #ShowYourStripes – Graphics & lead scientist: Ed Hawkins, National Centre for Atmospheric Science, University of Reading; Data: UK Met Office | Design by: sustentio [PG] | Licence: CC-BY
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Three Decades of Climate Mitigation: Why Haven't We Bent the Global Emissions Curve?

Annual Review of Environment and Resources

Vol. 46:653-689 (Volume publication date October 2021)

First published as a Review in Advance on June 29, 2021

<https://doi.org/10.1146/annurev-environ-012220-011104>

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“I’ve been there all along, and it had taken me too long to figure out what was happening. I wrote the first book about [climate change] and I kept writing more books, articles, and having symposiums on the theory that if we kept piling up enough data and reason eventually the powers that be would get to work — why wouldn’t they?”

- Bill McKibben

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Because the fight wasn’t about data and reason, the fight was about money and power, which is what fights are always about.”

- Bill McKibben

Asset Revaluation and the Existential Politics of Climate Change

Jeff D. Colgan , Jessica F. Green,  and Thomas N. Hale 

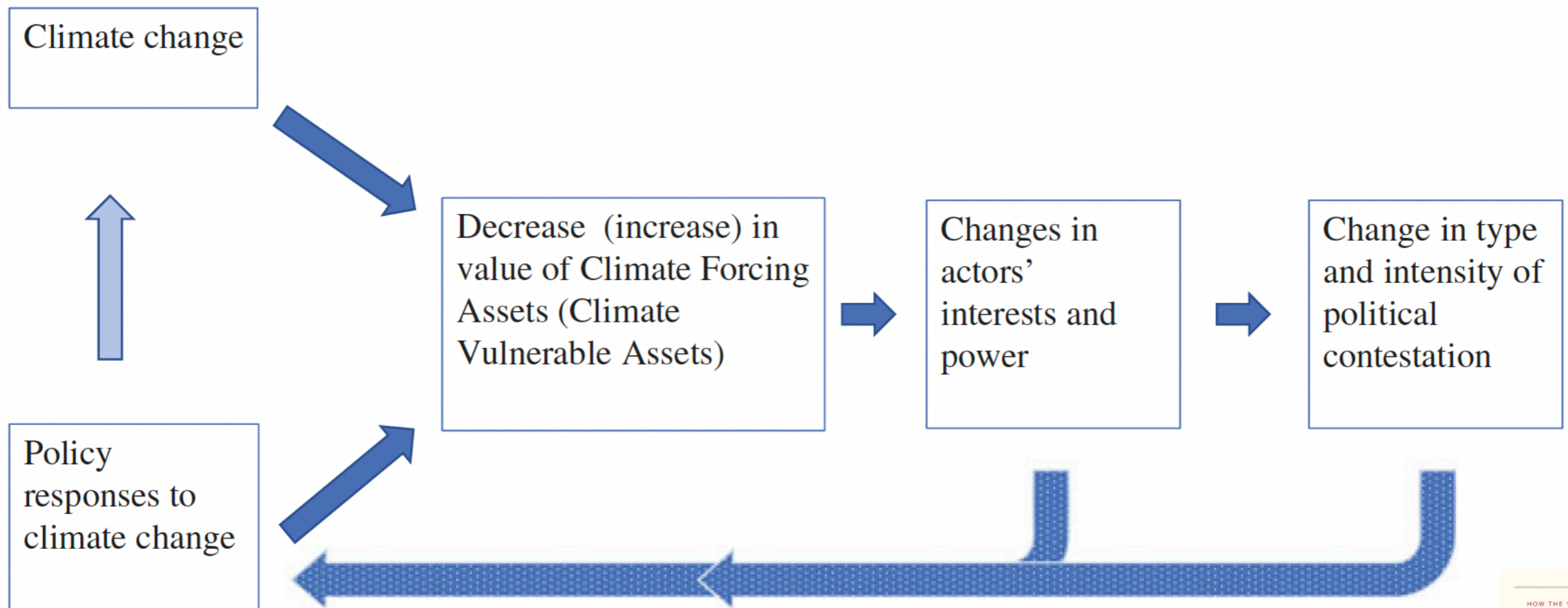
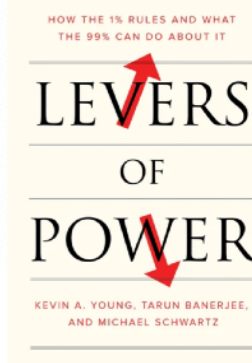
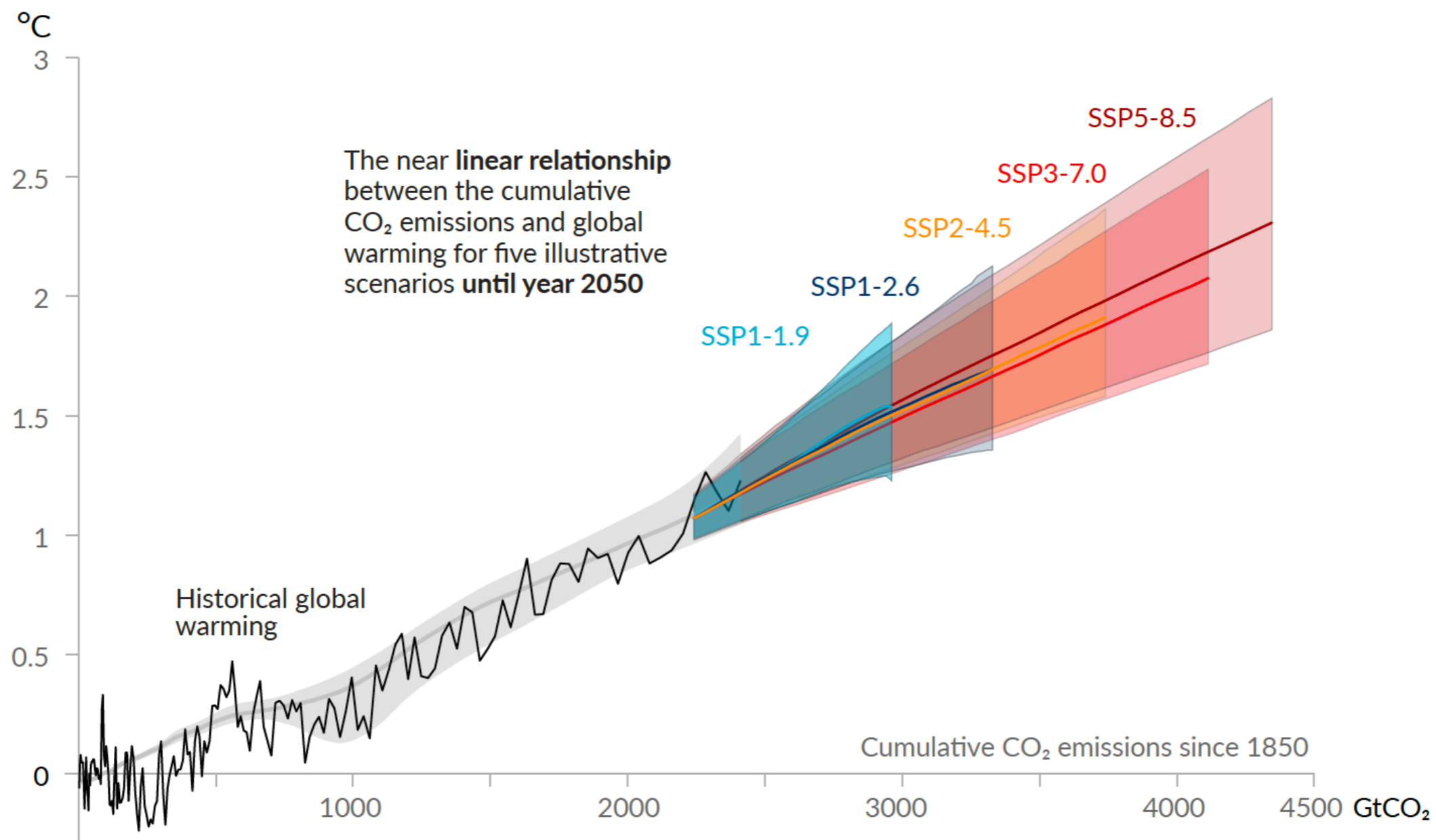


FIGURE 2. *A dynamic theory of asset revaluation*



Every tonne of CO₂ emissions adds to global warming

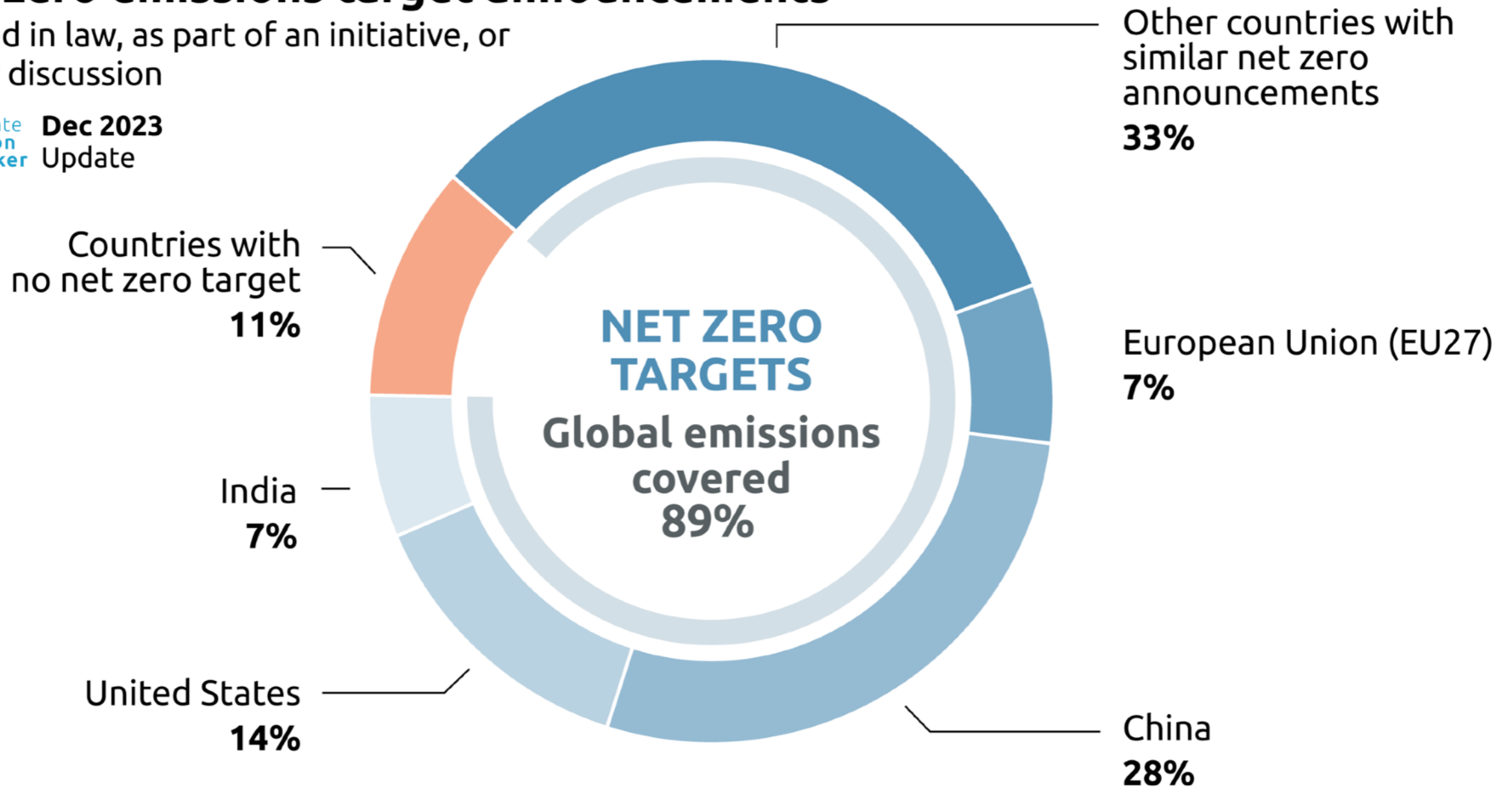
Global surface temperature increase since 1850-1900 (°C) as a function of cumulative CO₂ emissions (GtCO₂)



Net zero emissions target announcements

Agreed in law, as part of an initiative, or under discussion

 **Climate Action Tracker** **Dec 2023**
Update

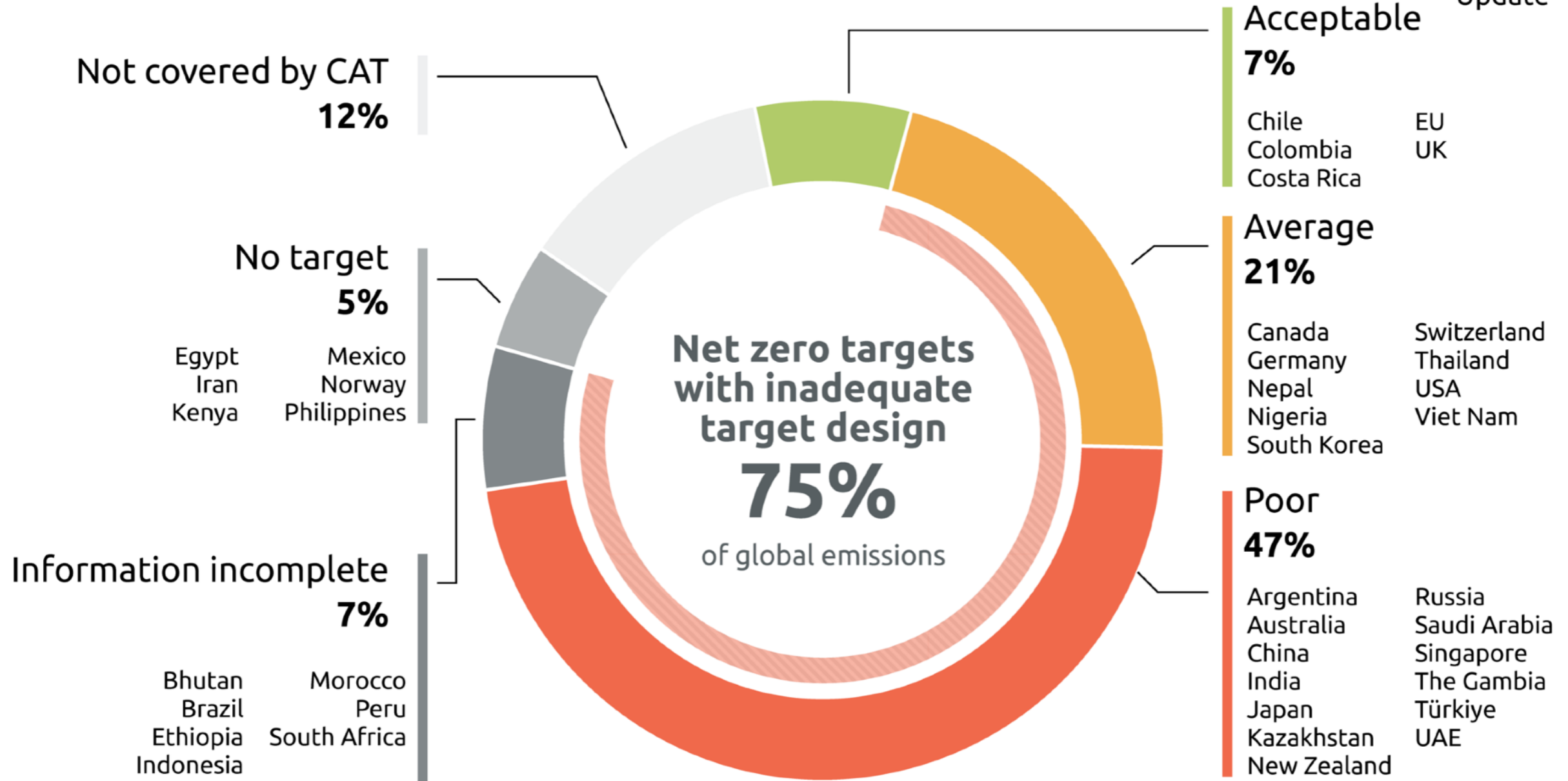


Net zero target design - mostly inadequate to date

Quality of net zero targets by percentage of global emissions evaluated using the CAT's design blueprint for transparent, comprehensive and robust national net zero targets



Dec 2023 Update





NET ZERO STOCKTAKE 2023

Assessing the status and trends of net zero target setting across countries, sub-national governments and companies

June 2023

Nations Are Undercounting Emissions, Putting UN Goals at Risk

BY FRED PEARCE · MARCH 21, 2024

NAME ↑↓	COUNTRY ↑↓ All ▾	SECTOR ↑↓ Fossil Fuels ▾	ANNUAL REVENUE ↓	TARGET YEAR ↑↓ All ▾	TARGET TYPE ↑↓ All ▾	END TARGET STATUS ↑↓	INTERIM TARGET ↑↓ All ▾	DETAILED PLAN ↑↓	REPORTING MECHANISM ↑↓	SCOPE 3 COVERAGE ↑↓	CARBON CREDITS ↑↓
PetroChina Co	CHN	Fossil Fuels	\$281bn	2050	Other	Declaration / pledge	2025	●	●	●	●
Exxon Mobil	USA	Fossil Fuels	\$281bn	2050	Net zero	In corporate strategy	2030	●	●	●	●
BP	GBR	Fossil Fuels	\$272bn	2050	Net zero	In corporate strategy	2025	●	●	●	●
Sinopec	CHN	Fossil Fuels	\$271bn	2050	Carbon neutral(ity)	Proposed / in discussion	2030	●	●	●	●
Saudi Aramco	SAU	Fossil Fuels	\$230bn	2050	Net zero	Declaration / pledge		●	●	●	●
Royal Dutch Shell	NLD	Fossil Fuels	\$170bn	2050	Net zero	In corporate strategy	2030	●	●	●	●
TotalEnergies	FRA	Fossil Fuels	\$120bn	2050	Net zero	In corporate strategy	2025	●	●	●	●
Valero Energy	USA	Fossil Fuels	\$106bn	2035	Emissions reduction target	In corporate strategy	2025	●	●	●	●
Chevron	USA	Fossil Fuels	\$94bn	2050	Net zero	Declaration / pledge	2028	●	●	●	●
Gazprom	RUS	Fossil Fuels	\$91bn	2031	Emissions reduction target	In corporate strategy		●	●	●	●
Equinor	NOR	Fossil Fuels	\$88bn	2050	Net zero	In corporate strategy	2030	●	●	●	●

Revealed: more than 90% of rainforest carbon offsets by biggest certifier are worthless, analysis shows

Investigation into Verra carbon standard finds most are 'phantom credits' and may worsen global heating

- ['Nowhere else to go': Alto Mayo, Peru, at centre of conservation row](#)
- [Greenwashing or a net zero necessity? Scientists on carbon offsetting](#)
- [Carbon offsets flawed but we are in a climate emergency](#)



Carbon Offsets: Last Week Tonight with John Oliver (HBO)

5.3M views • 1 year ago



John Oliver explains what carbon offsets are, what they claim to do, how they might be making climate change even worse, and, ...

6 moments



OFFSETS | ADDITIONALITY | The Nature Conservancy | RYANAIR | Green Resources | UNITED...



**Six reasons why
current climate policy
is inadequate**

Why net zero by 2050 is woefully inadequate

1. Equity considerations
imply much faster
decarbonisation rates



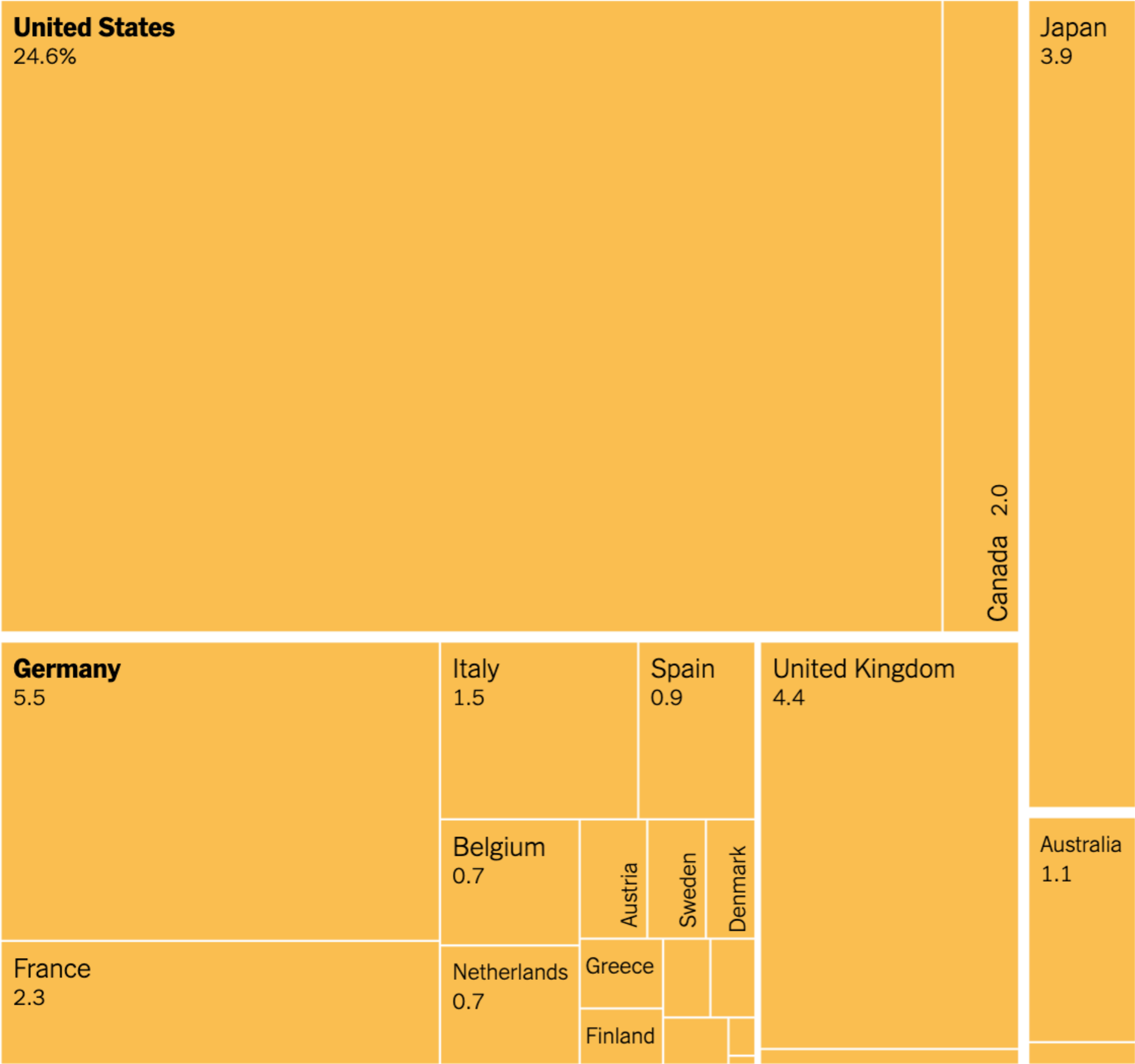
Carbon Budget Explorer

Exploring fair climate policy in three steps

- 1. Set global targets**
Defining the global carbon budget and emissions pathway
- 2. Choose your effort-sharing principle**
Implicating each country's "fair" emissions
- 3. Observe individual country results**
Indicating the pathway for each country in more detail

<https://www.carbonbudgetexplorer.eu/>

23 rich, developed countries are responsible for half of all historical CO₂ emissions.



Anderson et al. (2020)

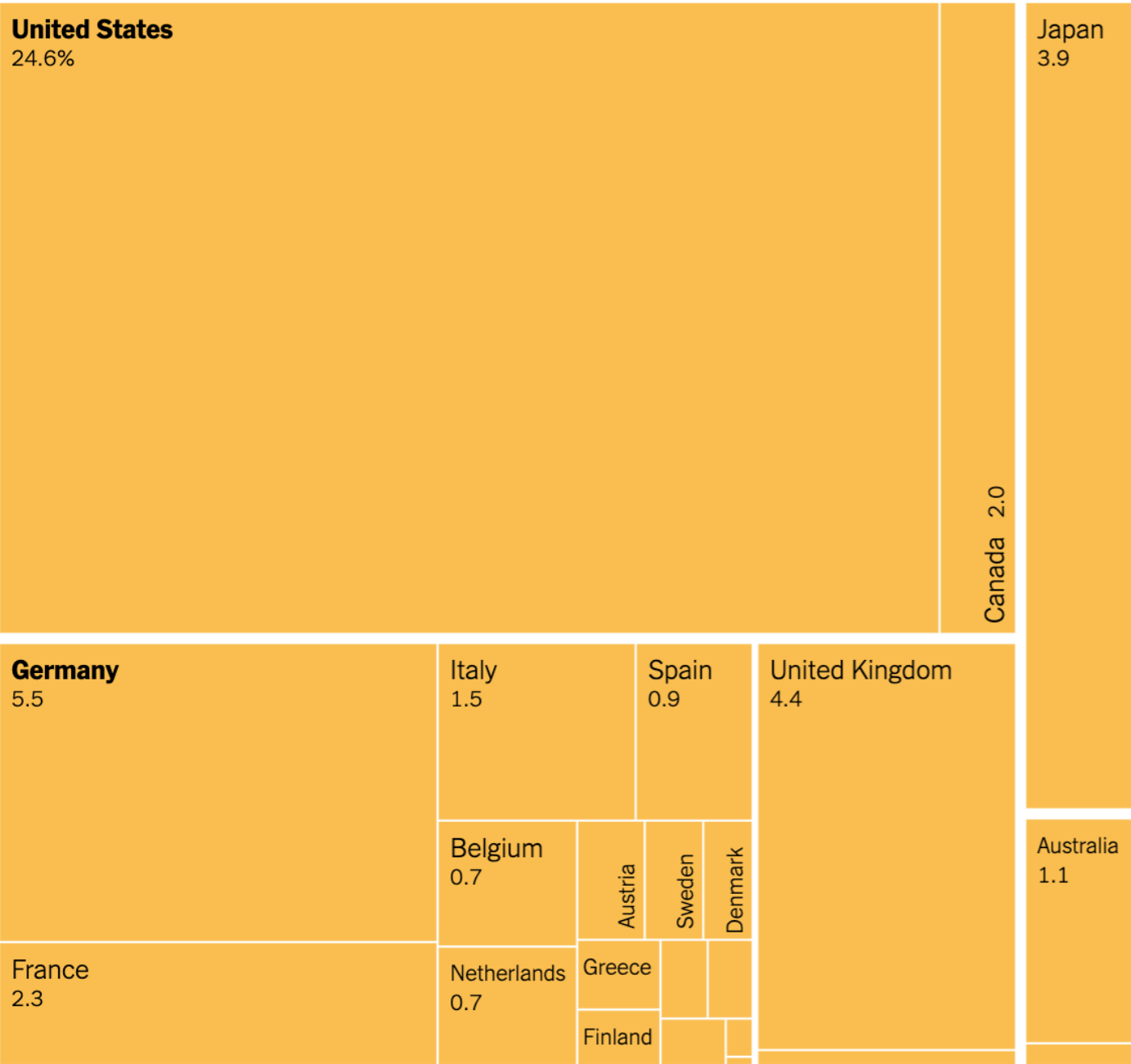
Calverley & Anderson (2022)

Tyndall°Centre

for Climate Change Research

Phaseout Pathways for Fossil Fuel Production within Paris-compliant carbon budgets

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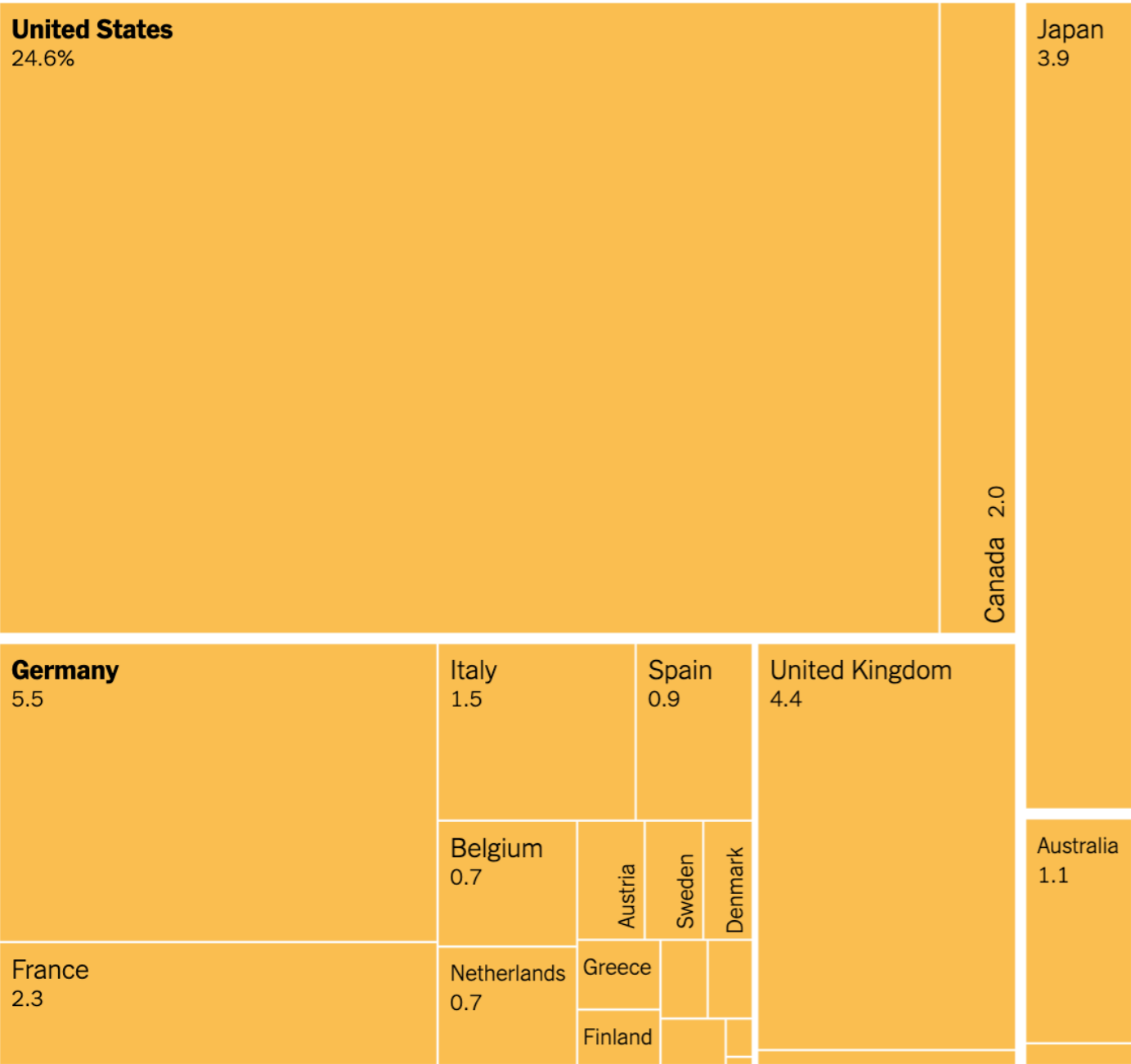
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“For developed nations, coal production needs to fall by 50% within five years and be effectively eliminated by 2030.”

Anderson et al. (2020)

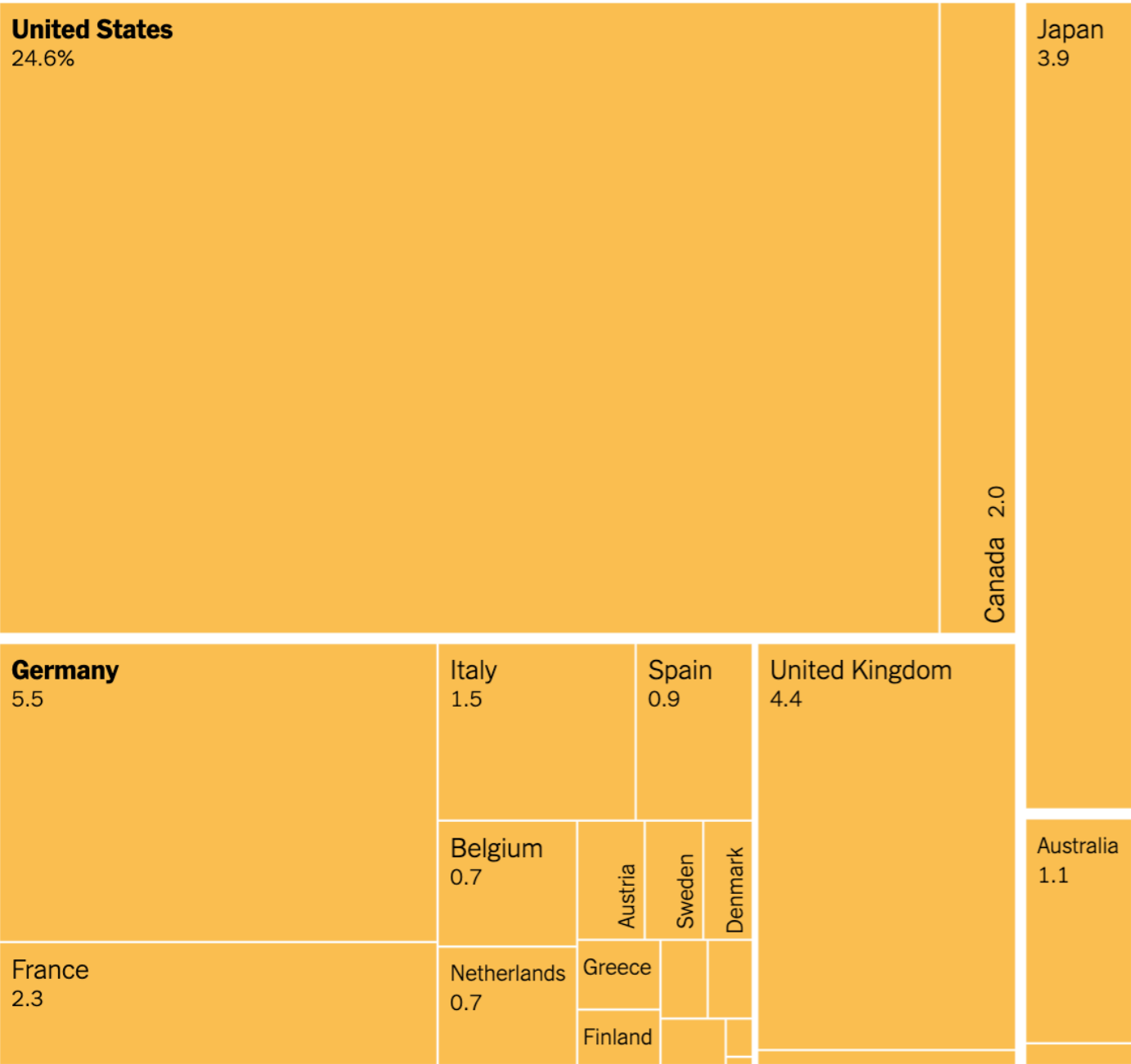
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Phaseout Pathways for Fossil Fuel Production within Paris-compliant carbon budgets

23 rich, developed countries are responsible for half of all historical CO₂ emissions.



“For the wealthiest group of ‘producer nations’ [...] output of oil and gas needs to be cut by 74% by 2030, with a complete phase out by 2034.”

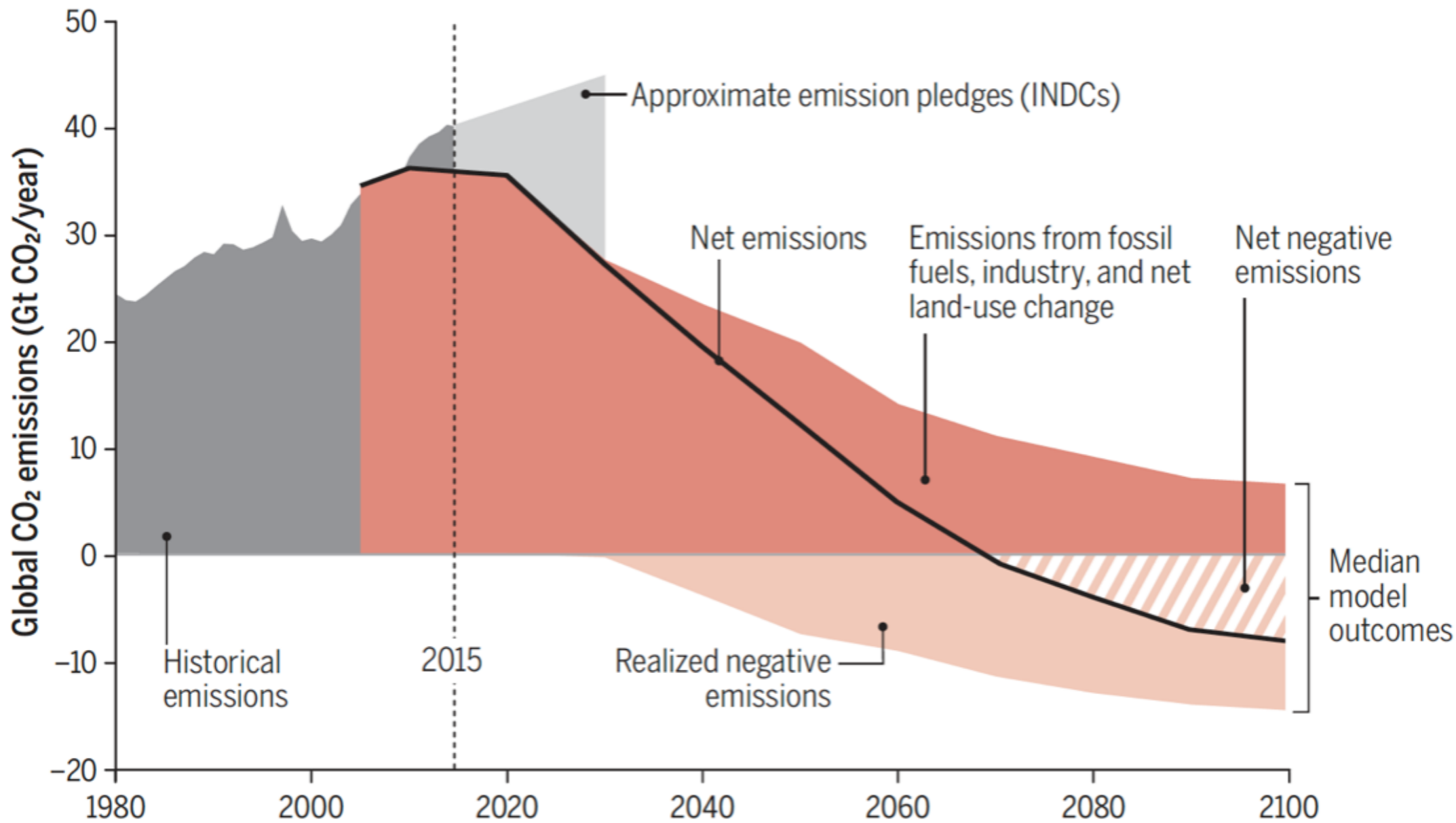
Why net zero by 2050 is woefully inadequate

**2. Gives us a mere 50%
chance of staying within
1.5°C**

Why net zero by 2050 is woefully inadequate

3. Relies on negative emissions technology that is unproven at scale

Peters [Talk](#)
Anderson [Talk](#)
Anderson [Interview](#)
Riahi et al. ([2022](#))



“Negative-emission technologies are not an insurance policy, but rather an unjust and high-stakes gamble.”

- Anderson & Peters ([2016](#))

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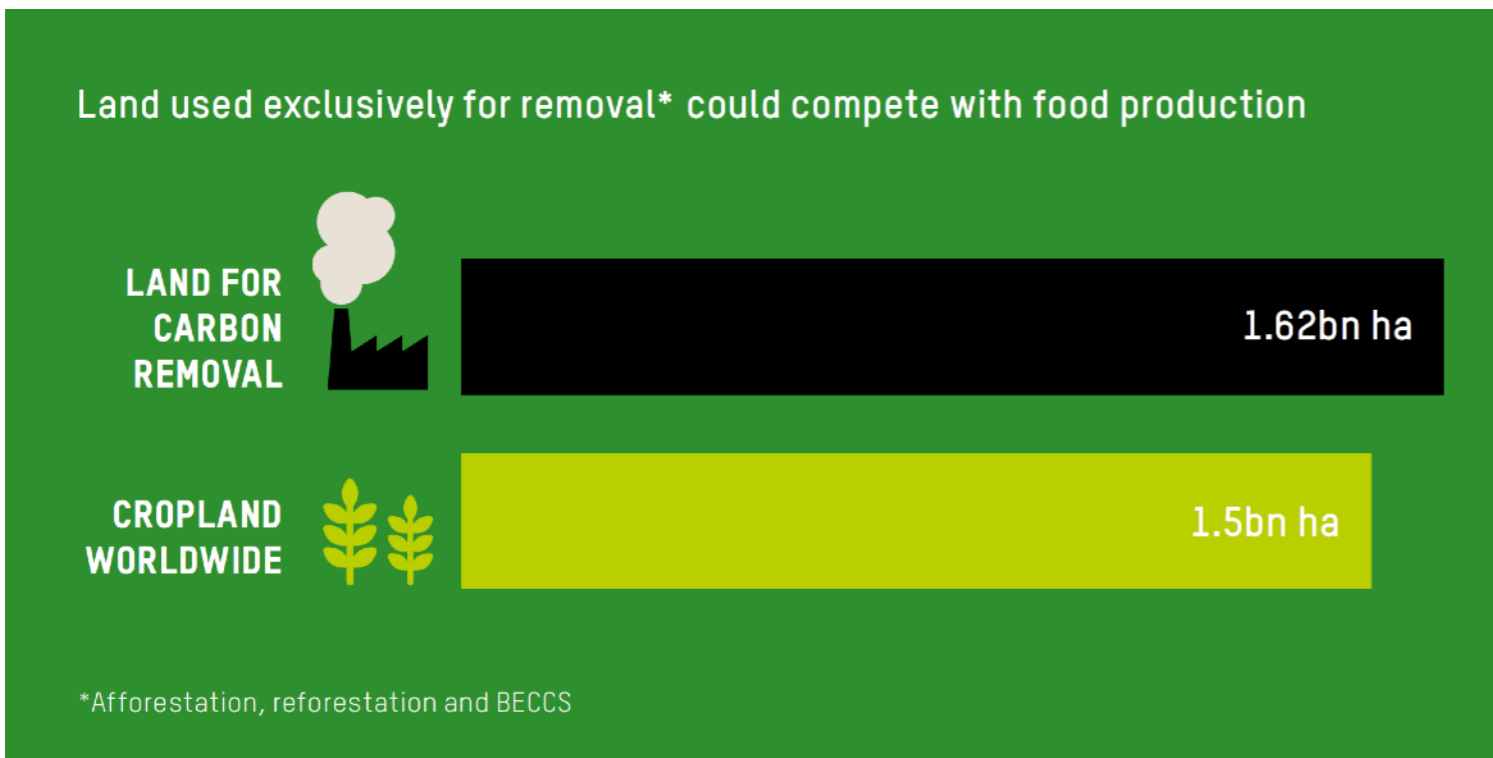
Number of scenarios	Type of scenario	Total BECCS removal	Removal per year
91 / 95	1.5° limited / no overshoot	334	4.1
122 / 123	1.5° high overshoot	464	5.7
294 / 294	2°	291	3.6

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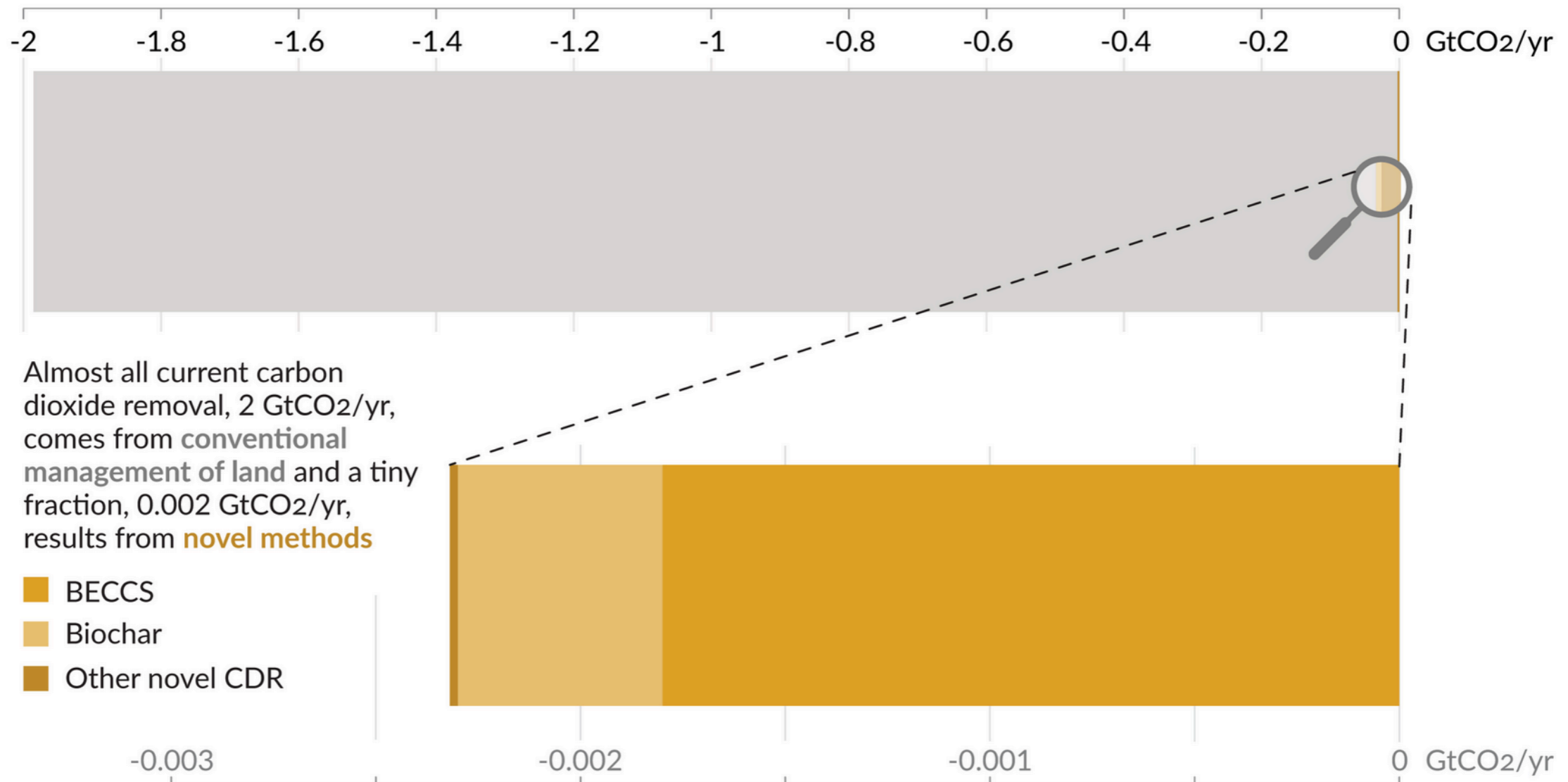


“Negative-emission technologies are not an insurance policy, but rather an unjust and high-stakes gamble.”

- Anderson & Peters ([2016](#))

Only a tiny fraction of all current carbon dioxide removal results from **novel methods**

Total current amount of carbon dioxide removal, split into **conventional** and **novel** methods (GtCO₂/yr)



Why net zero by 2050 is woefully inadequate

**4. Relies on unprecedented
decoupling of emissions
from economic growth**

Decoupling: Countries that achieved economic growth while reducing CO₂ emissions, 2005-20

Emissions are adjusted for trade. This means that CO₂ emissions caused in the production of imported goods are added to its domestic emissions - and for goods that are exported the emissions are subtracted.

Average incomes are measured by GDP per capita (except for Ireland, for which it is measured by GNI per capita).



Data sources: Global Carbon Project & World Bank.

There are more countries that achieved the same, but only those countries for which data is available and for which each change exceeded 5% are shown.

OurWorldInData.org - Research and data to make progress against the world's largest problems.

Licensed under CC-BY by the author Max Roser

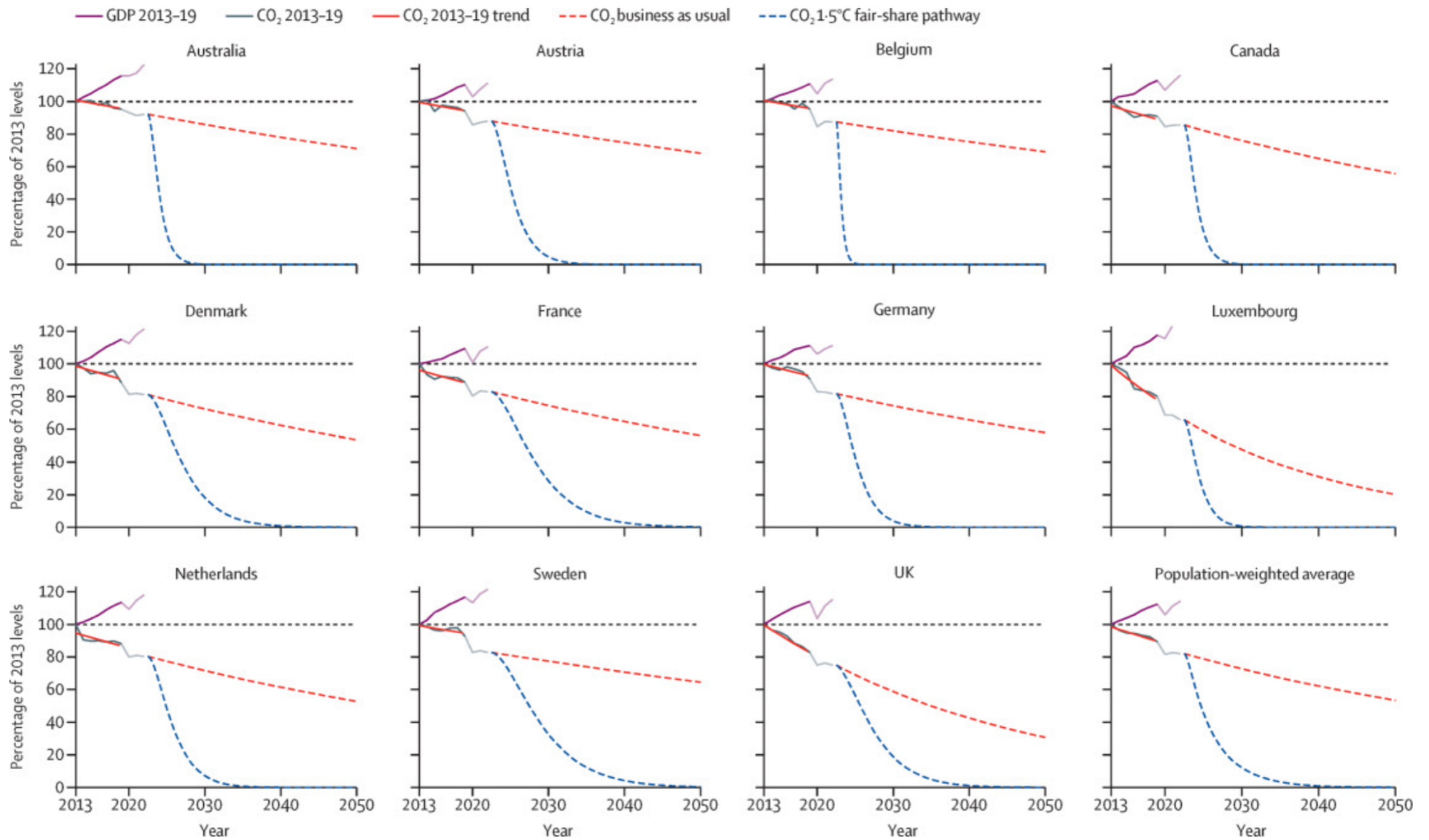
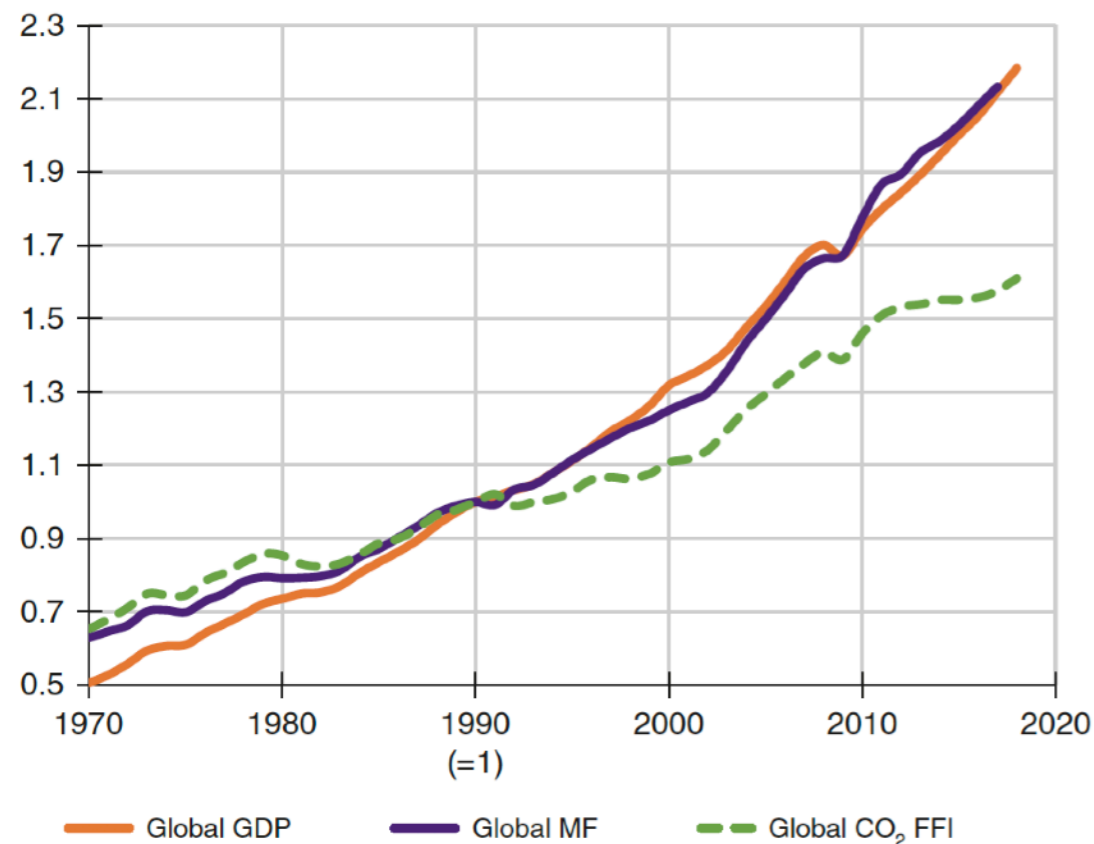


Figure 2 In all high-income countries that have recently achieved absolute decoupling, the achieved emission reductions are far from the emission reductions required to comply with their 1.5°C fair-shares



ECONOMICS

Unraveling the claims for (and against) green growth

Can the global economy grow indefinitely, decoupled from Earth's limitations?

By **Tim Jackson¹** and **Peter A. Victor²**

Comment | [Published: 04 August 2021](#)

Urgent need for post-growth climate mitigation scenarios

















[Jason Hickel](#) , [Paul Brockway](#), [Giorgos Kallis](#), [Lorenz Keyßer](#), [Manfred Lenzen](#), [Aljoša Slameršak](#), [Julia Steinberger](#) & [Diana Ürge-Vorsatz](#)

Nature Energy **6**, 766–768 (2021) | [Cite this article](#)

2218 Accesses | 1476 Altmetric | [Metrics](#)

PAPER • OPEN ACCESS

A systematic review of the evidence on decoupling of GDP, resource use and GHG emissions, part II: synthesizing the insights

Helmut Haberl¹ , Dominik Wiedenhofer^{1,9} , Doris Virág^{1,9} , Gerald Kalt¹ , Barbara Plank¹ , Paul Brockway² , Tomer Fishman³ , Daniel Hausknost⁵ , Fridolin Krausmann¹ , Bartholomäus Leon-Gruchalski⁴ , Andreas Mayer¹ , Melanie Pichler¹ , Anke Schaffartzik^{1,6} , Tânia Sousa⁷ , Jan Streeck¹  and Felix Creutzig⁸  — [Hide full author list](#)

Published 11 June 2020 • © 2020 The Author(s). Published by IOP Publishing Ltd

[Environmental Research Letters](#), [Volume 15](#), [Number 6](#)

Citation Helmut Haberl *et al* 2020 *Environ. Res. Lett.* **15** 065003

Is Green Growth Possible?

Jason Hickel^a and Giorgos Kallis^b

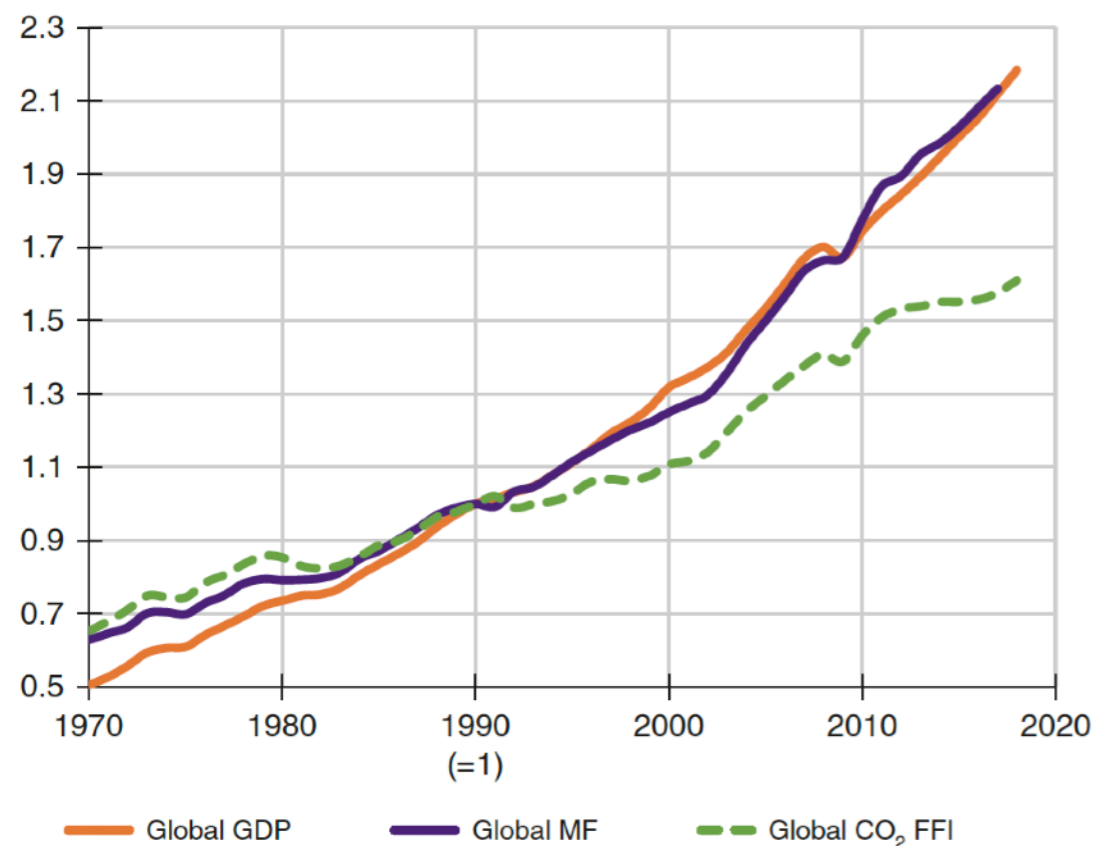
^aAnthropology, Goldsmiths, University of London, London, UK; ^bICREA and ICTA-UAB, Universitat Autònoma de Barcelona, Barcelona, Spain

ABSTRACT

The notion of green growth has emerged as a dominant policy response to climate change and ecological breakdown. Green growth theory asserts that continued economic expansion is compatible with our planet's ecology, as technological change and substitution will allow us to absolutely decouple GDP growth from resource use and carbon emissions. This claim is now assumed in national and international policy, including in the Sustainable Development Goals. But empirical evidence on resource use and carbon emissions does not support green growth theory. Examining relevant studies on historical trends and model-based projections, we find that: (1) there is no empirical evidence that absolute decoupling from resource use can be achieved on a global scale against a background of continued economic growth, and (2) absolute decoupling from carbon emissions is highly unlikely to be achieved at a rate rapid enough to prevent global warming over 1.5°C or 2°C, even under optimistic policy conditions. We conclude that green growth is likely to be a misguided objective, and that policymakers need to look toward alternative strategies.

KEYWORDS

Sustainable development; ecological economics; green growth; degrowth; decoupling



“We conclude that large rapid absolute reductions of resource use and GHG emissions cannot be achieved through observed decoupling rates, hence decoupling needs to be complemented by sufficiency-oriented strategies and strict enforcement of absolute reduction targets.”

- Haberl et al. (2020, abstract)

ECONOMICS

Unraveling the claims for (and against) green growth

Can the global economy grow indefinitely, decoupled from Earth’s limitations?

By **Tim Jackson¹** and **Peter A. Victor²**

Comment | [Published: 04 August 2021](#)

Urgent need for post-growth climate mitigation scenarios

[Jason Hickel](#) ✉, [Paul Brockway](#), [Giorgos Kallis](#), [Lorenz Keyßer](#), [Manfred Lenzen](#), [Aljoša Slameršak](#), [Julia Steinberger](#) & [Diana Ürge-Vorsatz](#)

Nature Energy **6**, 766–768 (2021) | [Cite this article](#)

2218 Accesses | 1476 Altmetric | [Metrics](#)

Is Green Growth Possible?

Jason Hickel^a and Giorgos Kallis^b

^aAnthropology, Goldsmiths, University of London, London, UK; ^bICREA and ICTA-UAB, Universitat Autònoma de Barcelona, Barcelona, Spain

ABSTRACT

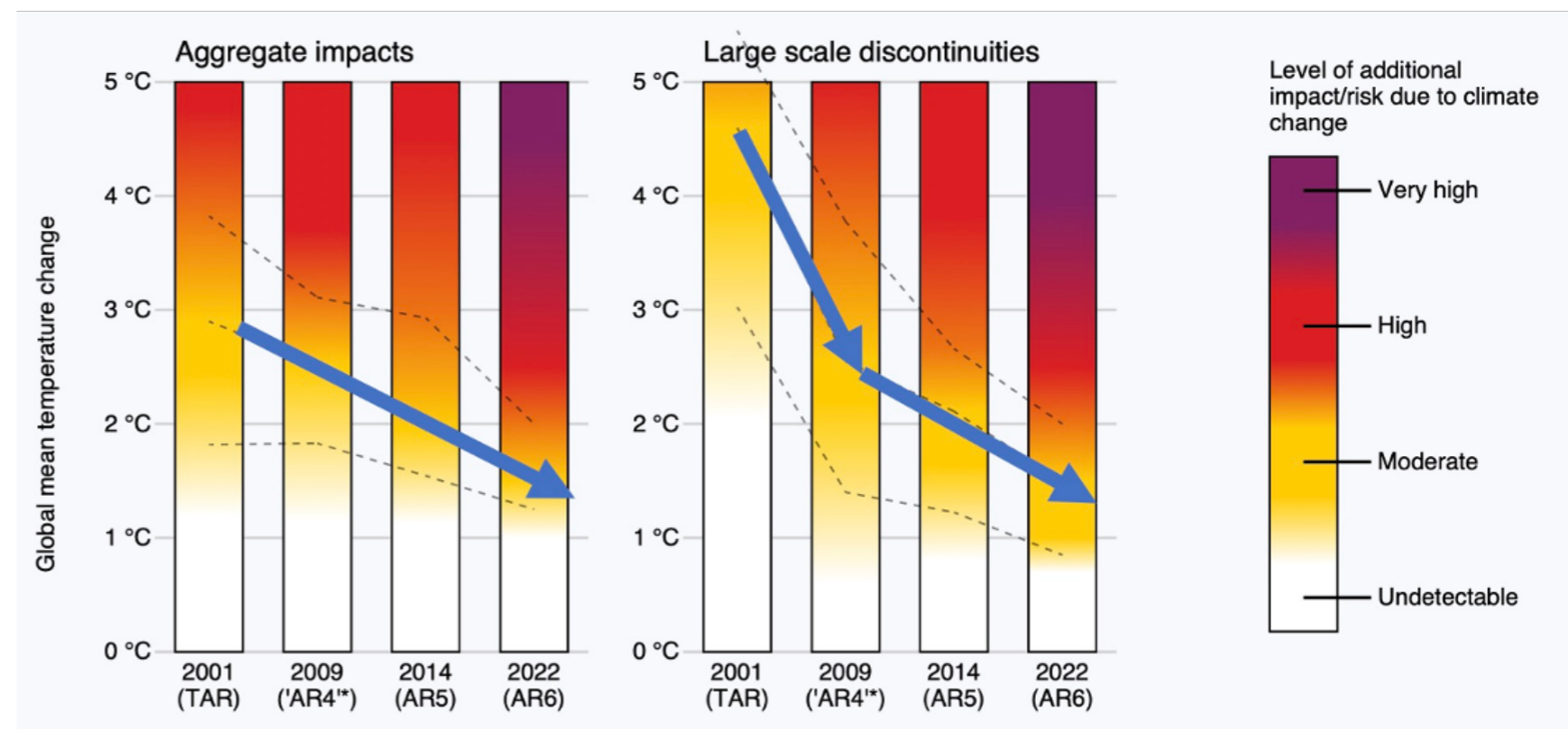
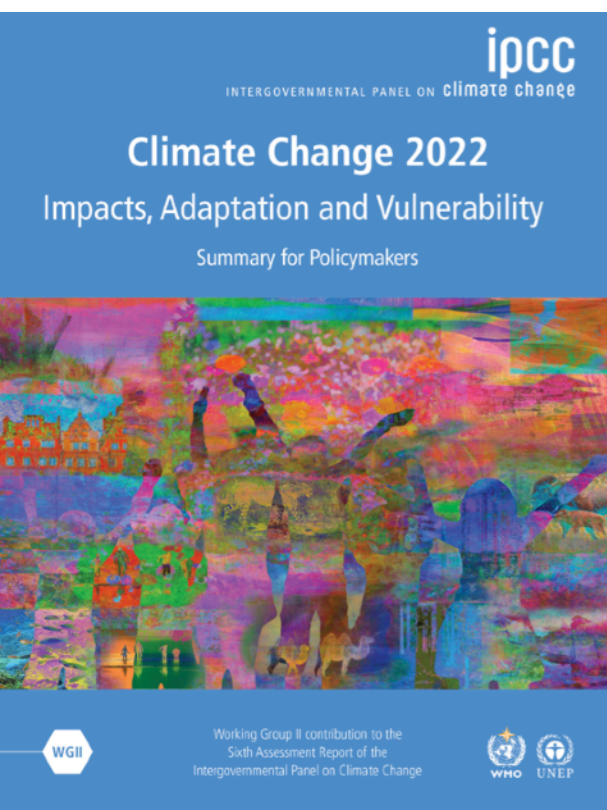
The notion of green growth has emerged as a dominant policy response to climate change and ecological breakdown. Green growth theory asserts that continued economic expansion is compatible with our planet’s ecology, as technological change and substitution will allow us to absolutely decouple GDP growth from resource use and carbon emissions. This claim is now assumed in national and international policy, including in the Sustainable Development Goals. But empirical evidence on resource use and carbon emissions does not support green growth theory. Examining relevant studies on historical trends and model-based projections, we find that: (1) there is no empirical evidence that absolute decoupling from resource use can be achieved on a global scale against a background of continued economic growth, and (2) absolute decoupling from carbon emissions is highly unlikely to be achieved at a rate rapid enough to prevent global warming over 1.5°C or 2°C, even under optimistic policy conditions. We conclude that green growth is likely to be a misguided objective, and that policymakers need to look toward alternative strategies.

KEYWORDS

Sustainable development; ecological economics; green growth; degrowth; decoupling

Why net zero by 2050 is woefully inadequate

5. Climate impacts are worse than predicted and accelerating

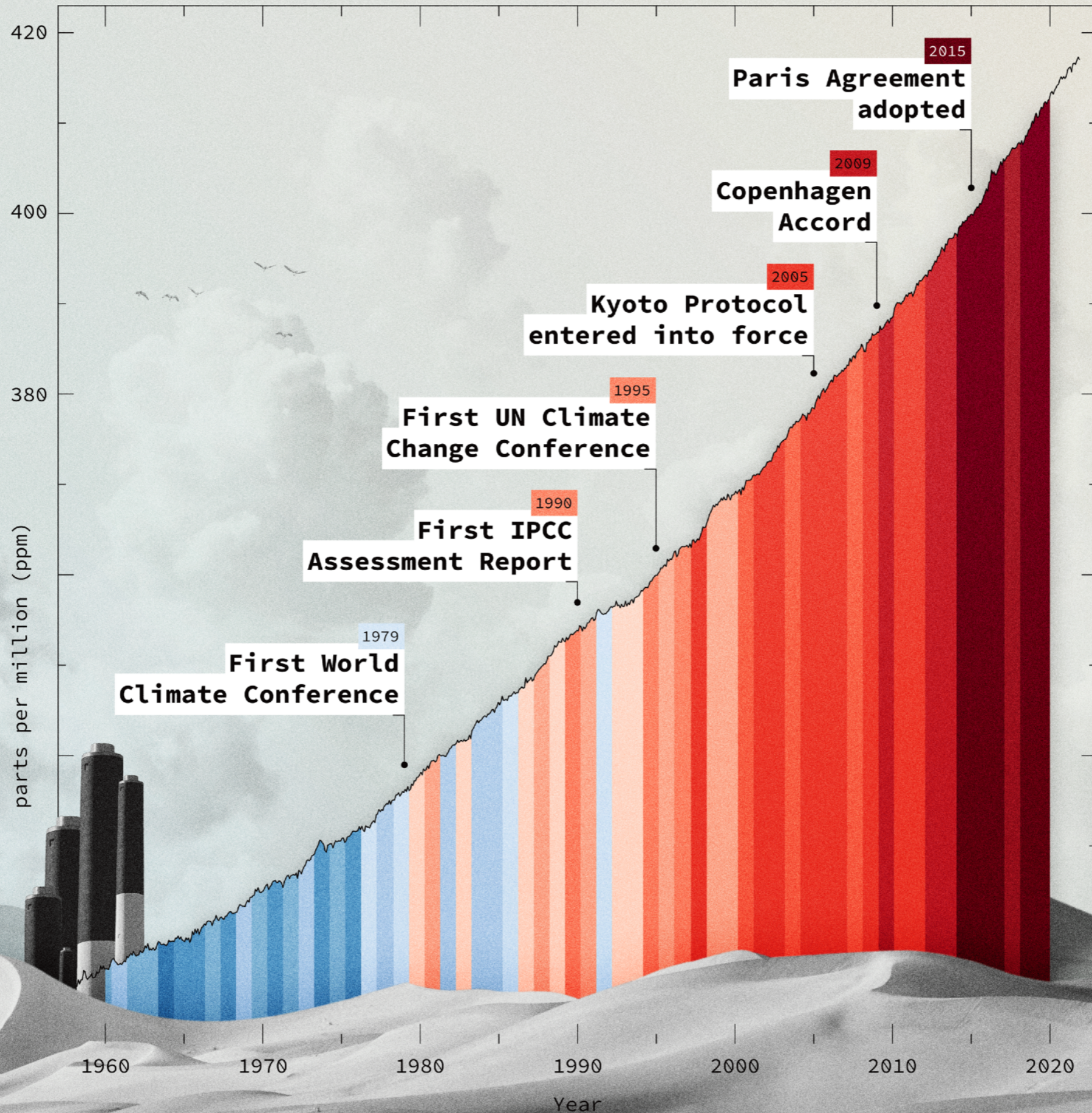


Why net zero by 2050 is woefully inadequate

**6. Saying one thing, doing
another**

Trends in Atmospheric CO₂ vs Global Temperature Change

#climateINACTIONstripes



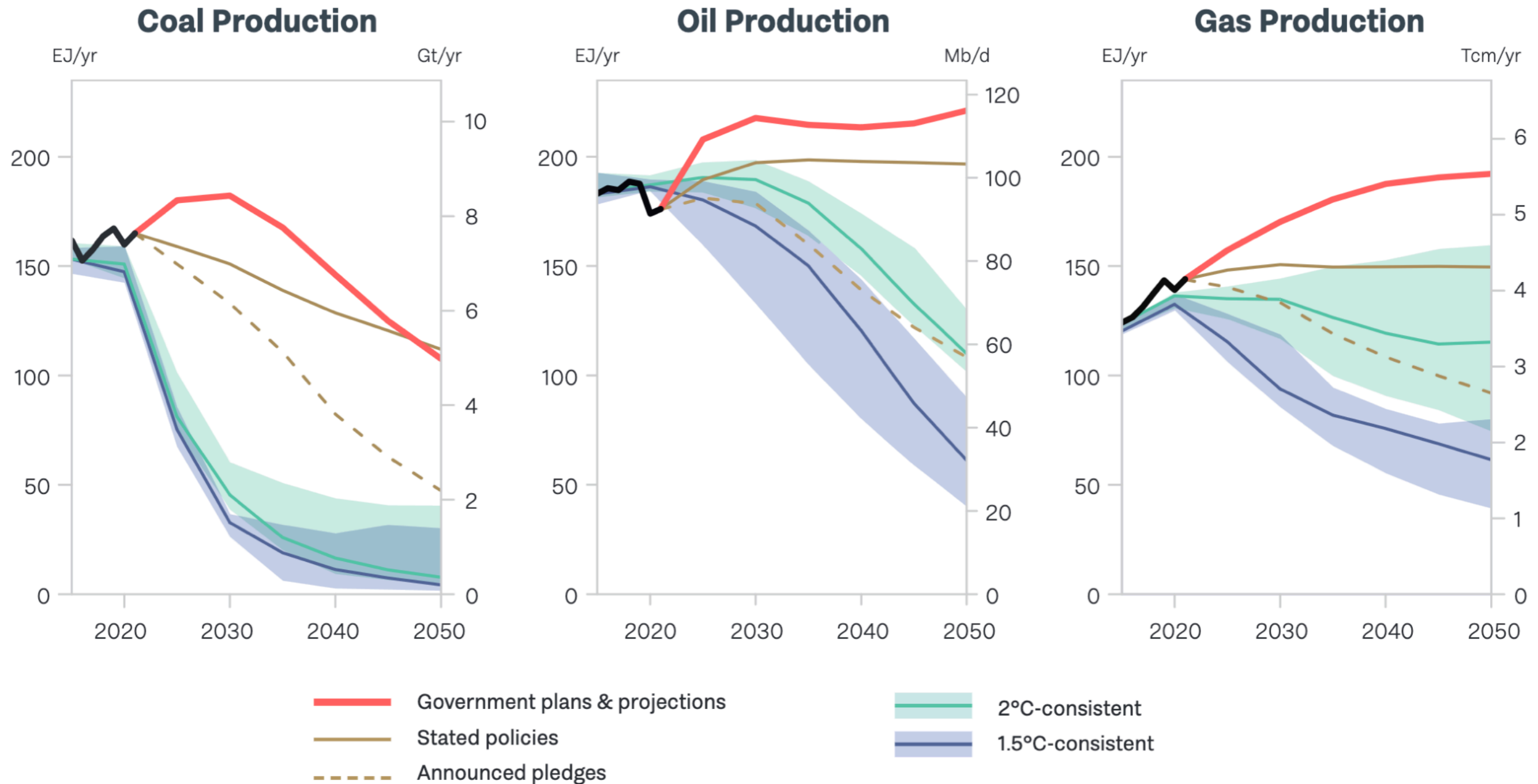
Composite Graph of: Atmospheric CO₂ at Mauna Loa Observatory, December 2021 – Scripps Institution of Oceanography & NOAA Global Monitoring Laboratory | #ShowYourStripes – Graphics & lead scientist: Ed Hawkins, National Centre for Atmospheric Science, University of Reading; Data: UK Met Office | Design by: sustentio [PG] | Licence: CC-BY
@MuelletTadzio @vriebkenarie @MarijusHasenheit @sustentioEU

“If governments are serious about the climate crisis, there can be no new investments in oil, gas and coal, from now – from this year.”

Fatih Birol (2021)



“Governments plan to produce more than double the amount of fossil fuels in 2030 than would be consistent with limiting warming to 1.5°C.”





Extinction Rebellion
@ExtinctionR



"The truly dangerous radicals are the countries that are increasing the supply of fossil fuels."

Which countries is the Secretary General of the UN referring to here?

Brace yourselves. 🧵

[Tweet übersetzen](#)



António Guterres
@antonioguterres



Climate activists are sometimes depicted as dangerous radicals.

But the truly dangerous radicals are the countries that are increasing the production of fossil fuels.

Investing in new fossil fuels infrastructure is moral and economic madness.

11:46 AM · Apr 5, 2022 · Twitter Web App

6:54 nachm. · 13. Apr. 2022 · Twitter Web App

1.448 Retweets 104 Zitierte Tweets 3.524 „Gefällt mir“-Angaben

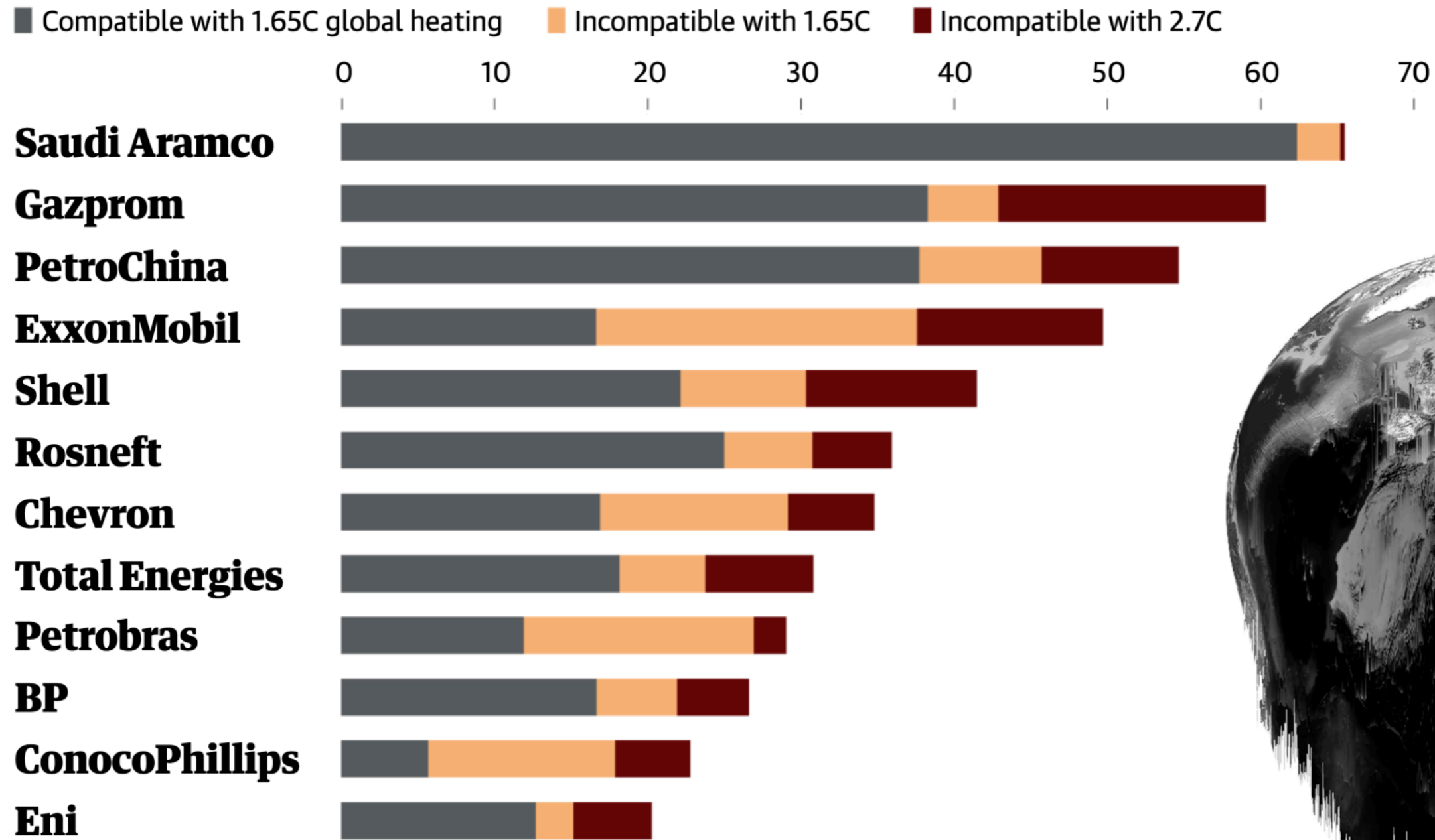
- United States
- United Kingdom
- Germany
- The Netherlands
- Norway
- Turkey
- Cyprus
- Canada
- Australia
- New Zealand
- Russia
- Brazil
- Mexico
- Japan
- China
- India
- Nigeria
- Uganda
- Egypt
- Morocco

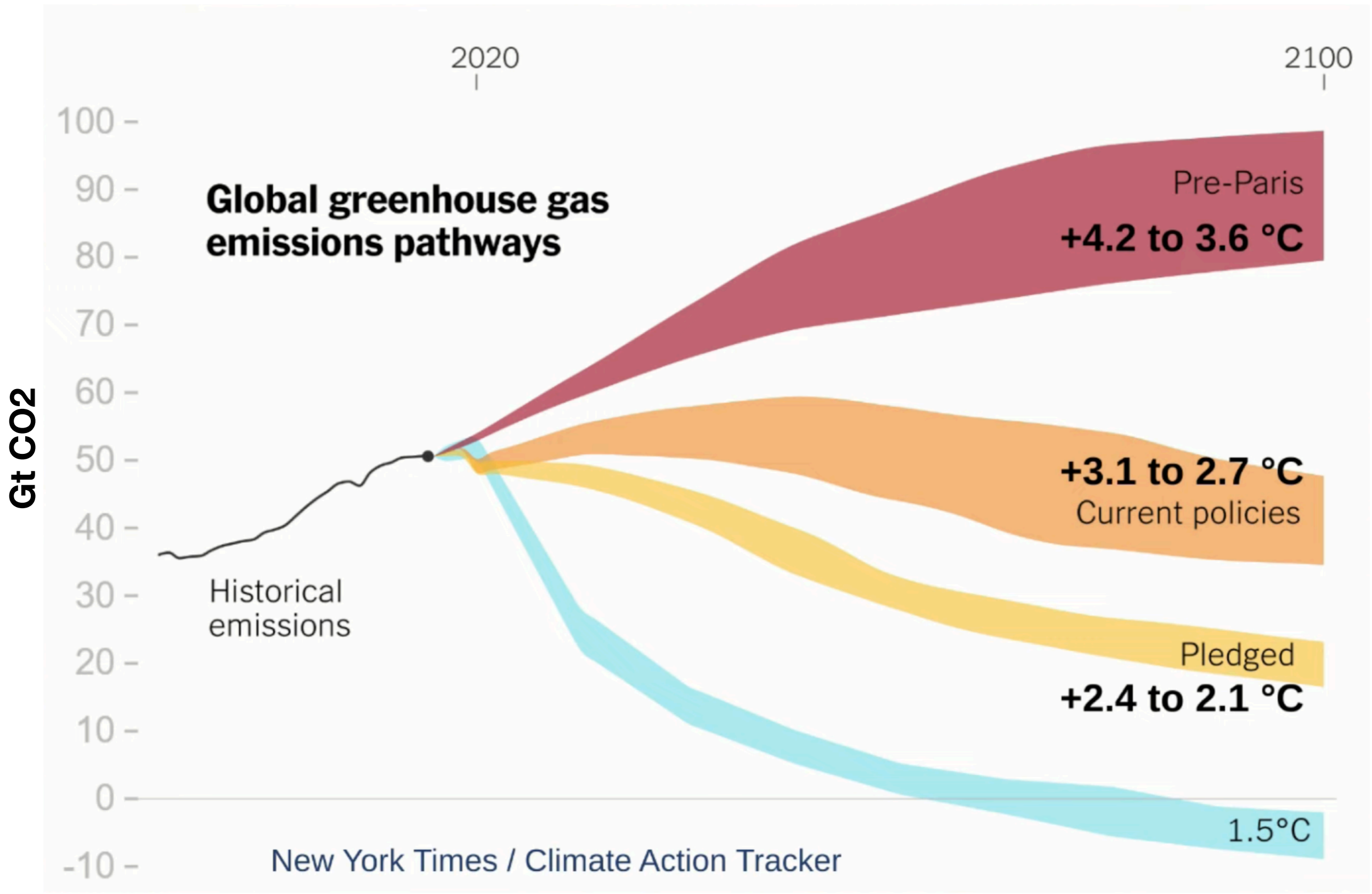


Source

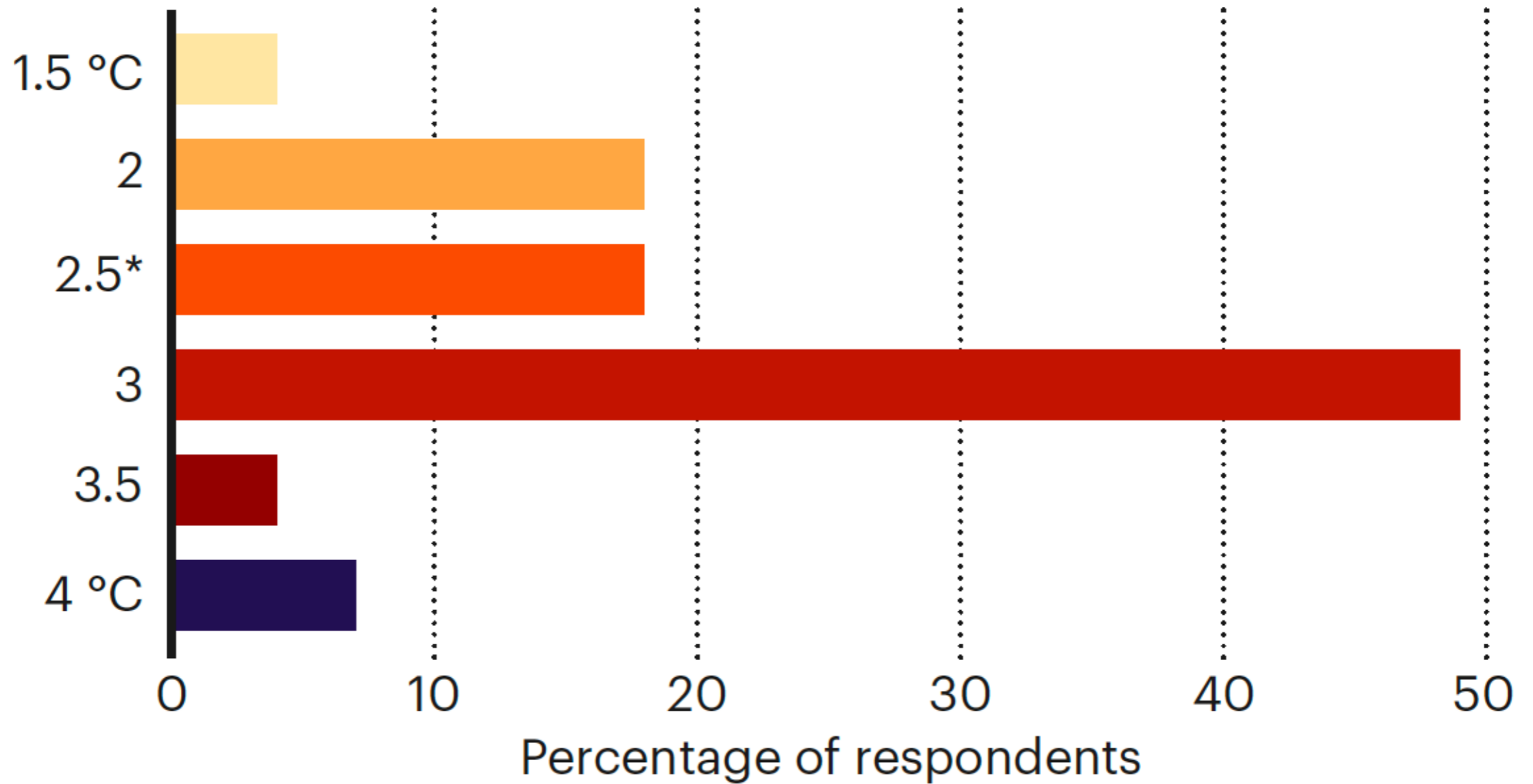
Major companies plan to spend many millions a day to 2030 on exploiting new oil and gas

Capital expenditure per day 2021-2030, \$m

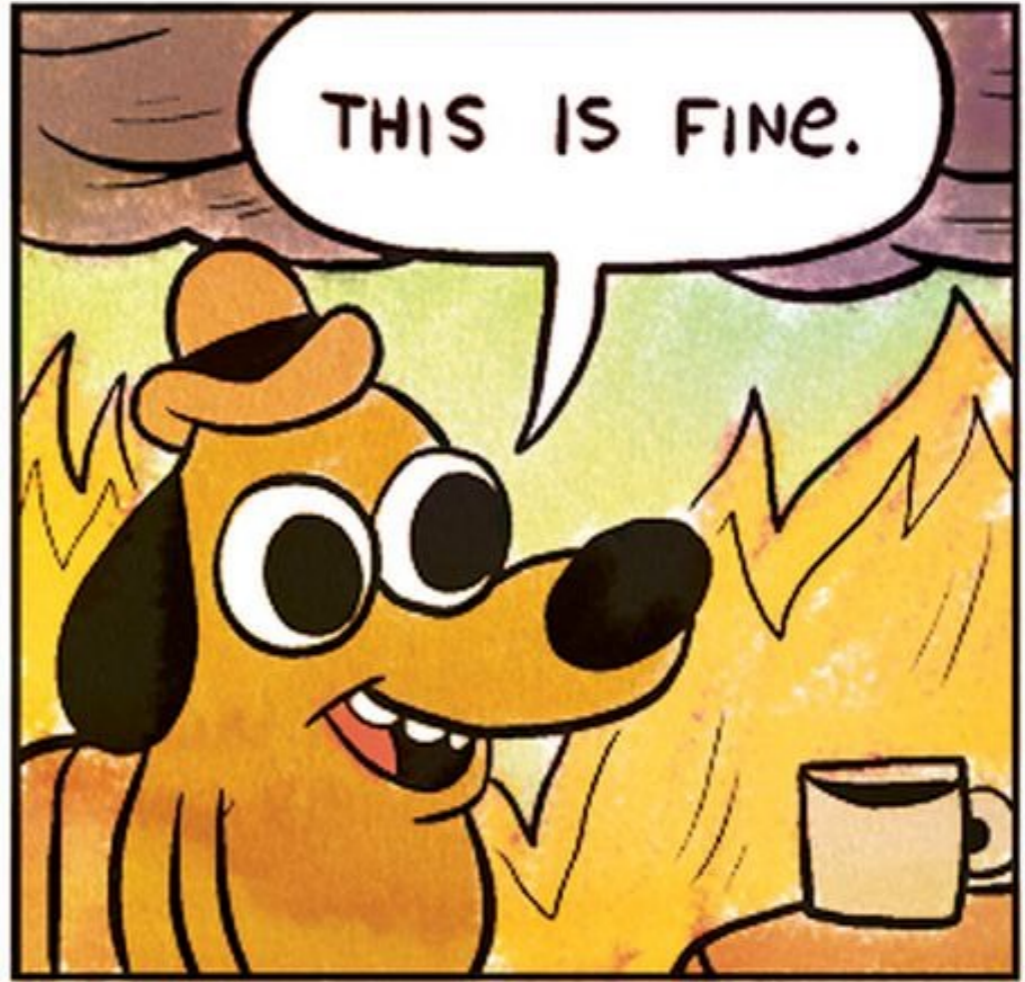


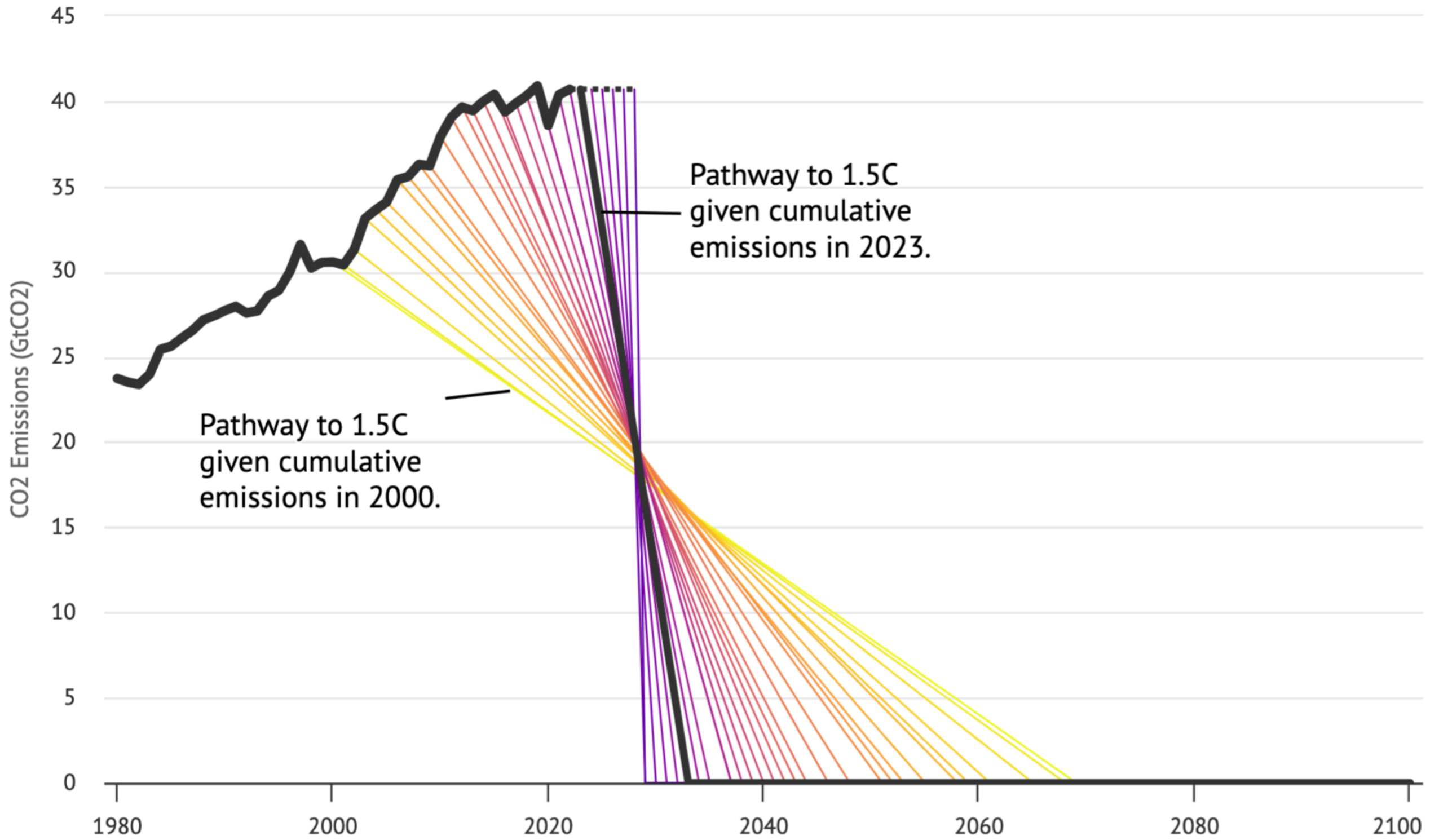


How much warming above pre-industrial times do you think is likely by 2100?

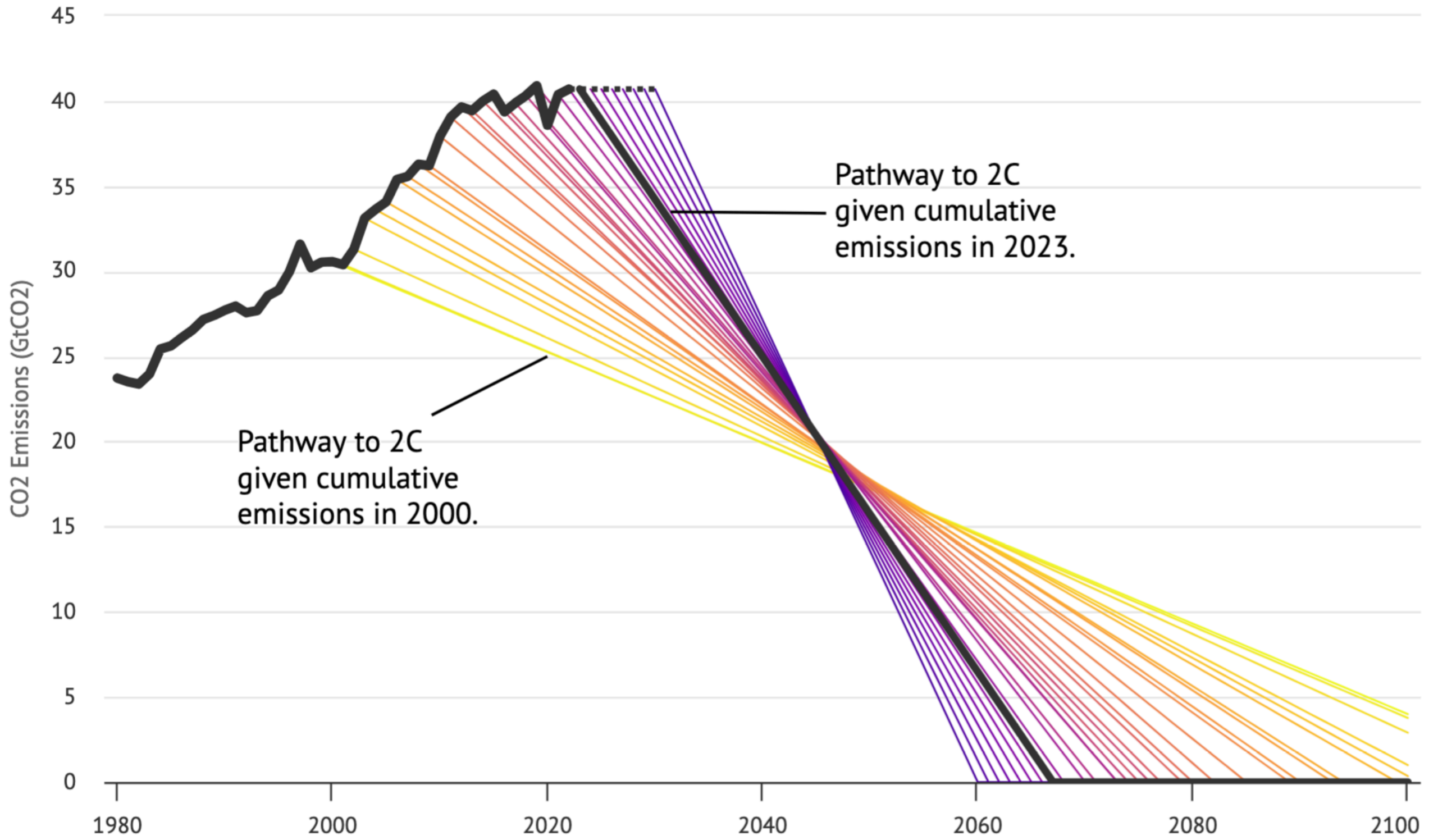


*Includes 2 responses between 2.7 °C and 2.75 °C;
2.5 °C and 3.5 °C were write-in answers.





Source: UNEP Gap report.



Source: UNEP Gap report.

Part III:
Disrupting Climate
 Policymaking

Three Actors

Businesses Governments Civil Society

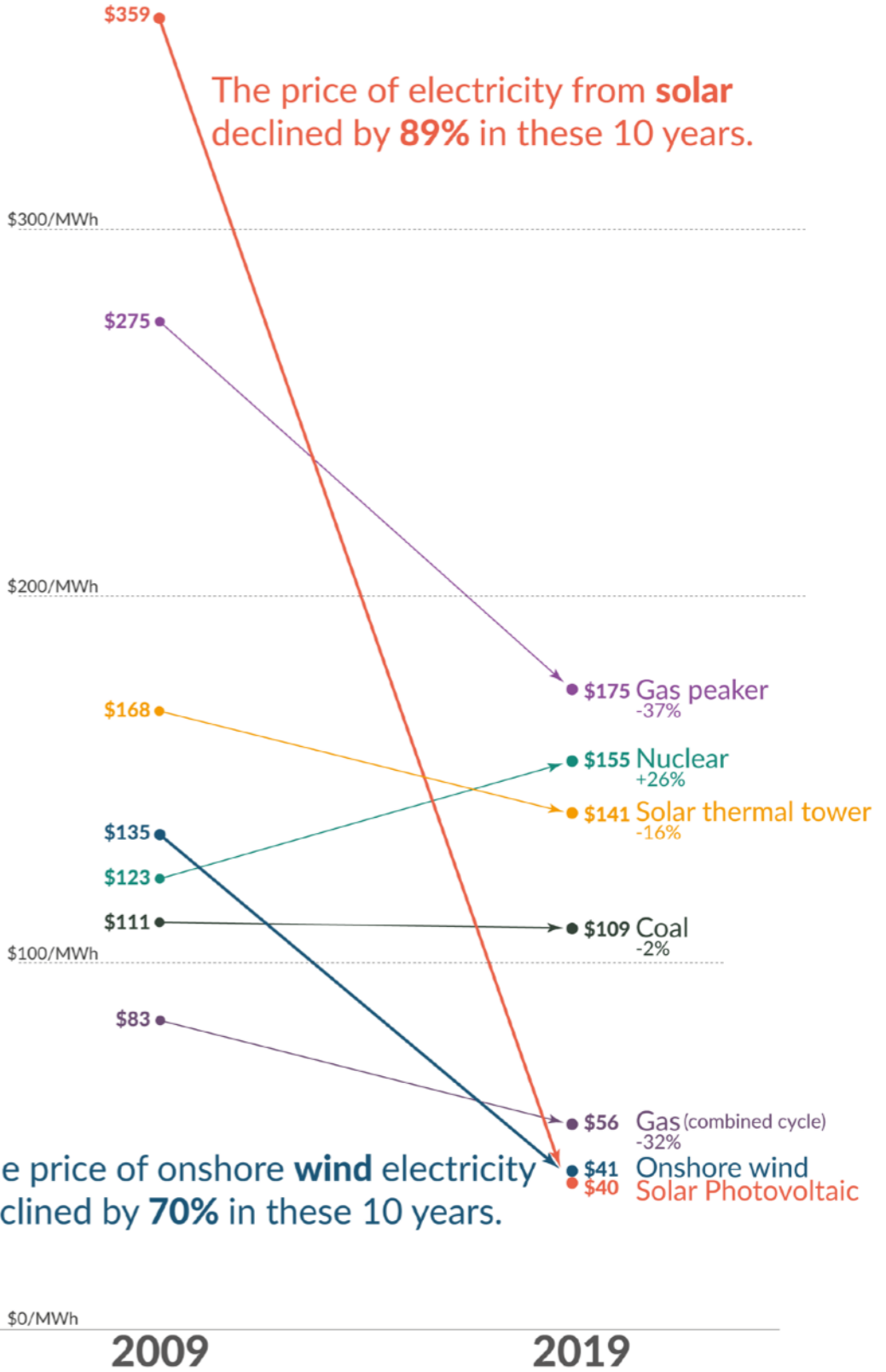
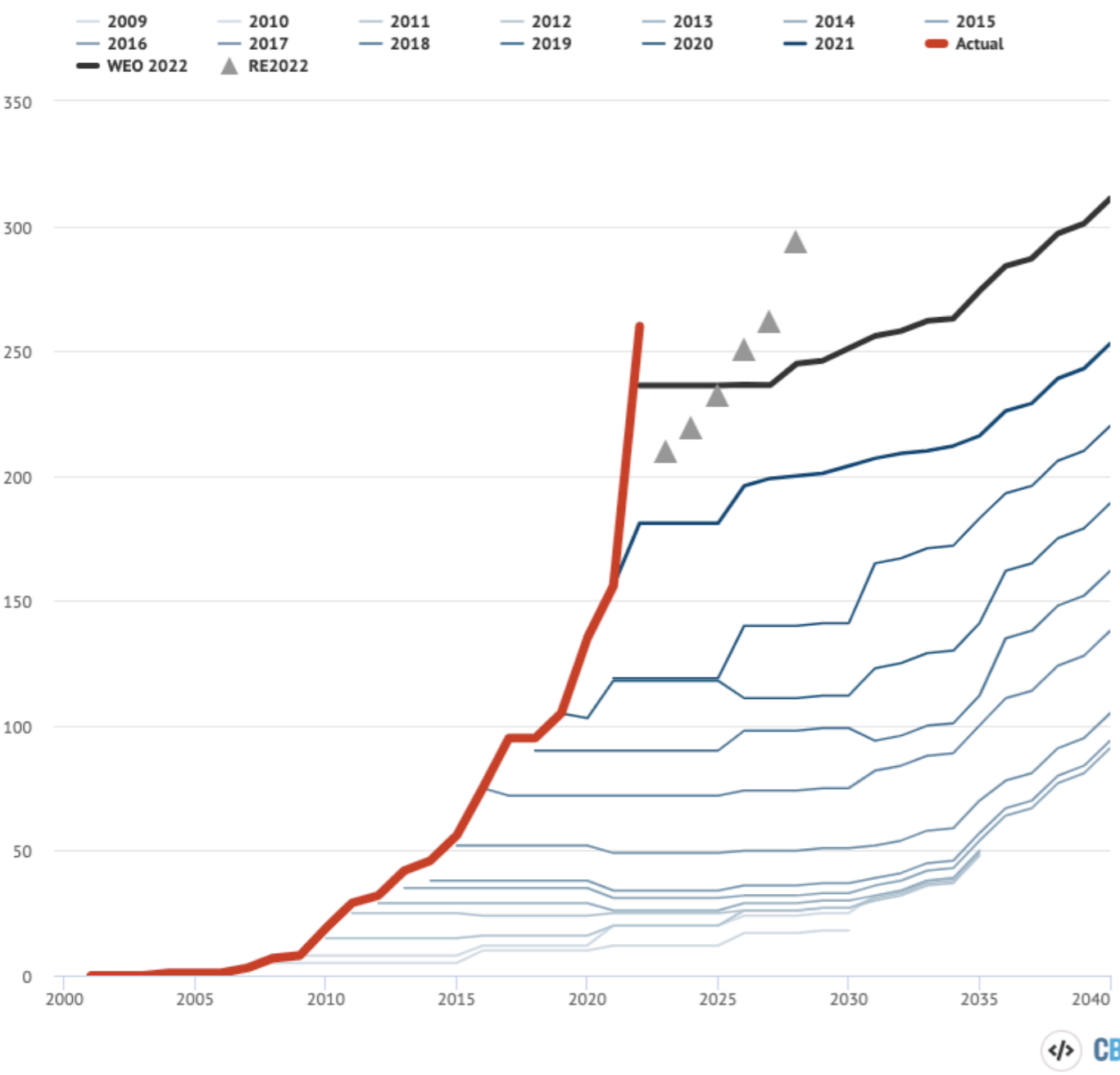
Who will trigger fundamental change?

Businesses

The price of electricity from new power plants
 Electricity prices are expressed in 'levelized costs of energy' (LCOE). LCOE captures the cost of building the power plant itself as well as the ongoing costs for fuel and operating the power plant over its lifetime.

The rapid **rise of solar** continues to **outpace IEA outlooks** – but remains short of what would be needed for 1.5C

Gigawatts added per year in IEA WEOs, before retirements; Triangles show IEA Renewables 2022 forecast



The price of onshore **wind** electricity declined by **70%** in these 10 years.

Data: Lazard Levelized Cost of Energy Analysis, Version 13.0
 OurWorldinData.org – Research and data to make progress against the world's largest problems. Licensed under CC-BY by the author Max Roser.

POLICY REPORT

ENERGY TRANSITION MYTHBUSTERS

Unpacking the 6 policy myths
that threaten decarbonisation



“Let me be, I think, categorical in this. We cannot justify going for a low return. Our shareholders deserve to see us going after strong returns. If we cannot achieve the double-digit returns in a business, we need to question very hard whether we should continue in that business. Absolutely, we want to continue to go for lower and lower and lower carbon, but it has to be profitable.”

- Wael Sawan, Shell's CEO, February 2nd, 2023

Source

Christophers (2022)



Governments


**When you ride ALONE
you ride with Hitler!**



**Join a
Car-Sharing Club
TODAY!**

WALTER PURSELL

Source



The Consumer's VICTORY PLEDGE

As a consumer in the total defense of democracy
I will do my part to make my home, my com-
munity, my country ready, efficient, and strong.

**I will buy carefully.
I will take good care of the things I have.
I will waste nothing.**

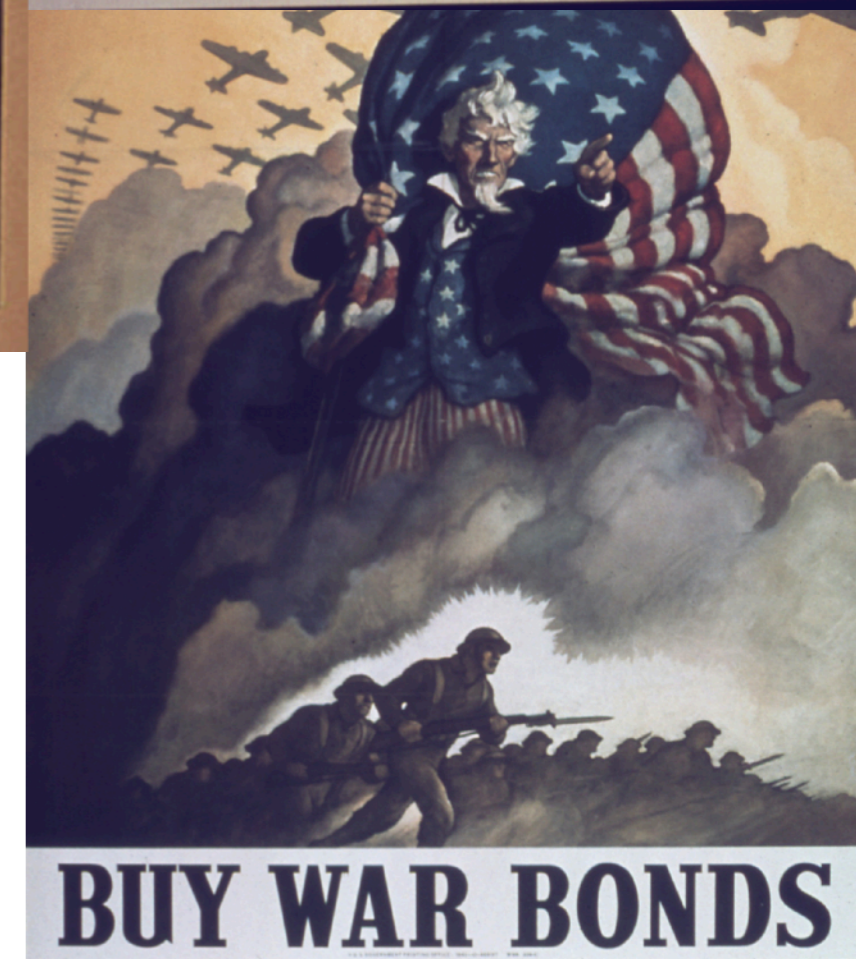
When you sign this pledge you are joining the ranks of
millions of consumers working together to help win the war.

*Issued by Consumer Division
Office of Price Administration
Washington, D. C.*

WASTE HELPS THE ENEMY



**CONSERVE
MATERIAL**

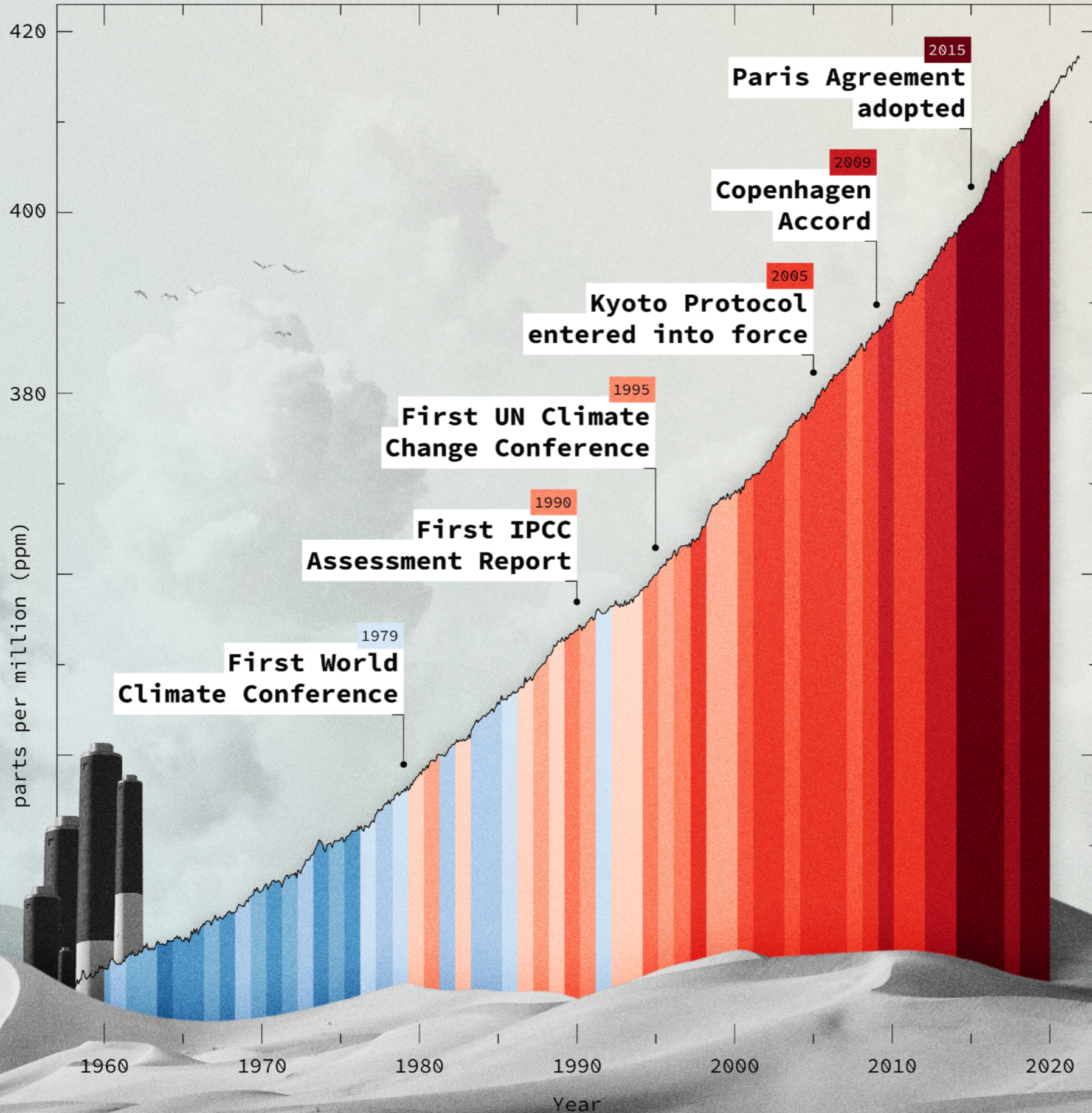


BUY WAR BONDS

Government spending rose 10 fold from 1940 to 1945
National speed limit of 35 mph to conserve fuel, car sharing
Manufacturing of cars, construction of new homes banned
Rationing of gasoline, meat, butter, sugar etc.
Income taxes of up to 94%

Trends in Atmospheric CO₂ vs Global Temperature Change

#climateINACTIONstripes



Composite Graph of: Atmospheric CO₂ at Mauna Loa Observatory, December 2021 – Scripps Institution of Oceanography & NOAA Global Monitoring Laboratory | #ShowYourStripes – Graphics & lead scientist: Ed Hawkins, National Centre for Atmospheric Science, University of Reading; Data: UK Met Office | Design by: sustentio [PG] | Licence: CC-BY
@MuelletTadzio @vriebkenarie @MarijusHasenheit @sustentioEU

Civil Society

You and I




Carbon Footprint Reduction



- Stop or lower air travel
- Stop driving petrol cars
- Reduce your meat consumption, especially beef
- Talk about it!


An Audacious Toolkit: Actions Against Climate Breakdown (Part 3: I is for Individual)

 Julia Steinberger Nov 26, 2018 · 15 min read

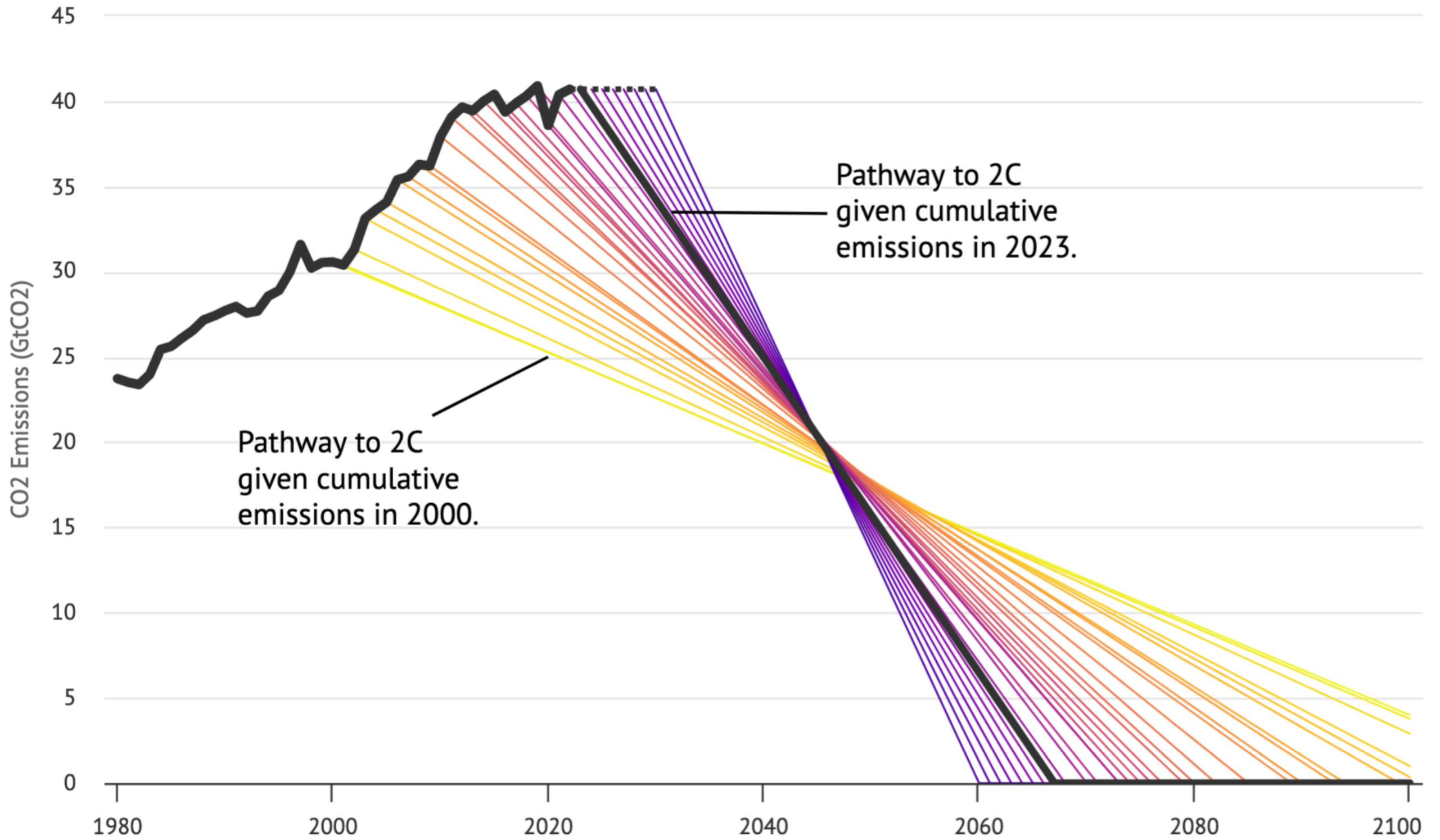


Your Personal Action Guide for the Environment

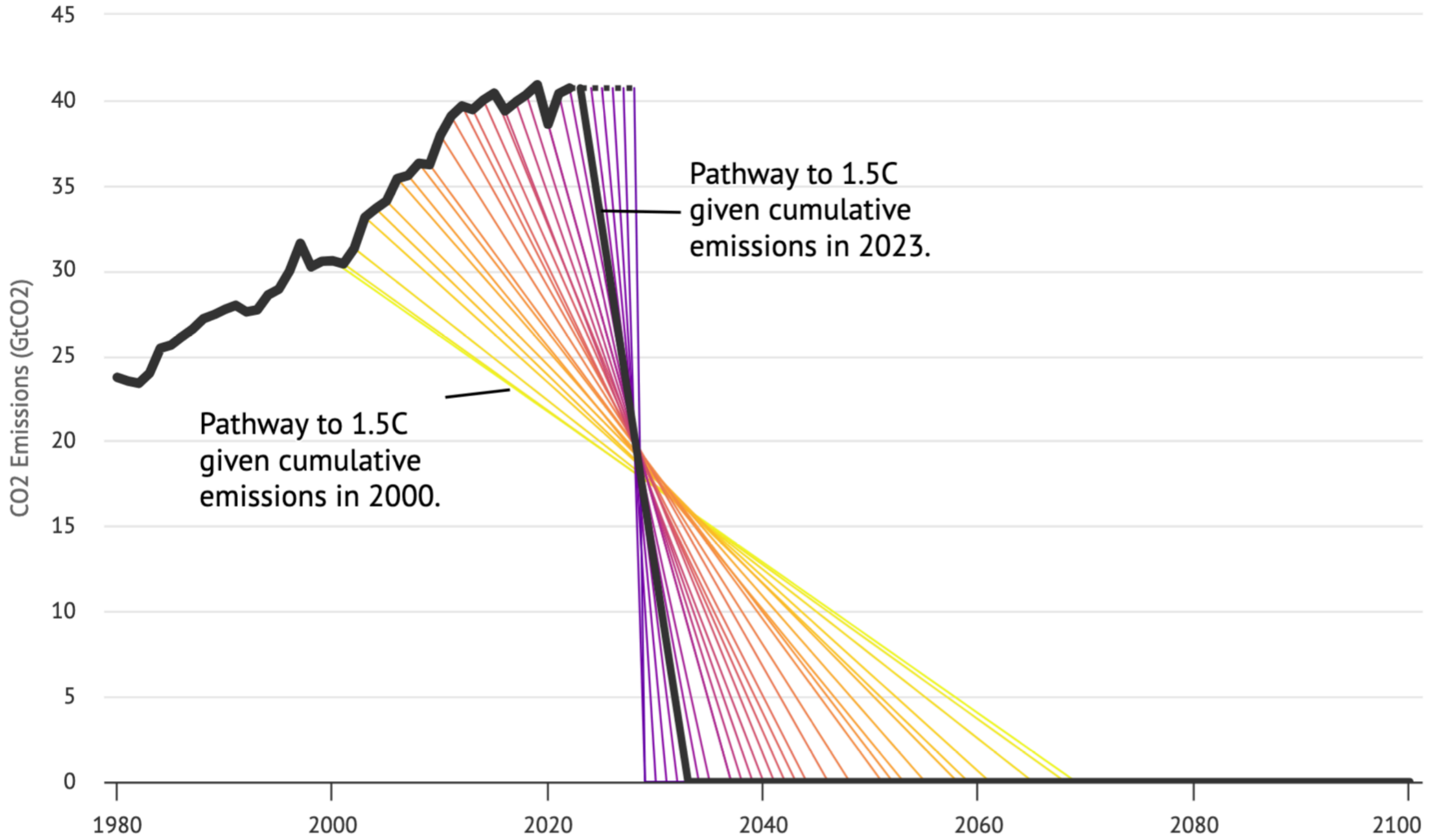
Solving our biggest environmental problems will require huge changes in policy and business practice. But it turns out that our personal actions can help too, if we focus on the right things. Here are some places to start.

 Dr. Jonathan Foley [Follow](#) 
Apr 22, 2020 · 14 min read ★





Source: UNEP Gap report.

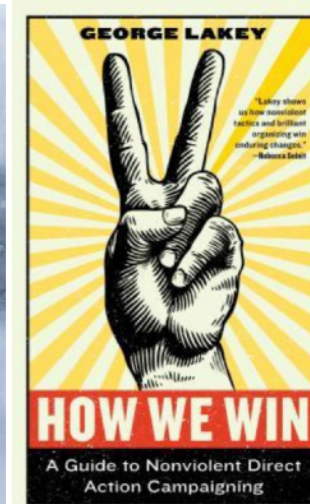
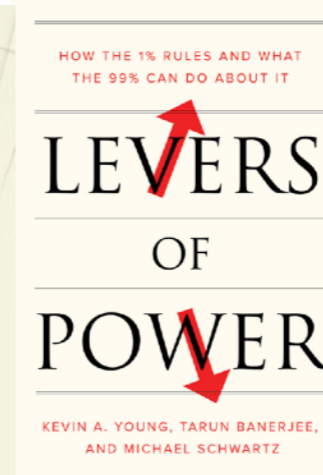
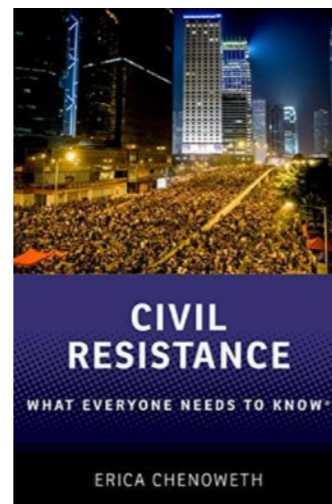


Source: UNEP Gap report.

Civil Resistance

Civil Resistance

Method to change the status quo using a diverse set of nonviolent, noninstitutional actions (strikes, protests, occupations, boycotts, etc.)



Civil Resistance

Method to change the status quo using a diverse set of nonviolent, noninstitutional actions (strikes, protests, occupations, boycotts, etc.)

On the Duty of Civil Disobedience

by Henry David Thoreau

1849, original title: Resistance to Civil Government

Civil Disobedience

Public, conscientious and nonviolent breach of law with the aim to bring about a change in laws or government policies

On the Duty of Civil Disobedience

by Henry David Thoreau

1849, original title: Resistance to Civil Government



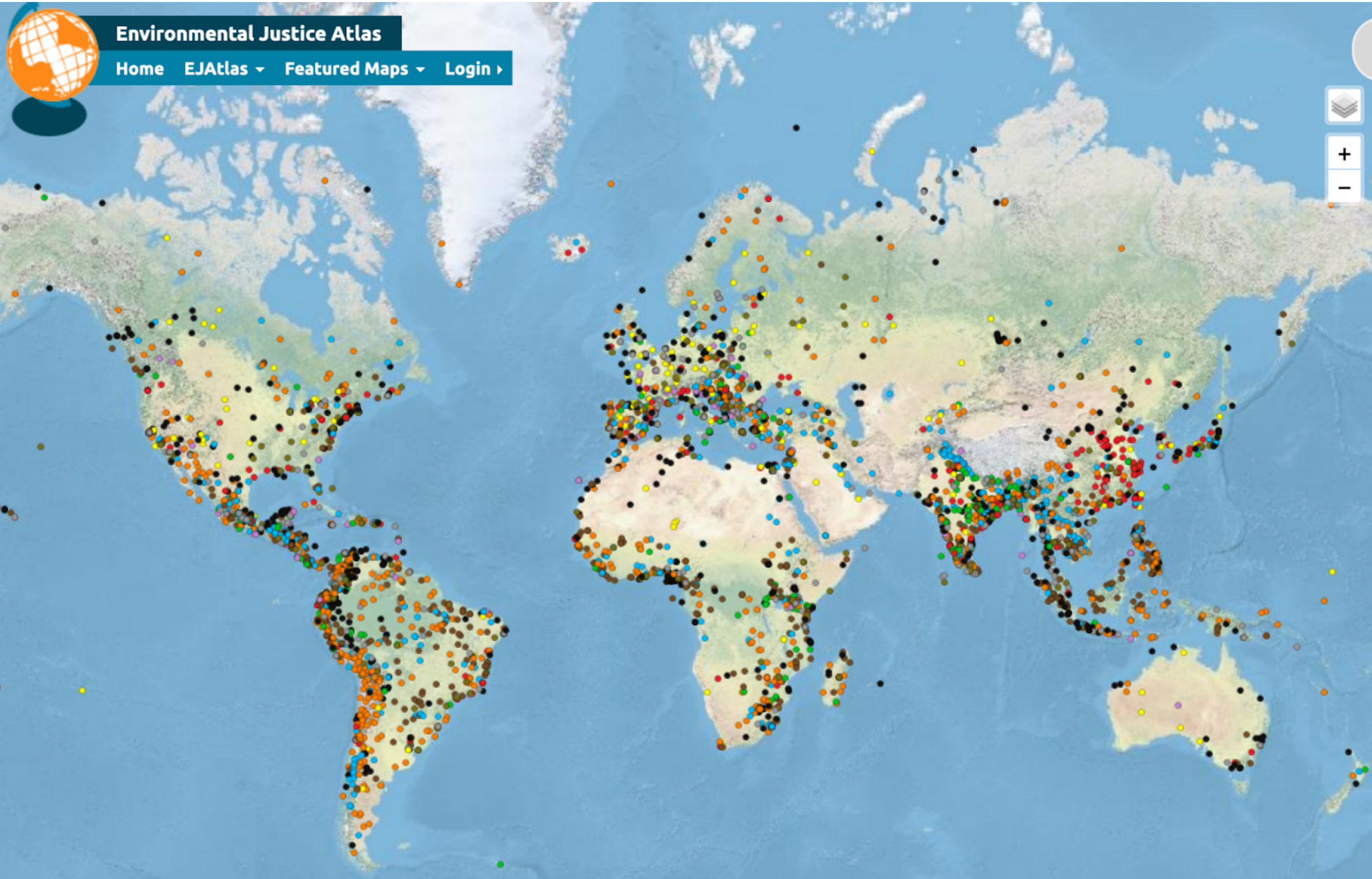
A black and white photograph of a diner counter. In the foreground, a man in a suit jacket stands with his back to the camera, leaning on the counter. Another man in a suit jacket stands next to him, looking towards the counter. In the background, a woman is visible behind the counter. A sign on the right side of the image reads "FOUNTAIN CLOSED" in large, bold, sans-serif letters. Below this, there is a stylized signature or logo, and then the text "INTEREST OF PUBLIC SAFETY" in smaller, bold, sans-serif letters. The counter has a Coca-Cola logo on it. The floor has a checkered pattern, and there is a rope barrier in the foreground.

**FOUNTAIN
CLOSED**

ML

**INTEREST OF
PUBLIC
SAFETY**





Environmental Justice Atlas

[Home](#) [EJAtlas](#) [Featured Maps](#) [Login](#)



Fridays for Future

2018

SKOLSTREJK
FÖR
KLIMATET

2019

STRIKE FOR THE CLIMA

1992 World Scientists' Warning to Humanity

Published Jul 16, 1992 | Updated Feb 4, 2022

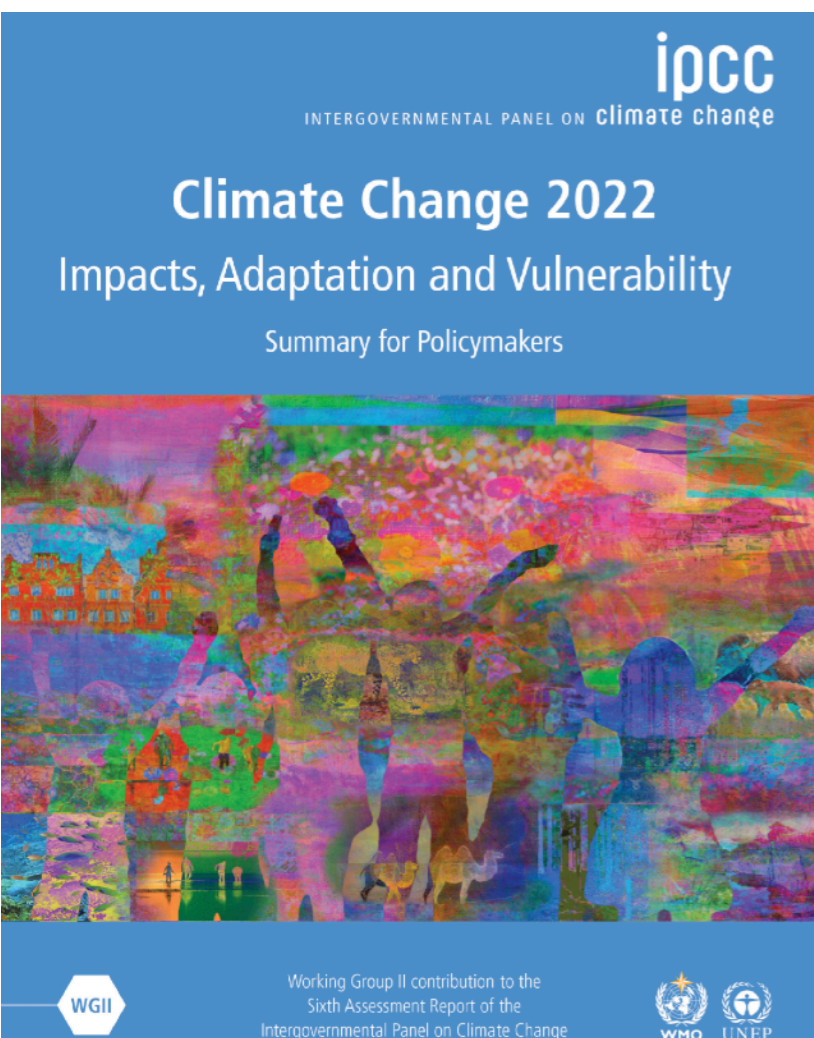
JOURNAL ARTICLE

World Scientists' Warning to Humanity: A Second Notice

William J. Ripple, Christopher Wolf, Thomas M. Newsome, Mauro Galetti, Mohammed Alamgir, Eileen Crist, Mahmoud I. Mahmoud, William F. Laurance, 15,364 scientist signatories from 184 countries

BioScience, Volume 67, Issue 12, December 2017, Pages 1026–1028, <https://doi.org/10.1093/biosci/bix125>

Published: 13 November 2017



Source

Ripple et al. (2017)

 | LETTER

Concerns of young protesters are justified

[GREGOR HAGEDORN](#), [PETER KALMUS](#), [MICHAEL MANN](#), [SARA VICCA](#), [JOKE VAN DEN BERGE](#), [JEAN-PASCAL VAN YPERSELE](#), [DOMINIQUE BOURG](#), [JAN ROTMANS](#),

[ROOPE KAARONEN](#), [STEFAN RAHMSTORF](#), [HELGA KROMP-KOLB](#), [GOTTFRIED KIRCHENGAST](#), [RETO KNUTTI](#), [SONIA I. SENEVIRATNE](#), [PHILIPPE THALMANN](#), [RAVEN CRETNEY](#),

[ALISON GREEN](#), [KEVIN ANDERSON](#), [MARTIN HEDBERG](#), [DOUGLAS NILSSON](#), [AMITA KUTTNER](#), AND [KATHARINE HAYHOE](#)

fewer

[Authors Info & Affiliations](#)

SCIENCE • 12 Apr 2019 • Vol 364, Issue 6436 • pp. 139-140 • DOI: [10.1126/science.aax3807](https://doi.org/10.1126/science.aax3807)

ENVIRONMENT OCTOBER 13, 2019 / 4:12 AM / UPDATED 2 YEARS AGO

Scientists endorse mass civil disobedience to force climate action

By Matthew Green

5 MIN READ



LONDON (Reuters) - Almost 400 scientists have endorsed a civil disobedience campaign aimed at forcing governments to take rapid action to tackle climate change, warning that failure could inflict “incalculable human suffering.”

[Source](#)





“Einstein said to think and not act is a crime. If we understand the situation, we must try to make it clear. I decided six or seven years ago that I did not want my grandchildren to look back in the future and say ‘Opa understood what was happening, but he didn’t make it clear’.”



“There is a very widespread feeling that the individual is impotent against governments, and that, however bad their policies may be, there is nothing effective that private people can do about it.



This is a complete mistake. If all those who disapprove of government policy were to join in massive demonstrations of civil disobedience, they could render governmental folly impossible and compel the so-called statesmen to acquiesce in measures that would make human survival possible.”

Civil disobedience by scientists helps press for urgent climate action

Time is short to secure a liveable and sustainable future; yet, inaction from governments, industry and civil society is setting the course for 3.2 °C of warming, with all the cascading and catastrophic consequences that this implies. In this context, when does civil disobedience by scientists become justified?

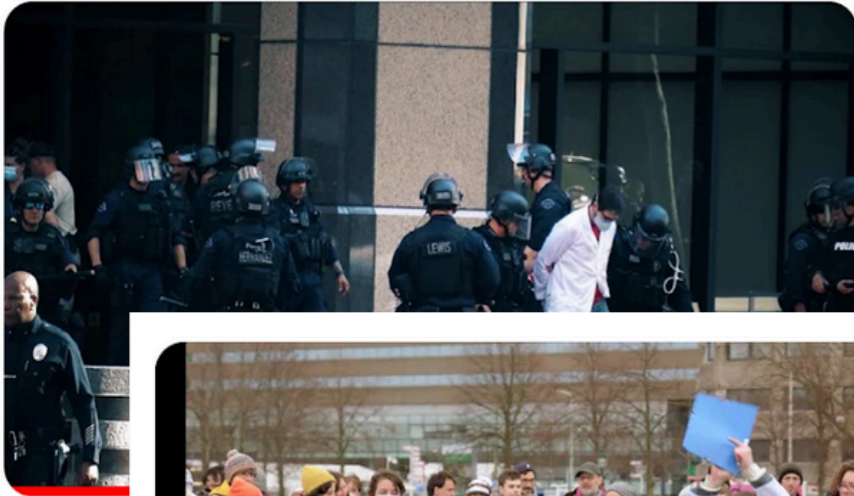
Stuart Capstick, Aaron Thierry, Emily Cox, Oscar Berglund, Steve Westlake and Julia K. Steinberger



Over 1000 academics in 26 countries took to the streets during 4 - 9 April



- Blocking government ministries / corporations, paper pastings
- Academic strikes, occupations, teach-ins, street theatre
- Mass arrests in multiple countries
- Global press coverage



Scientist Rebellion at Chase Bank Los Angeles

8.6K views • 9 months ago

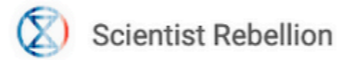


When **scientists** around the world are putting their bodies on the line to warn

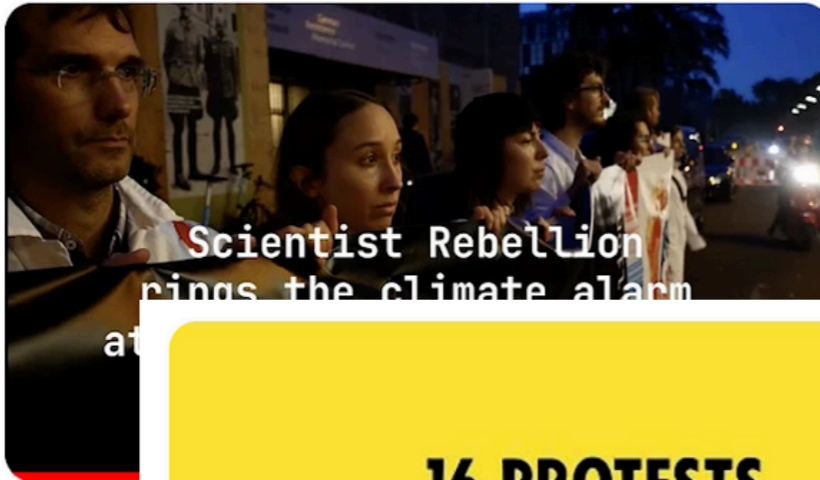


Scientist Rebellion takes action in the Netherlands

4.5K views • 9 months ago



To secure a liveable future, we need emergency action! 🚨 The scientific community has been



Scientist Rebellion rings the alarm at the World Health Summit

747 views • 3 months ago



60 scientists from Scientist Rebellion disrupt opening of World Health Summit in Berlin, Germany, :

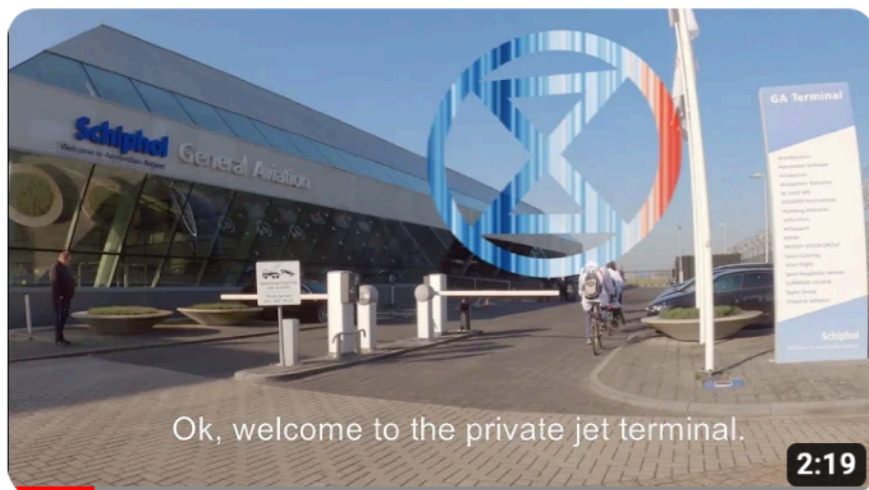
**16 PROTESTS
AGAINST PRIVATE AVIATION
IN 11 COUNTRIES**

Scientists and activists block private airports in eleven countries

406 views • 2 months ago



Scientists and climate campaigners from Scientist Rebellion and Extinction Rebellion barricaded n



Scientist Rebellion Netherlands blocks private jet terminal using bikes

4 views • 18 minutes ago



As part of the global Make Them Pay (<https://makethempay.info/>), Dutch scientists and academics blocked the private jet terminal ...

New





GA Terminal

- Aerodynamics
- Amsterdam Software
- Aviapartner
- Aviapartner Executive
- NL EASY AIR
- EXXAERO International
- Homborg Industries
- JetAviation
- JetSupport
- KMAR
- MOODY VISION GROUP
- Select Catering
- Silver Flight
- Spirit Hospitality Services
- SUMMUM LOUNGE
- Taylor Group
- Vliegclub Schiphol

Schiphol

Ok, welcome to the private jet terminal.







Part IV:
What Now?

These are
revolutionary times



“Only a crisis - actual or perceived - produces real change. When that crisis occurs, the actions that are taken depend on the ideas that are lying around. That, I believe, is our basic function: to develop alternatives to existing policies, to keep them alive and available until the politically impossible becomes the politically inevitable.”

Milton Friedman (1982)

“There are decades where nothing happens; and there are weeks where decades happen.”

Vladimir Lenin

Democratic Ecosocialism

- Climate and social crisis have the same root: capitalist mode of production — produces too much of the bad stuff and not enough of the good stuff
- Expand and decommodify universal public services
- Public works programmes to restore the Earth
- Public job guarantee
- Scale down unnecessary & harmful forms of production
- Reduce excess purchasing power of the rich

Democratic Ecosocialism

- Majority of climate policy researchers prefer post-growth over green growth
- Majority of people in 28 out of 34 countries hold anti-capitalist positions
- Support for sufficiency-oriented policies, job guarantee, workplace democracy, universal public services, progressive taxation very high
- Combine climate and social struggle for mass popular support

Democratic Ecosocialism

- Need a single hegemonic social movement that unifies climate and social demands (cf. “The Umbrella Project”)
- Campaigns on food, housing, transport, etc.
- Run in elections and get citizens’ assemblies going to enact progressive policies
- The alternative may well be 3°C and fascism

Let's be prepared

Thank you!