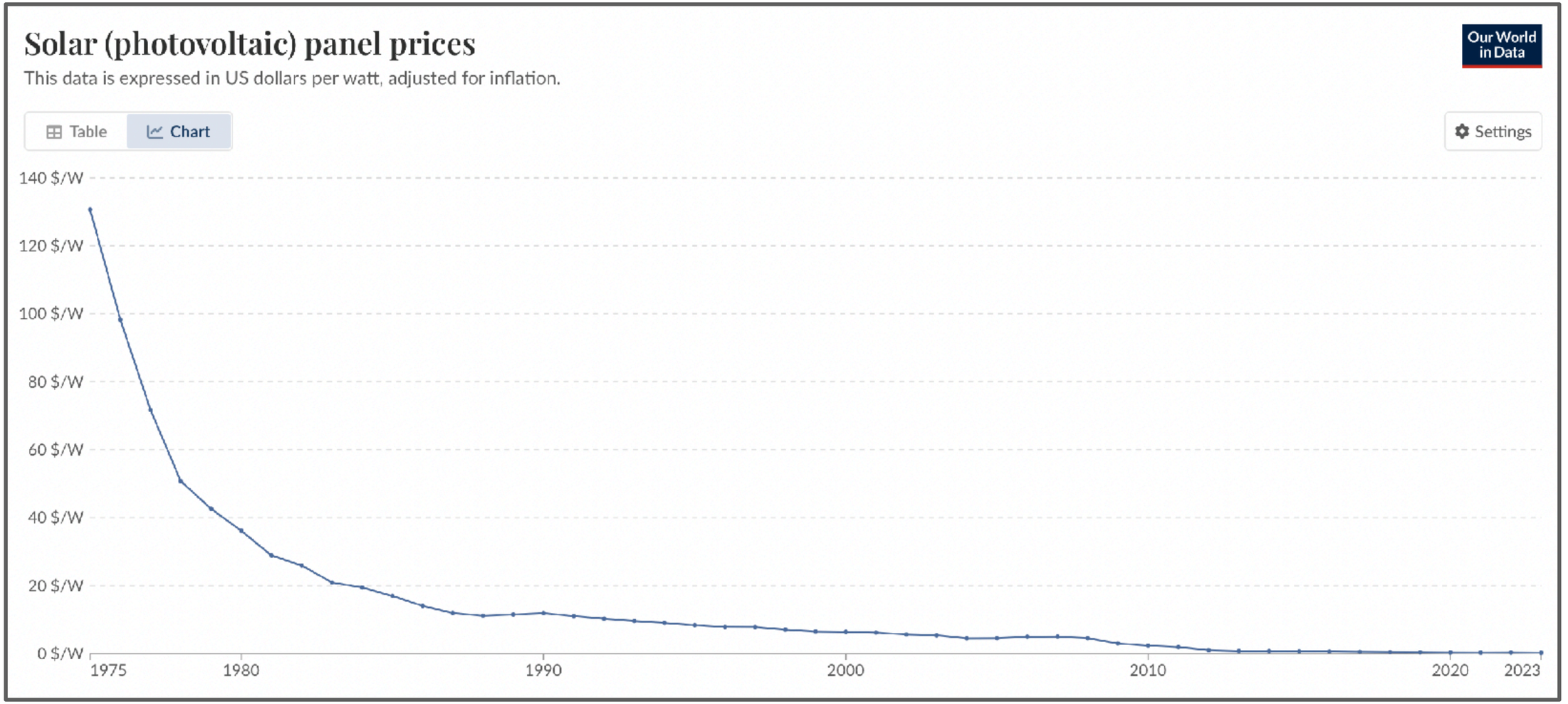
Finding hope, meaning, and purpose
in the midst of a climate & ecological crisis

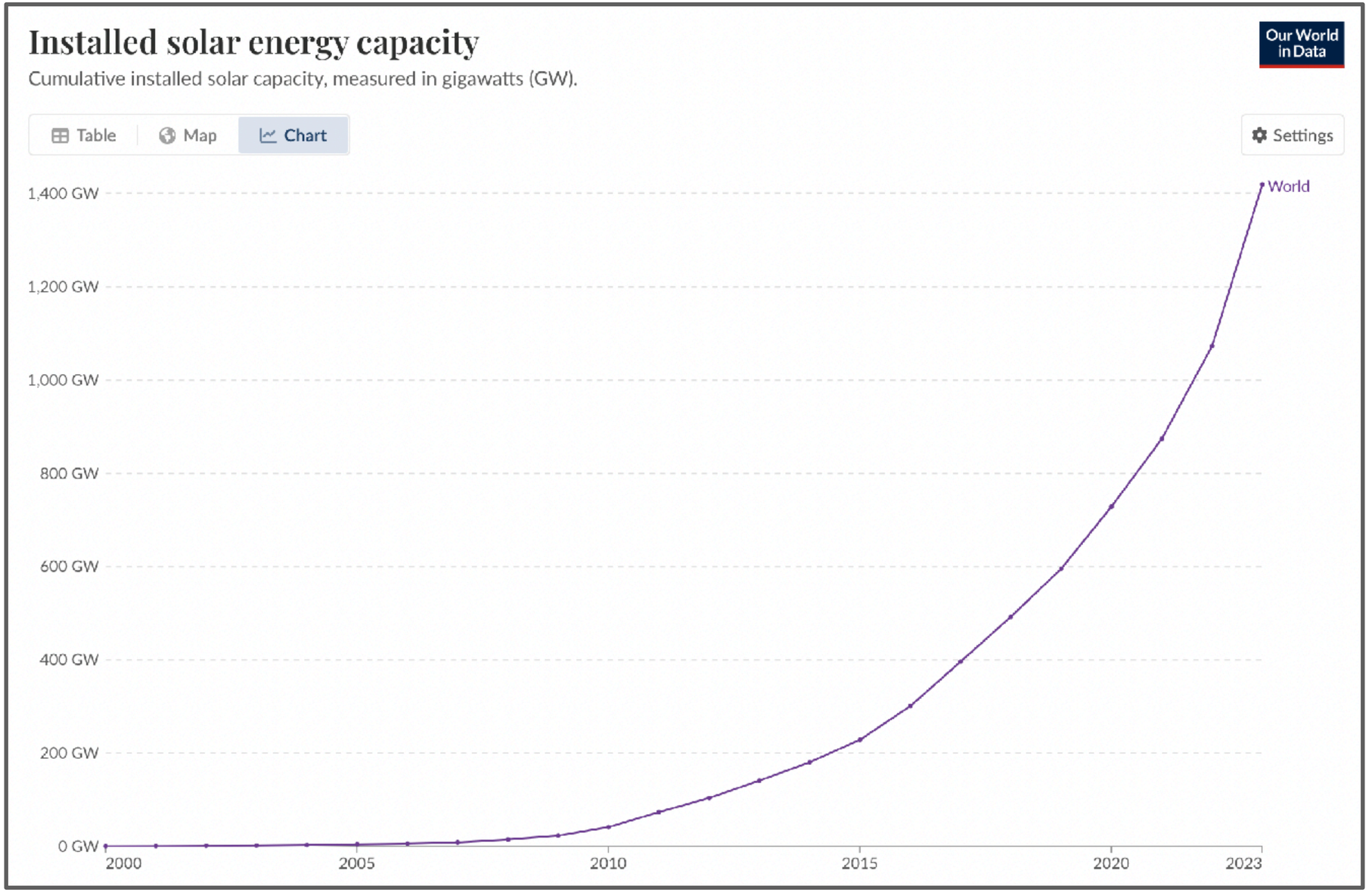
James Dyke
Associate Professor Earth System Science
University of Exeter | www.jamesgdyke.info

WE ARE GOING TO WIN

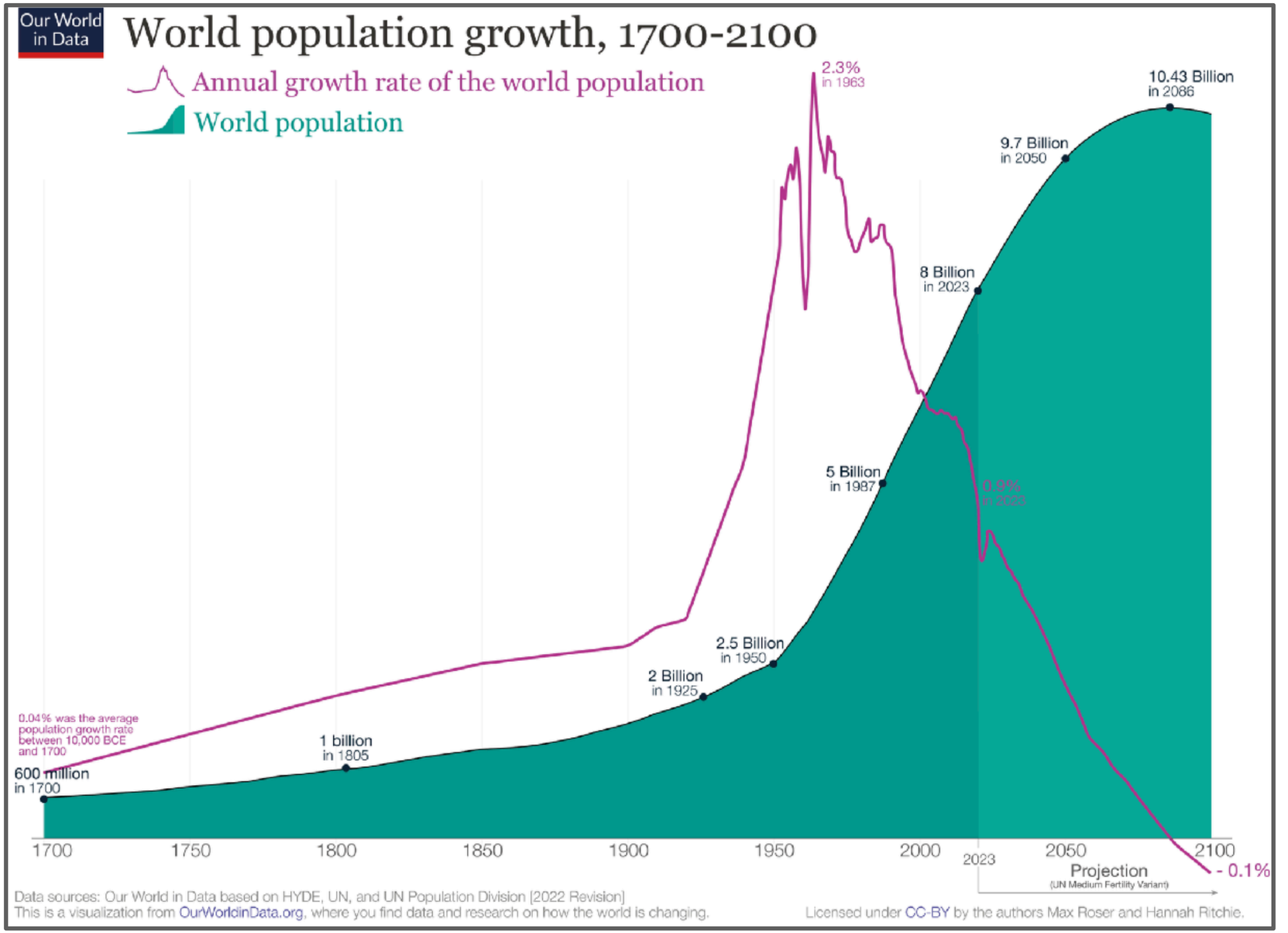
QUESTION IS:
HOW FAST?



https://ourworldindata.org/grapher/solar-pv-prices?yScale=linear



https://ourworldindata.org/grapher/installed-solar-pv-capacity?country=~OWID_WRL



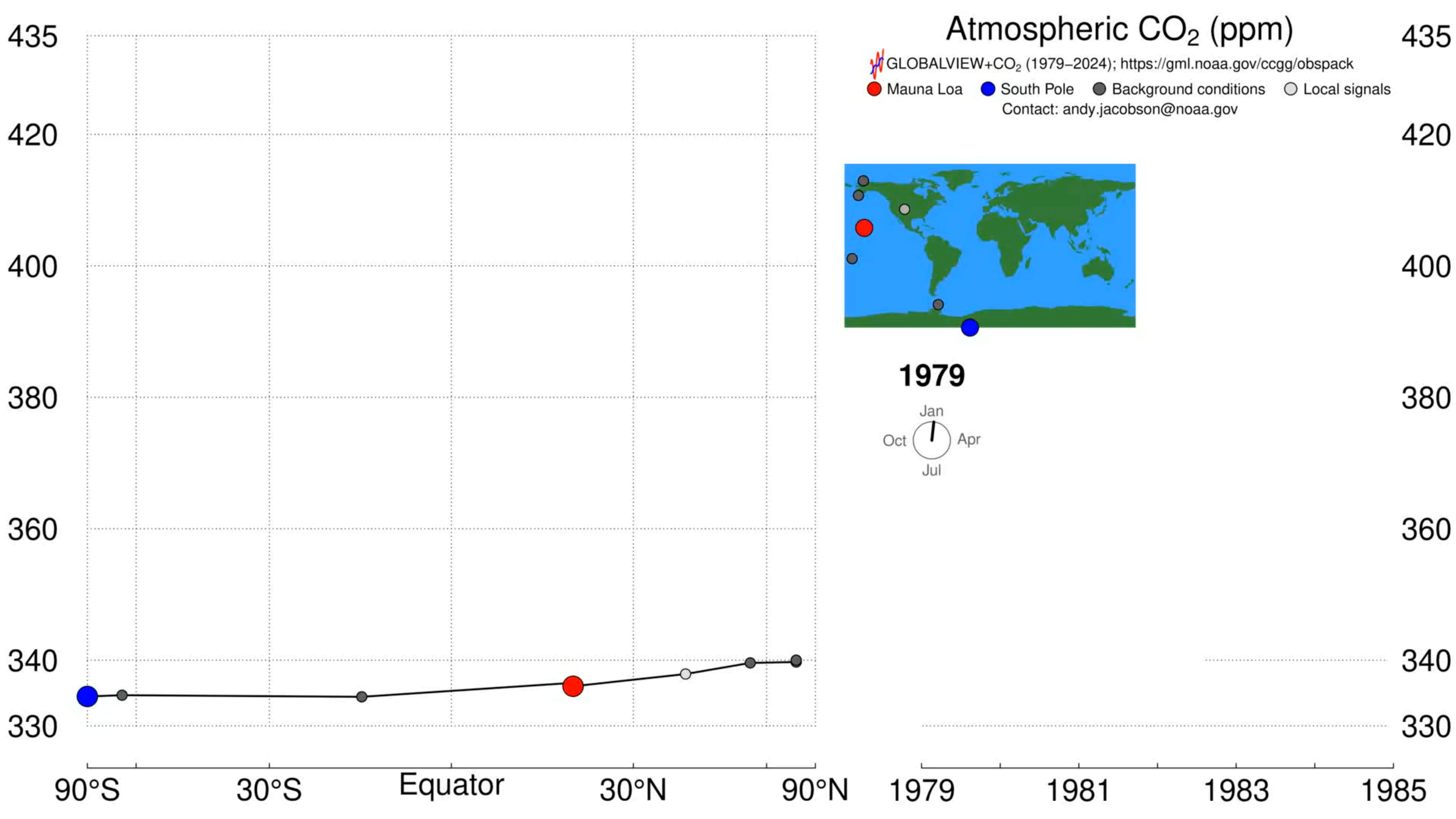
https://ourworldindata.org/population-growth#two-centuries-of-rapid-global-population-growth-will-come-to-an-end

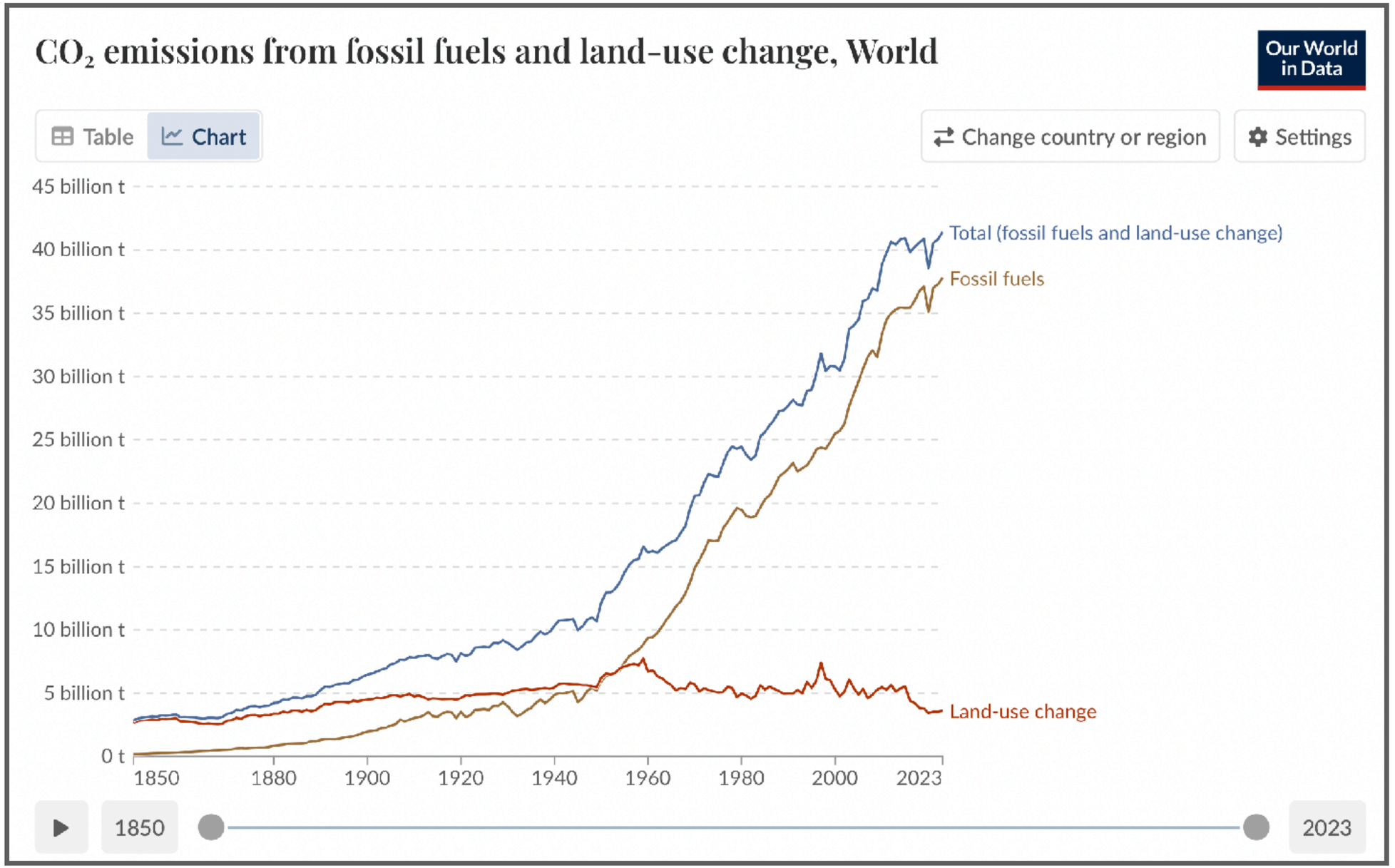
YES WE CAN

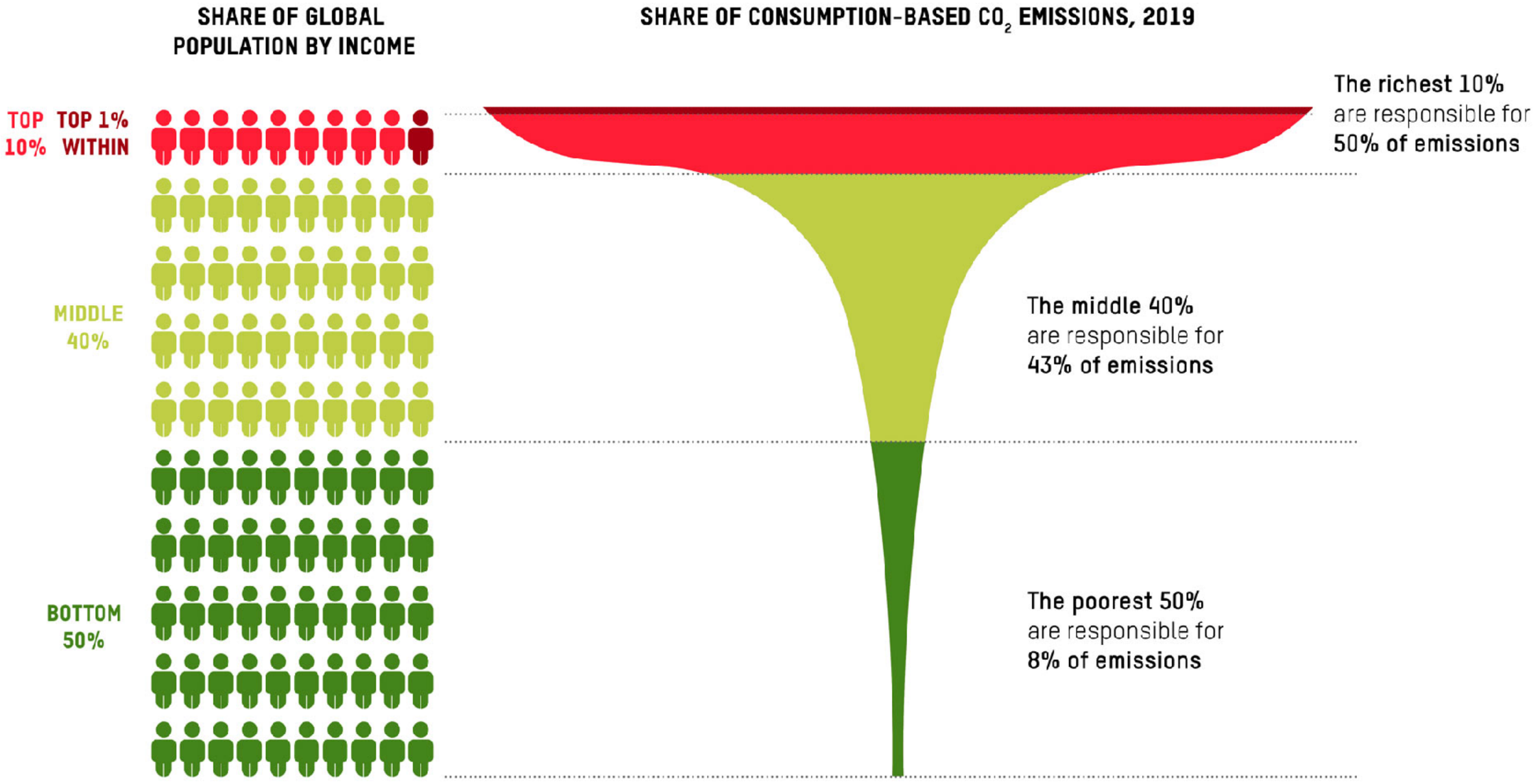
YES WE CAN

NO WE DIDN’T


I’m as mad as hell, and I’m not going to take it anymore


Atmospheric CO_2 (ppm)
GLOBALVIEW+CO_2 (1979–2024); https://gml.noaa.gov/ccgg/obspack
Mauna Loa
South Pole
Background conditions
Local signals
Contact: andy.jacobson@noaa.gov
1979
Jan
Apr
Jul
Oct
435
420
400
380
360
340
330
90°S
30°S
Equator
30°N
90°N
1979
1981
1983
1985


CO_2 emissions from fossil fuels and land-use change, World
Our World in Data
Table
Chart
Change country or region
Settings
45 billion t
40 billion t
35 billion t
30 billion t
25 billion t
20 billion t
15 billion t
10 billion t
5 billion t
0 t
1850
1880
1900
1920
1940
1960
1980
2000
2023
Total (fossil fuels and land-use change)
Fossil fuels
Land-use change
1850
2023

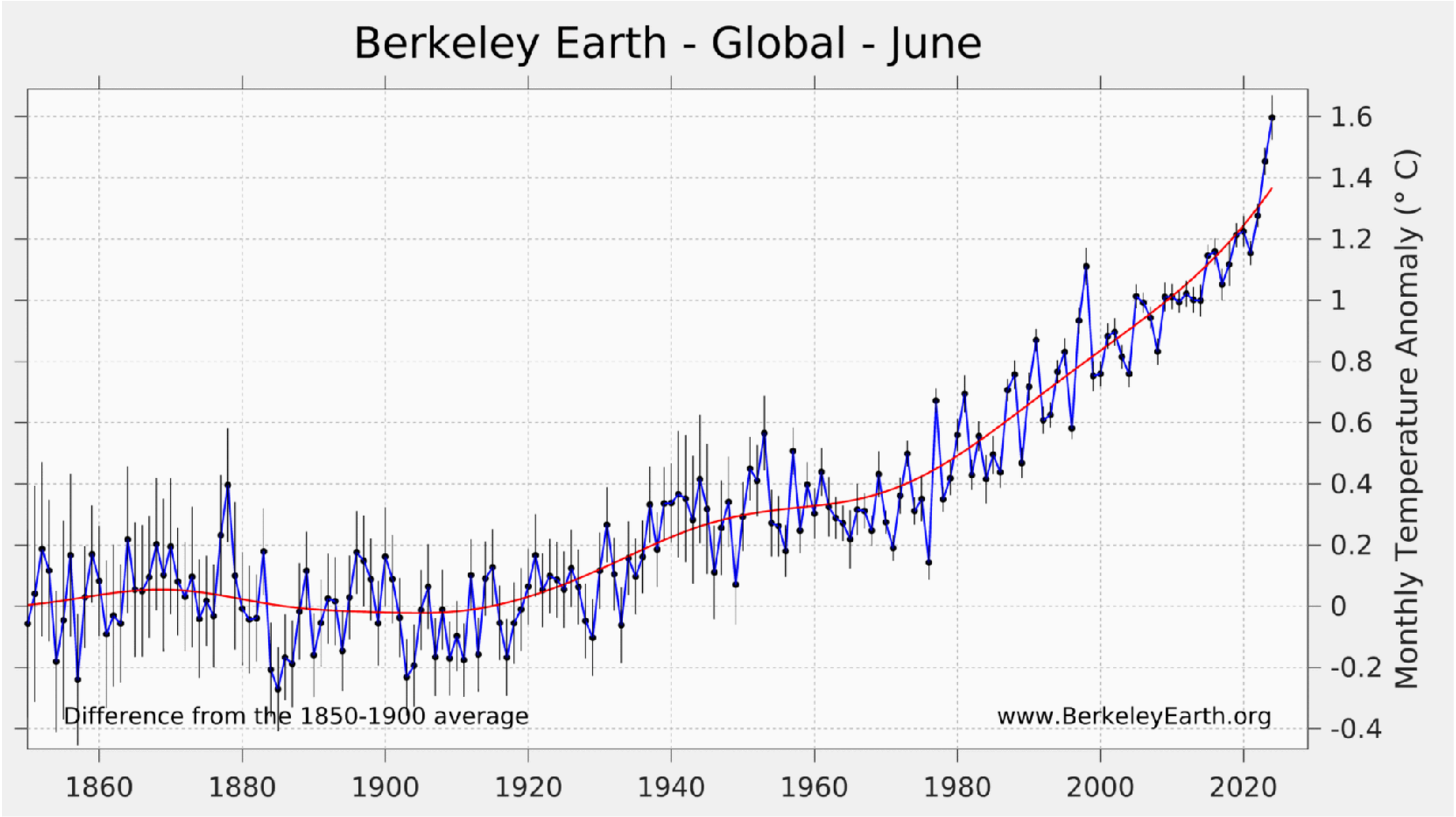


https://makerichpolluterspay.org/climate-equality-report/

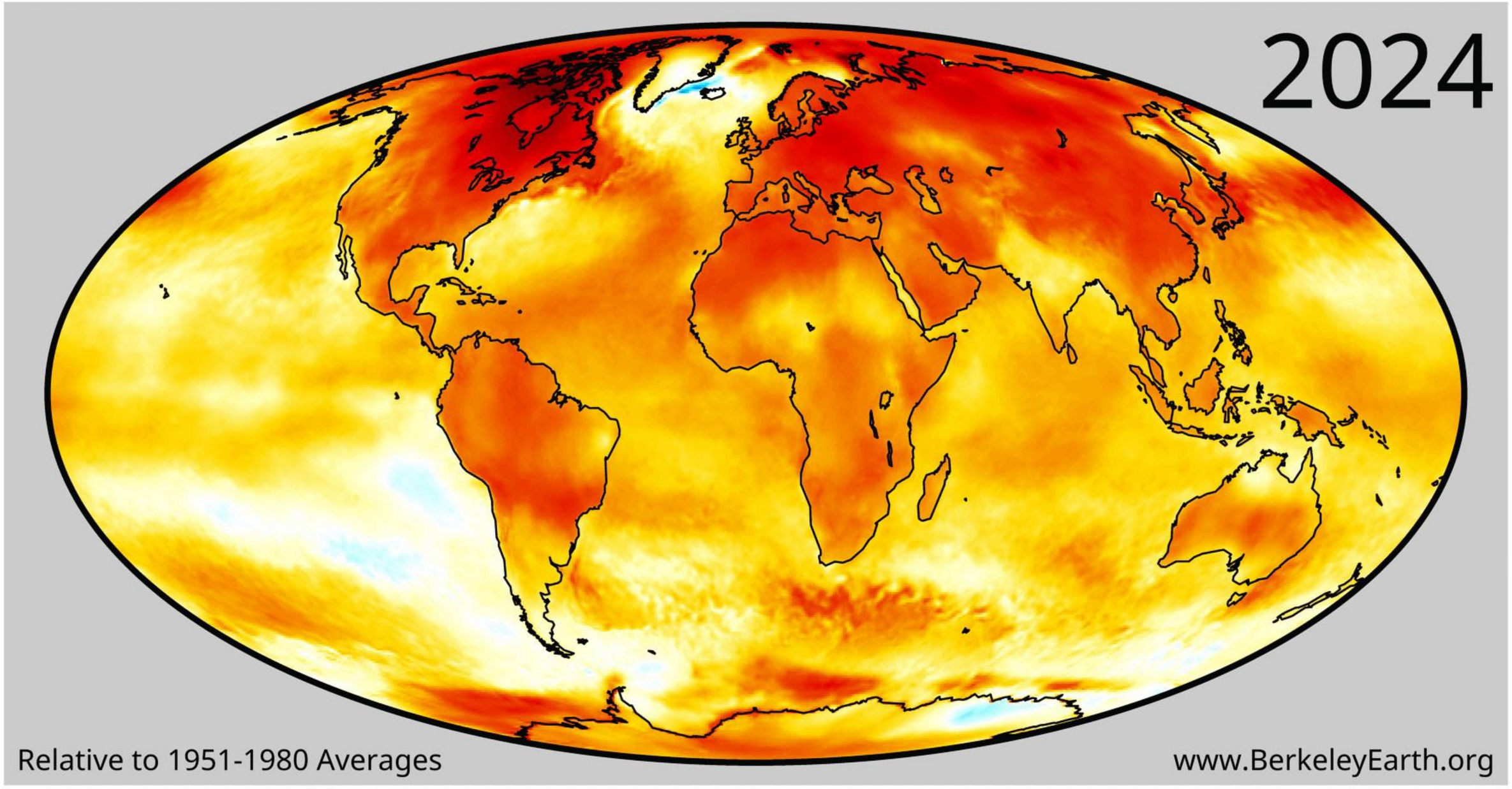
Paris talks in 2015 agreed that

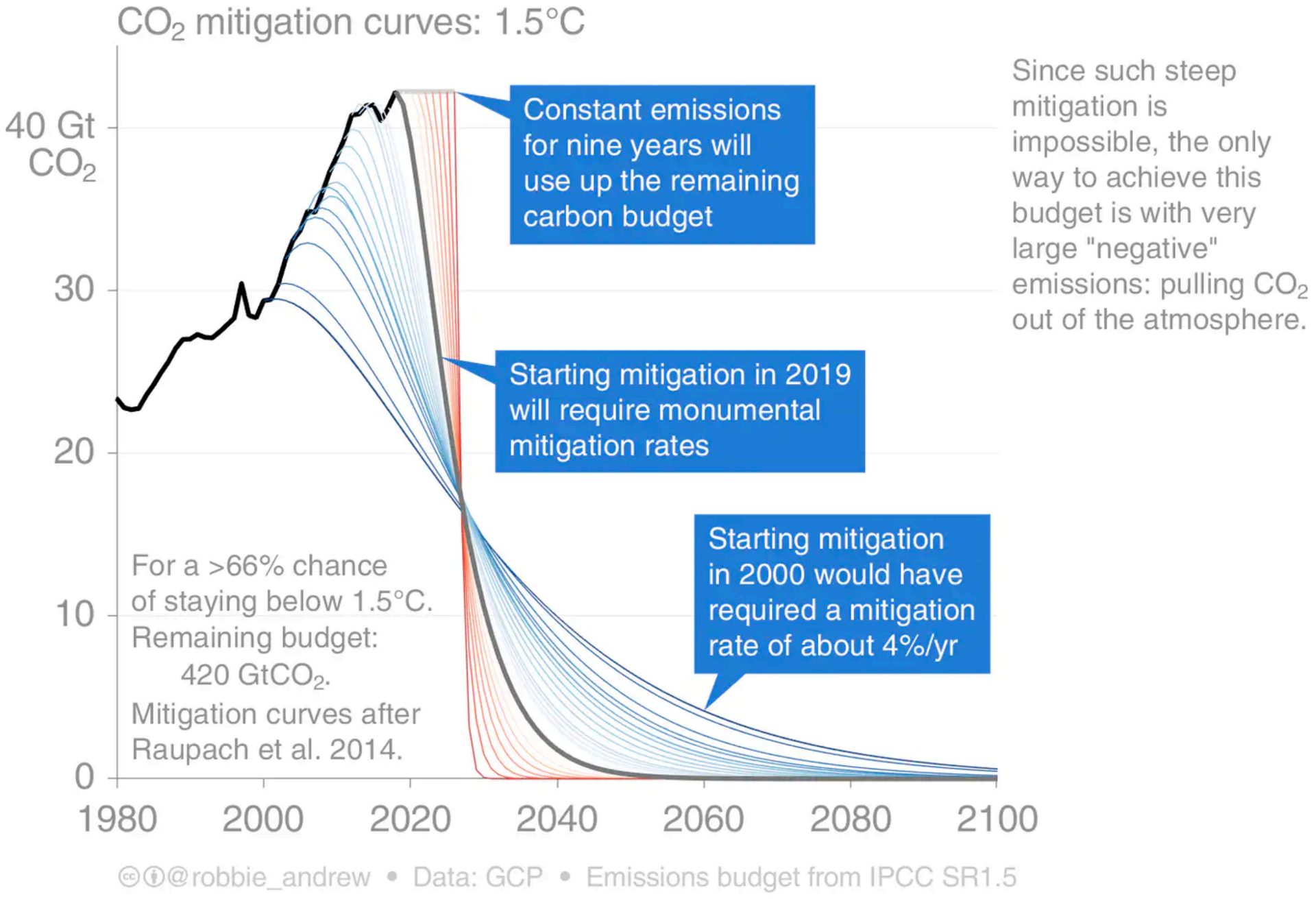
dangerous “well below” 2°C above 1850-1900

Glasgow talks in 2021 emphasised
dangerous as 1.5°C above 1850-1900

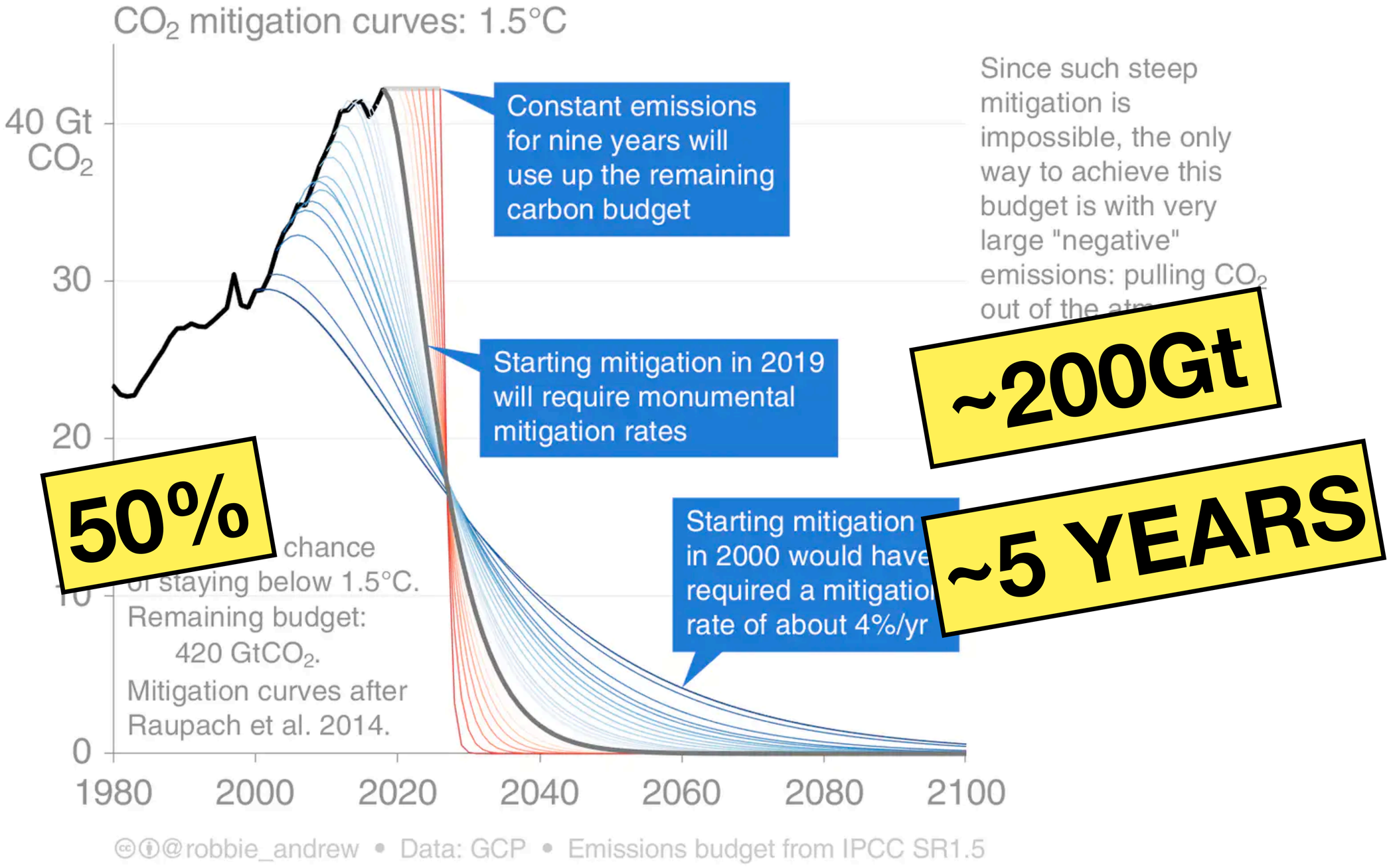


https://berkeleyearth.org/june-2024-temperature-update/

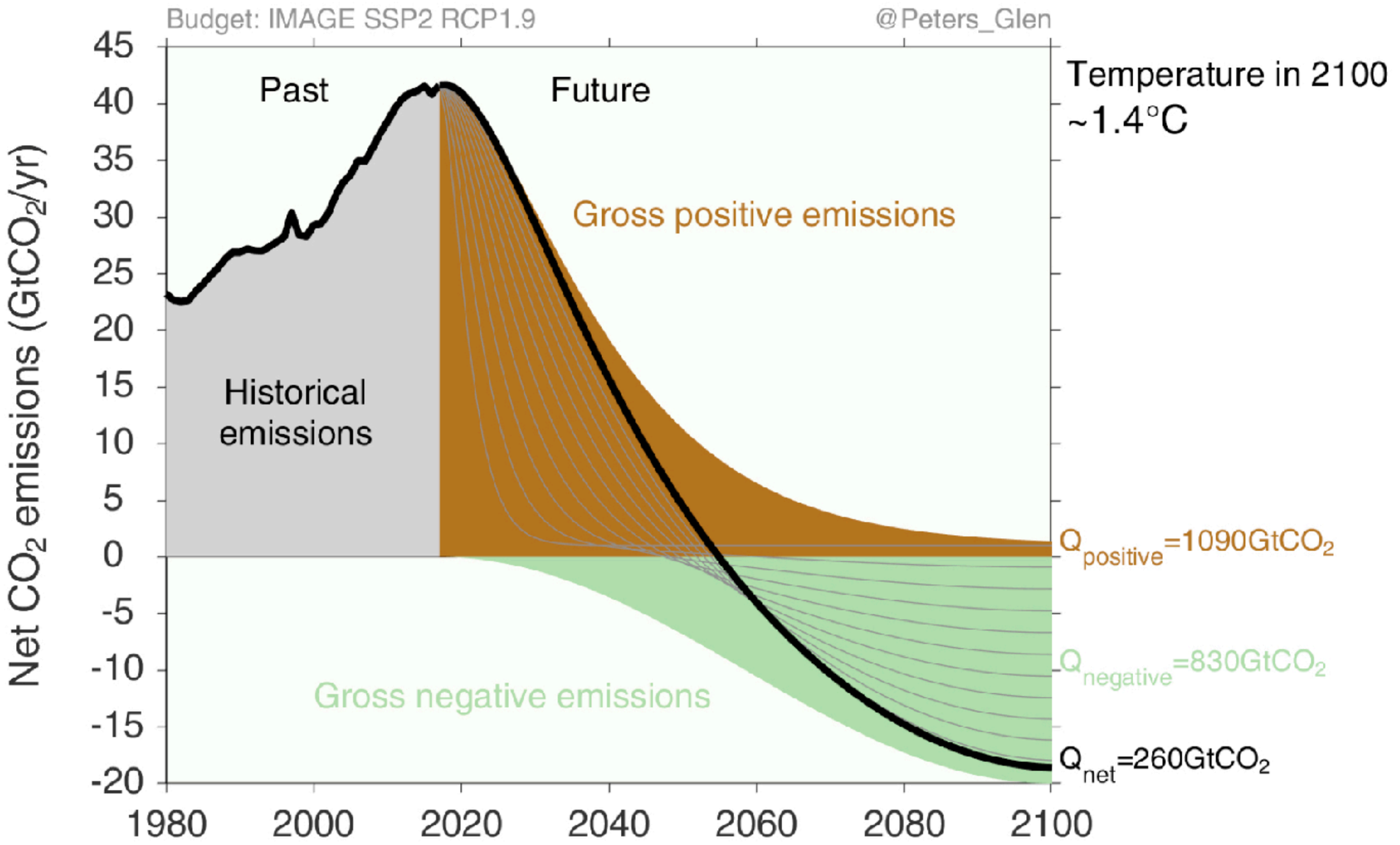

2024
Relative to 1951-1980 Averages
www.BerkeleyEarth.org
-6
-4
-2
-1
-0.5
0
0.5
1
2
4
6
Temperature
Anomaly (° C)



Since such steep mitigation is impossible, the only way to achieve this budget is with very large "negative" emissions: pulling CO_2 out of the atmosphere.


CO_2 mitigation curves: 1.5°C
40 Gt CO_2
30
20
0
1980
2000
2020
2040
2060
2080
2100
Constant emissions for nine years will use up the remaining carbon budget
Starting mitigation in 2019 will require monumental mitigation rates
Starting mitigation in 2000 would have required a mitigation rate of about 4%/yr
Since such steep mitigation is impossible, the only way to achieve this budget is with very large "negative" emissions: pulling CO_2 out of the atm
~200Gt
~5 YEARS
50%
chance
of staying below 1.5°C.
Remaining budget:
420 $GtCO_2$.
Mitigation curves after
Raupach et al. 2014.
@robbie_andrew • Data: GCP • Emissions budget from IPCC SR1.5

1.5°C now relies on overshoot recovery



Increasing skepticism about overshoot

Article

Overconfidence in climate overshoot

https://doi.org/10.1038/s41586-024-08020-9
Received: 17 October 2023
Accepted: 29 August 2024
Open access
Check for updates

Carl-Friedrich Schleussner, Gaurav Ganti, Quentin Lejeune, Biqing Zhu, Peter Pfleiderer, Ruben Prütz, Philippe Ciais, Thomas L. Frölicher, Sabine Fuss, Thomas Gasser, Matthew J. Gidden, Chahan M. Kropf, Fabrice Lacroix, Robin Lamboll, Rosanne Martyr, Fabien Maussion, Jamie W. McCaughey, Malte Meinshausen, Matthias Mengel, Zebedee Nicholls, Yann Quilcaille, Benjamin Sanderson, Sonia I. Seneviratne, Jana Sillmann, Christopher J. Smith, Norman J. Steinert, Emily Theokritoff, Rachel Warren, Jeff Price & Joeri Rogelj

Global emission reduction efforts continue to be insufficient to meet the temperature goal of the Paris Agreement[1]. This makes the systematic exploration of so-called overshoot pathways that temporarily exceed a targeted global warming limit before drawing temperatures back down to safer levels a priority for science and policy[2-5]. Here we show that global and regional climate change and associated risks after an overshoot are different from a world that avoids it. We find that achieving declining global temperatures can limit long-term climate risks compared with a mere stabilization of global warming, including for sea-level rise and cryosphere changes. However, the possibility that global warming could be reversed many decades into the future might be of limited relevance for adaptation planning today. Temperature reversal could be undercut by strong Earth system feedbacks resulting in high near-term and continuing long-term warming[6,7]. To hedge and protect against high-risk outcomes, we identify the geophysical need for a preventive carbon dioxide removal capacity of several hundred gigatonnes. Yet, technical, economic and sustainability considerations may limit the realization of carbon dioxide removal deployment at such scales[8,9]. Therefore, we cannot be confident that temperature decline after overshoot is achievable within the timescales expected today. Only rapid near-term emission reductions are effective in reducing climate risks.

Schleussner, C.-F. et al. Overconfidence in climate overshoot. Nature 634. 366–373 (2024).

nature communications

Article

https://doi.org/10.1038/s41467-024-53466-0

Over-reliance on land for carbon dioxide removal in net-zero climate pledges

Received: 19 September 2023
Accepted: 11 October 2024
Published online: 25 October 2024
Check for updates

Kate Dooley, Kirstine Lund Christiansen, Jens Friis Lund, Wim Carton & Alister Self

Achieving net-zero climate targets requires some level of carbon dioxide removal. Current assessments focus on tonnes of CO_2 removed, without specifying what form these removals will take. Here, we show that countries' climate pledges require approximately 1 (0.9–1.1) billion ha of land for removals. For over 40% of this area, the pledges envisage the conversion of existing land uses to forests, while the remaining area restores existing ecosystems and land uses. We analyse how this demand for land is distributed geographically and over time. The results are concerning, both in terms of the aggregate area of land, but also the rate and extent of land use change. Our findings demonstrate a gap between governments' expected reliance on land and the role that land can realistically play in climate mitigation. This adds another layer to the observed shortcomings of national climate pledges and indicates a need for more transparency around the role of land in national climate mitigation plans.

Dooley, K., Christiansen, K. L., Lund, J. F., Carton, W. & Self, A. Over-reliance on land for carbon dioxide removal in net-zero climate pledges. *Nat. Commun.* **15**, 9118 (2024).

INSIGHTS

POLICY FORUM

CLIMATE POLICY

Sustainability limits needed for CO_2 removal

The true climate mitigation challenge is revealed by considering sustainability impacts

By Alexandra Deprez, Paul Leadley, Kate Dooley, Phil Williamson, Wolfgang Cramer, Jean-Pierre Gattuso, Aleksandar Rankovic, Eliot L. Carlson, Felix Creutzig

Many governments and industries are relying on future large-scale, land-based carbon dioxide (CO_2) removal (CDR) to avoid making necessary steep greenhouse gas (GHG) emission cuts today (1, 2). Not only does this risk locking us into a high overshoot above 1.5°C (3), but it will also increase biodiversity loss, imperiling the Kunming-Montreal Global Biodiversity Framework (KMGBF) goals (4). Such CDR deployments also pose major economic, technological, and social feasibility challenges; threaten food security and human rights; and risk overstepping multiple planetary boundaries, with potentially irreversible consequences (1, 5, 6). We propose three ways to build on the Intergovernmental Panel on Climate Change (IPCC) analyses of CDR mitigation potential by assessing sustainability risks associated with land-use change and biodiversity loss; estimate the sustainable CDR budget based on socioecological thresholds; identify viable mitigation pathways that do not overstep those thresholds; and reframe governance around allocating limited CDR supply to the most legitimate uses.

Achieving the Paris Agreement climate goals primarily depends on deep, rapid, and

We assess risks to biodiversity and other impacts of land-use change arising from bioenergy with carbon capture and storage (BECCS) and afforestation and reforestation (A/R), the two CDR approaches most used in climate mitigation scenarios (3); and "nature-based" CDR (which includes various ecosystem restoration approaches). From this, we highlight ways forward for scientists at the start of the IPCC's seventh assessment cycle and for policy-makers and economic actors to heed the call at the December meeting (COP28) of the United Nations Framework Convention on Climate Change (UNFCCC) for deep emission cuts to keep the 1.5°C goal in reach.

SUSTAINABILITY LIMITS

The latest IPCC Working Group III (WGIII) report estimates the upper "technical mitigation potential" of BECCS and A/R at 11.3 and 10 gigatonnes of CO_2 per year ($GtCO_2$/year), respectively (3). Together, this could require converting up to 29 million km^2 of land—over three times the area of the United States—to bioenergy crops or trees, and potentially push over 300 million people into food insecurity [see supplementary materials (SM)]. The upper end of the IPCC's BECCS technical potential does not take into account socioeconomic barriers or the transgression of planetary boundaries, but the A/R potential takes into consideration food security and environmental impacts.

To address these issues, we have harmonized indicators and clearly identified assumptions (see SM). For example, assumptions for BECCS include projected future bioenergy and food crop yields; available land and impacts of land conversion; conversion efficiency of biomass to energy; and capture efficiency of emitted CO_2 (see SM).

Accounting for biodiversity losses and other land-use impacts, we find that high risk levels for BECCS and "nature-based" CDR start well below the IPCC's mean technical potential, and the A/R threshold from medium to high risk is at the level of IPCC mean technical potential (see the figure and SM). We find that the upper bounds of low risk for BECCS from dedicated bioenergy crops and residues are 0.7 and 1.2 $GtCO_2$/year for low and medium conversion and capture efficiencies, respectively (see the figure and SM). Corresponding upper bounds of medium risk are 1.3 and 2.8 $GtCO_2$/year for low and medium conversion and capture efficiencies. We consider that these upper bounds of medium risk indicate the limit between acceptable and unacceptable impacts; if exceeded, there are high risks to biodiversity, water availability, biogeochemical cycles, and competition for food production, which occur when around 1.5 million km^2 of land is dedicated to bioenergy crops (5) (SM).

Hence, upper bounds of both low and medium risk for BECCS are far lower than

Deprez, A. *et al.* Sustainability limits needed for CO2 removal. *Science* **383**, 484–486 (2024).

nature climate change

Analysis

https://doi.org/10.1038/s41558-024-01984-6

The carbon dioxide removal gap

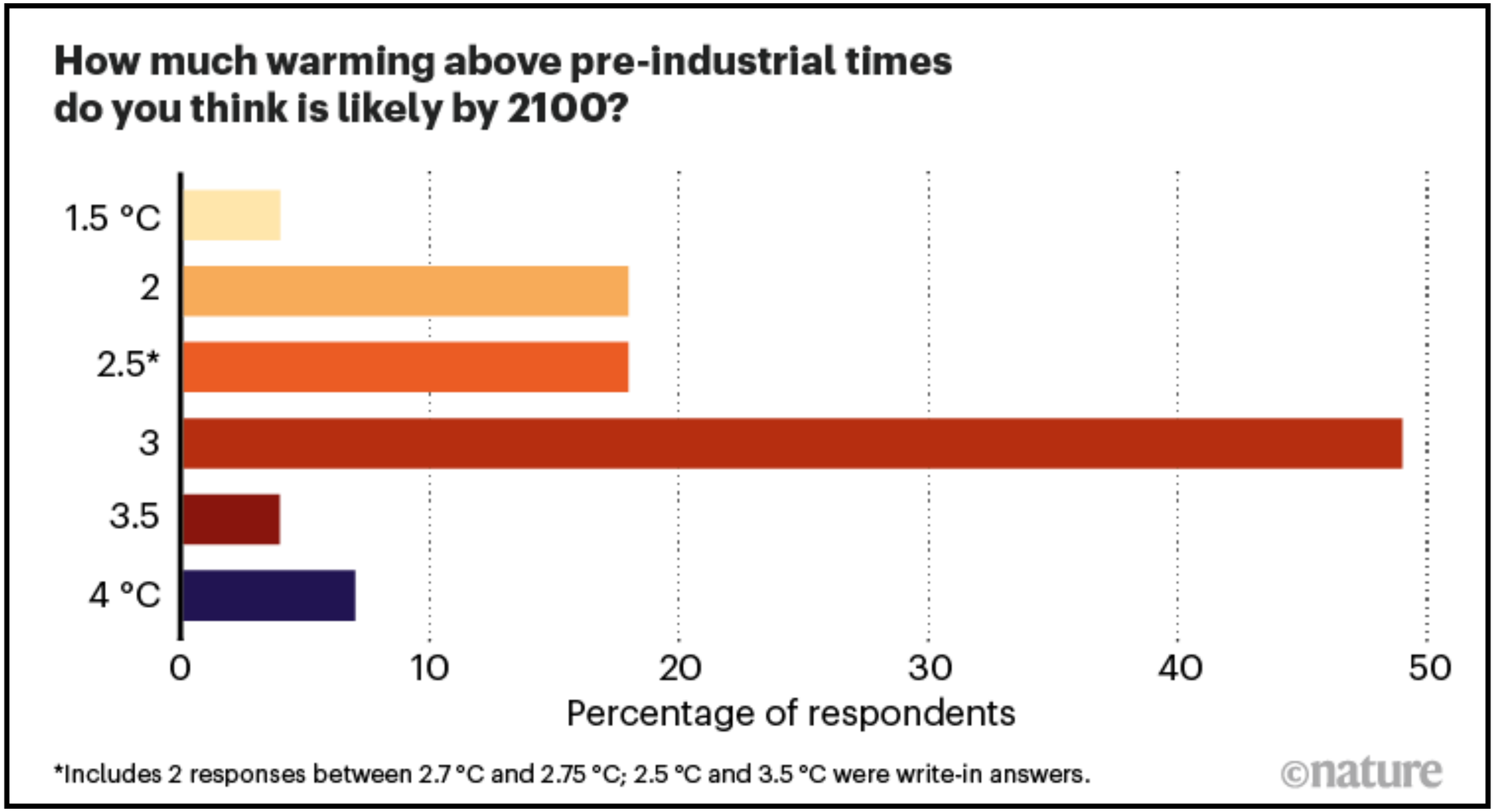
Received: 11 July 2023
Accepted: 19 March 2024
Published online: 03 May 2024
Check for updates

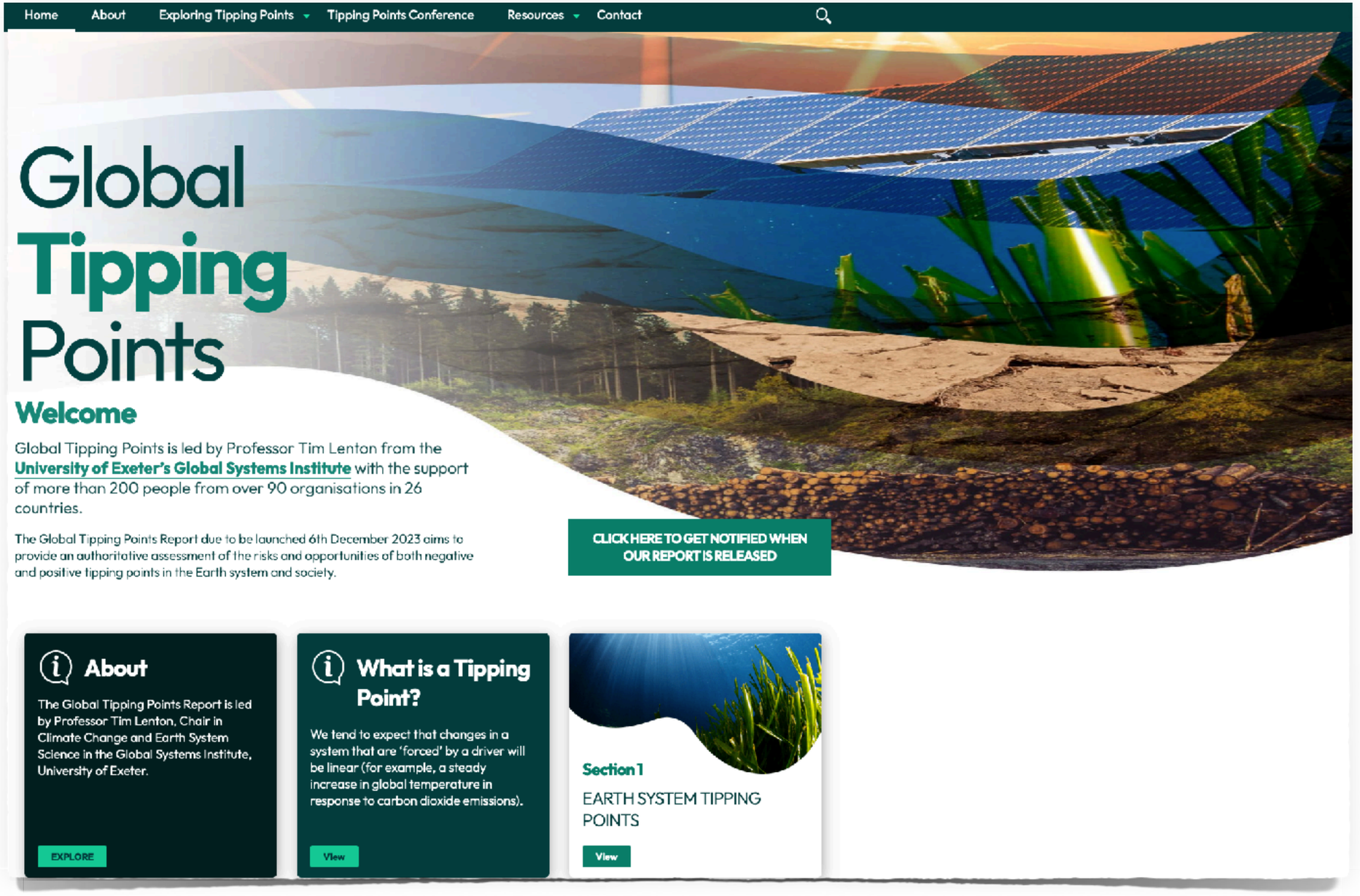
William F. Lamb, Thomas Gasser, Rosa M. Roman-Cuesta, Giacomo Grassi, Matthew J. Gidden, Carter M. Powis, Oliver Geden, Gregory Nemet, Yoga Pratama, Keywan Riahi, Stephen M. Smith, Jan Steinhauser, Naomi E. Vaughan, Harry B. Smith & Jan C. Minx

Rapid emissions reductions, including reductions in deforestation-based land emissions, are the dominant source of global climate mitigation potential in the coming decades. However, carbon dioxide removal (CDR) will also have an important role to play. Despite this, it remains unclear whether current national proposals for CDR align with temperature targets. Here we show the 'CDR gap', that is, CDR efforts proposed by countries fall short of those in integrated assessment model scenarios that limit warming to 1.5 °C. However, the most ambitious proposals for CDR are close to levels in a low-energy demand scenario with the most-limited CDR scaling and aggressive near-term emissions reductions. Further, we observe that many countries propose to expand land-based removals, but none yet commit to substantively scaling novel methods such as bioenergy carbon capture and storage, biochar or direct air carbon capture and storage.

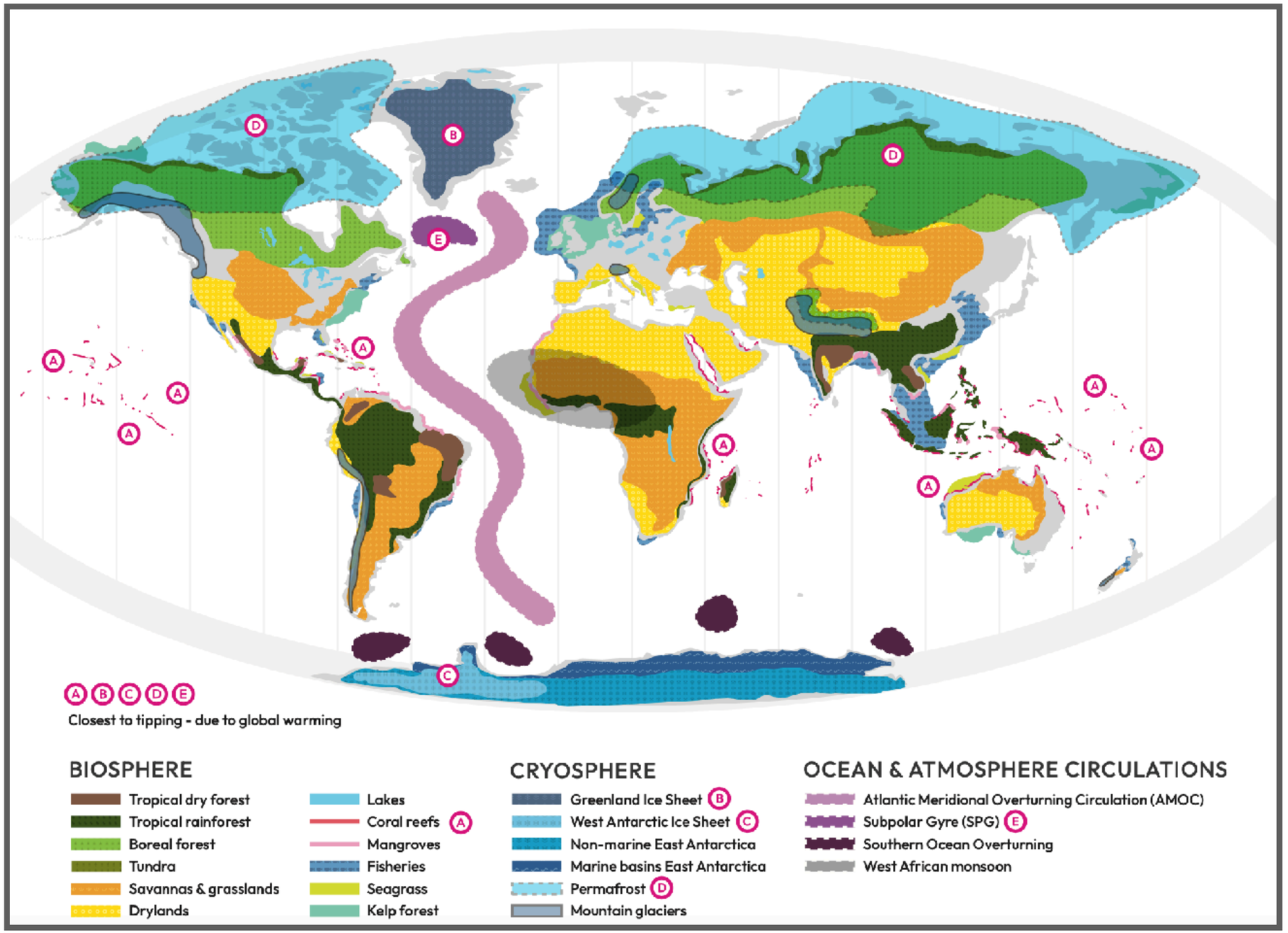
Lamb, W. F. *et al.* The carbon dioxide removal gap. *Nat. Clim. Chang.* 1–8 (2024) doi:10.1038/


SAMSUNG
23
THIS IS FINE.


How much warming above pre-industrial times do you think is likely by 2100?
1.5 °C
2
2.5*
3
3.5
4 °C
0
10
20
30
40
50
Percentage of respondents
*Includes 2 responses between 2.7 °C and 2.75 °C; 2.5 °C and 3.5 °C were write-in answers.
©nature



https://global-tipping-points.org/



T. M. Lenton, D.I. Armstrong McKay, S. Loriani, J.F. Abrams, S.J. Lade, J.F. Donges, M. Milkoreit, T. Powell, S.R. Smith, C. Zimm, J.E. Buxton, E. Bailey, L. Laybourn, A. Ghadiali, J.G. Dyke (eds), 2023, The Global Tipping Points Report 2023. University of Exeter, Exeter, UK.

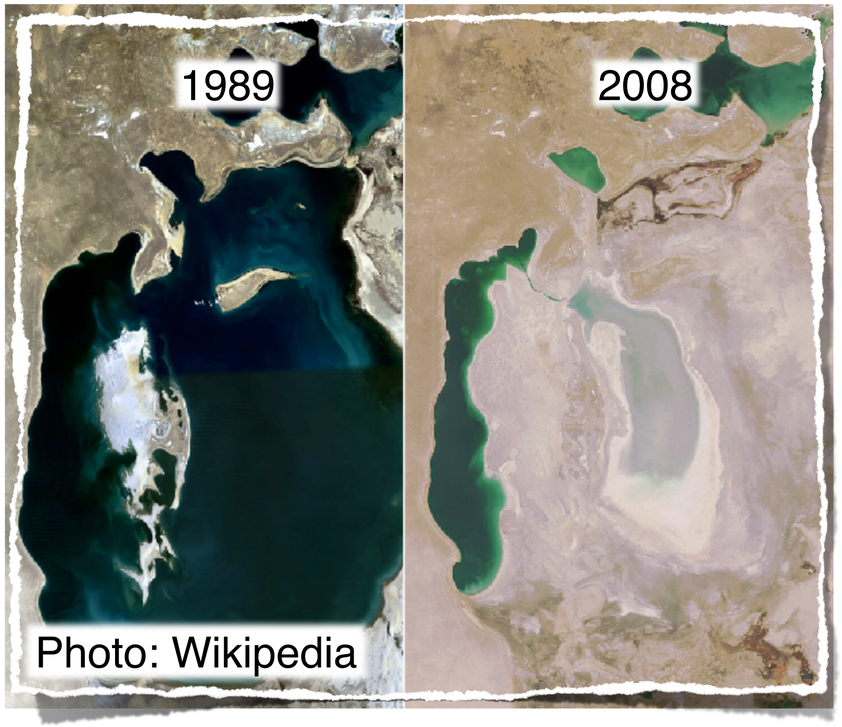

1989
2008
Photo: Wikipedia


Image: Wikipedia


Photo: Greenpeace

Donald J. Trump
@realDonaldTrump

Following

NBC News just called it the great freeze - coldest weather in years. Is our country still spending money on the GLOBAL WARMING HOAX?

RETWEETS	LIKES
742	459

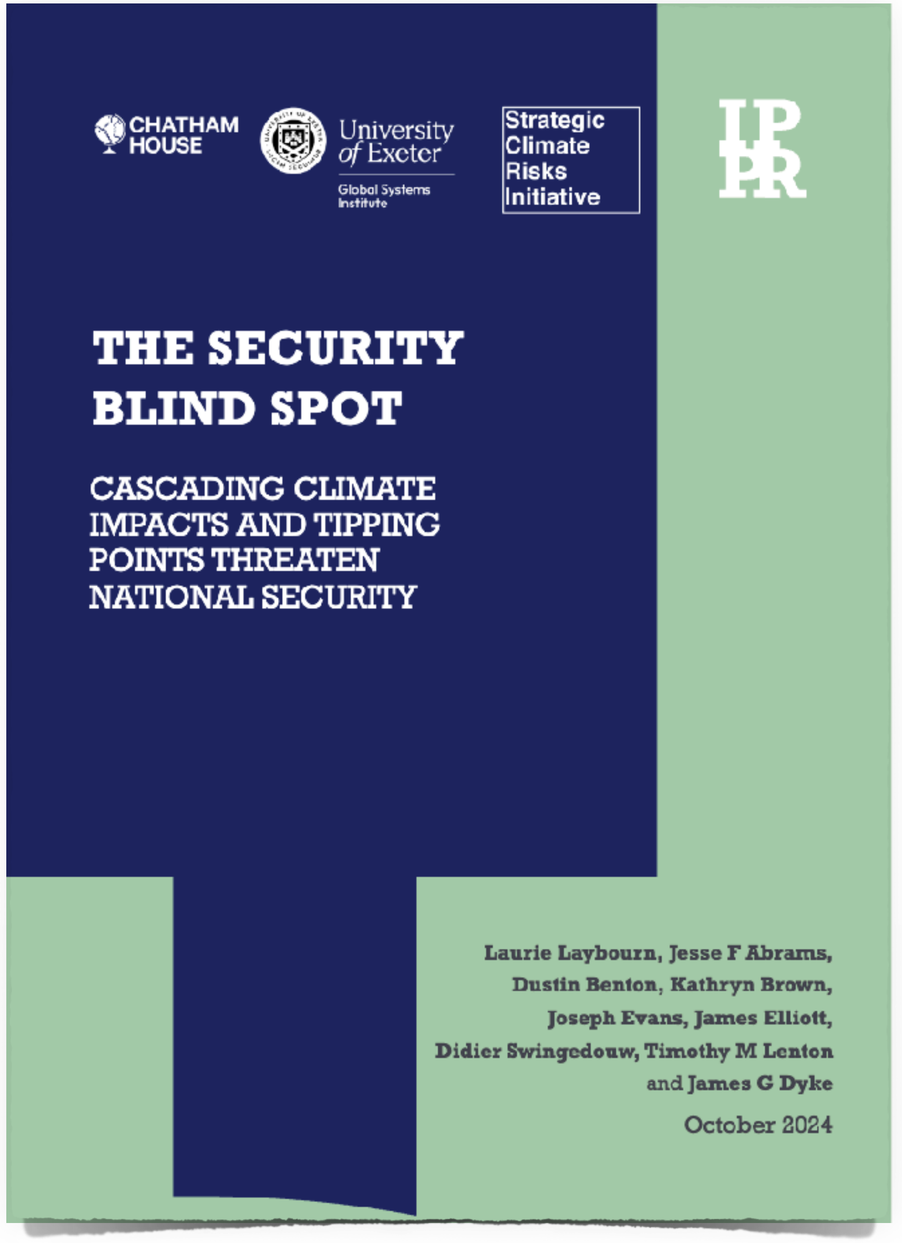
6:48 PM - 25 Jan 2014

Image: romania.fes.de/e/buzzwords-of-european-affairs-greenlash.html

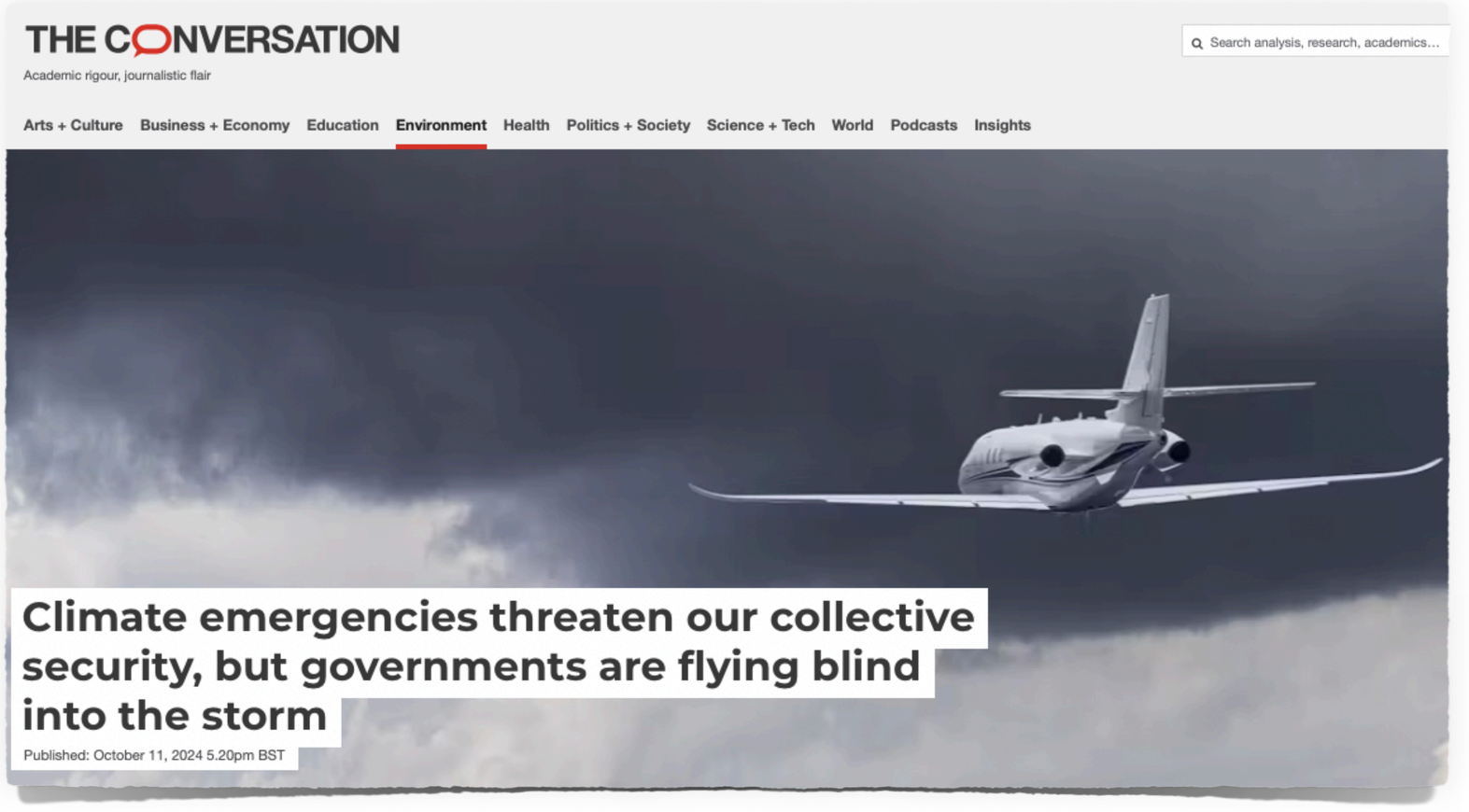

TRUMP


TRUMP


FINLAND
Stockholm
Gulf of Bothnia
Baltic Sea
Gotland
Oslo
Copenhagen
Malmö
Gothenburg
LITHUANIA
Vilnius
Kaunas
Warsaw
POLAND
Berlin
Kyiv
UKRAINE
Kharkiv
Dnipropetrovs'k
Zaporizhzhya
Mariupol
Donetsk
Rostov-na-Donu
Volgograd
Astrakhan
MOLDOVA
Odesa
ROMANIA
Caspian Sea
Baku



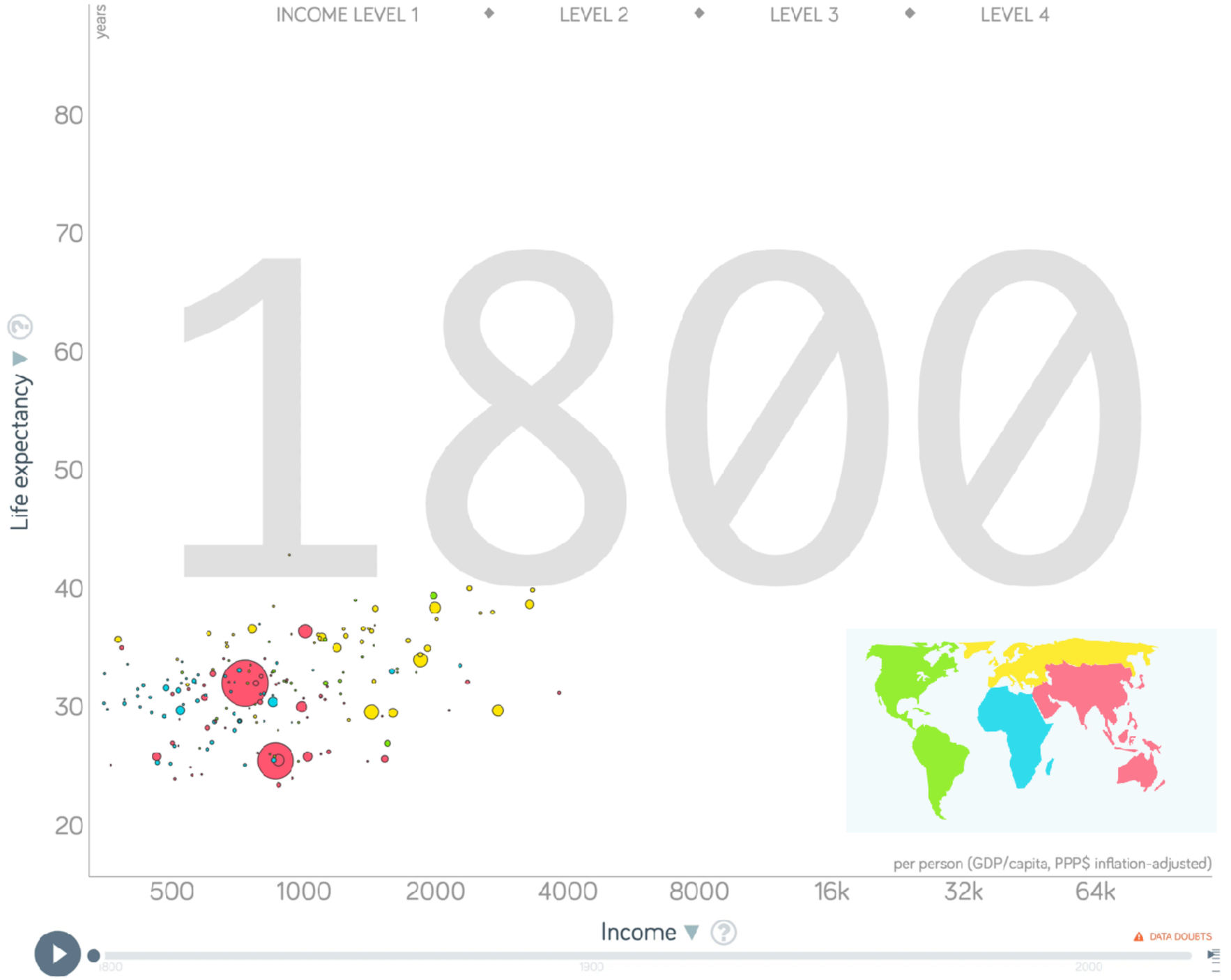
https://ippr-org.files.svdcdn.com/production/Downloads/The-security-blind-spot-October-24_2024-10-14-121035_uryr.pdf

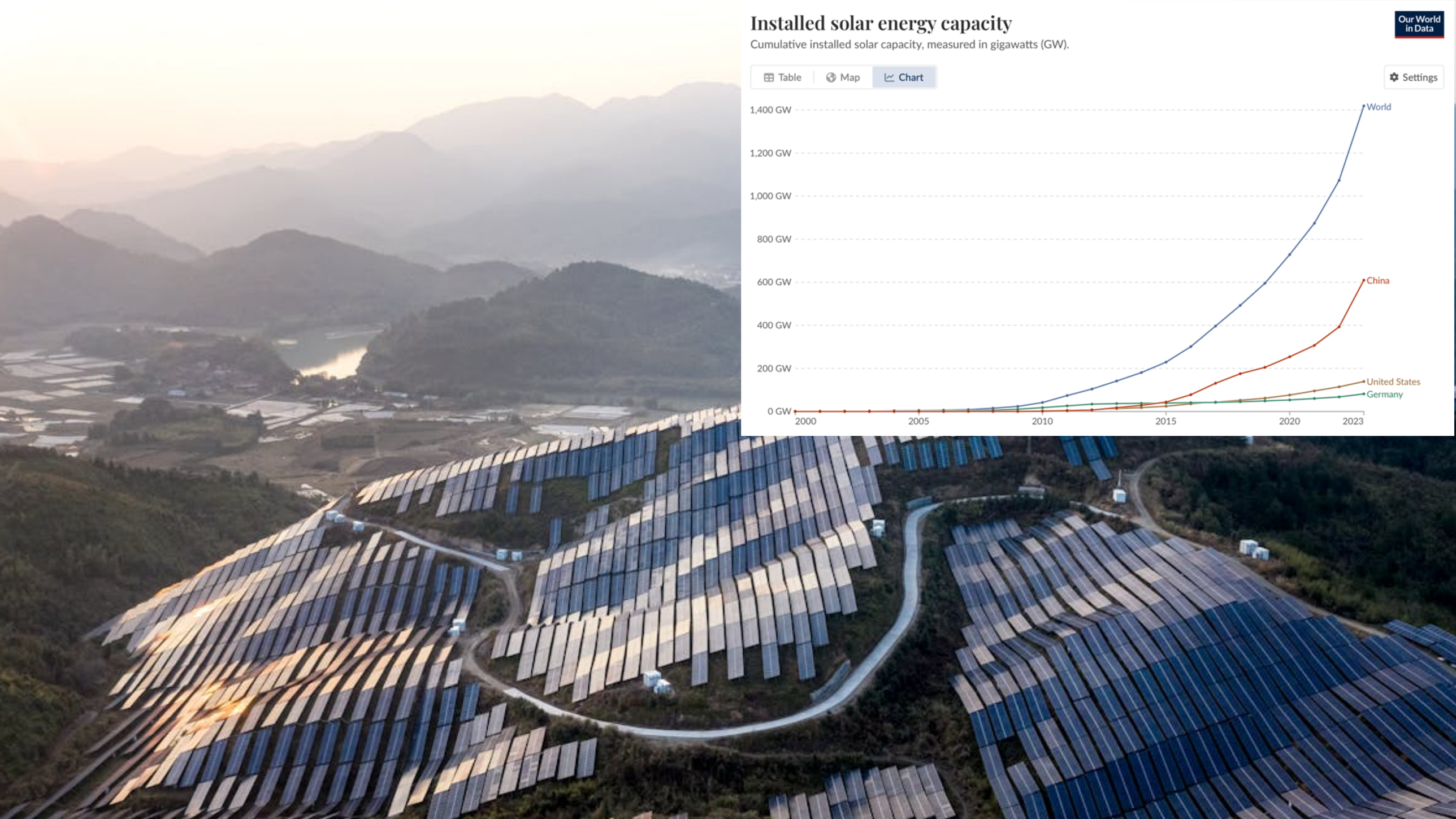


https://theconversation.com/climate-emergencies-threaten-our-collective-security-but-governments-are-flying-blind-into-the-storm-240814

HOW DID WE GET HERE?


GLOBAIA.ORG


INCOME LEVEL 1
LEVEL 2
LEVEL 3
LEVEL 4
years
80
70
60
50
40
30
20
1800
Life expectancy
per person (GDP/capita, PPP$ inflation-adjusted)
500
1000
2000
4000
8000
16k
32k
64k
Income
DATA DOUBTS
1800
1900
2000


Installed solar energy capacity
Cumulative installed solar capacity, measured in gigawatts (GW).
Our World in Data
Table
Map
Chart
Settings
1,400 GW
1,200 GW
1,000 GW
800 GW
600 GW
400 GW
200 GW
0 GW
2000
2005
2010
2015
2020
2023
World
China
United States
Germany


Finding hope,
meaning, and purpose
in the midst of a climate & ecological crisis


CREATING hope,
meaning, and purpose
in the midst of a climate & ecological crisis

1

STOP DOOMSCROLLING

When we feel out of control, doomscrolling can help us feel like we're gathering essential information – no matter how bad the news (Credit: Alamy)

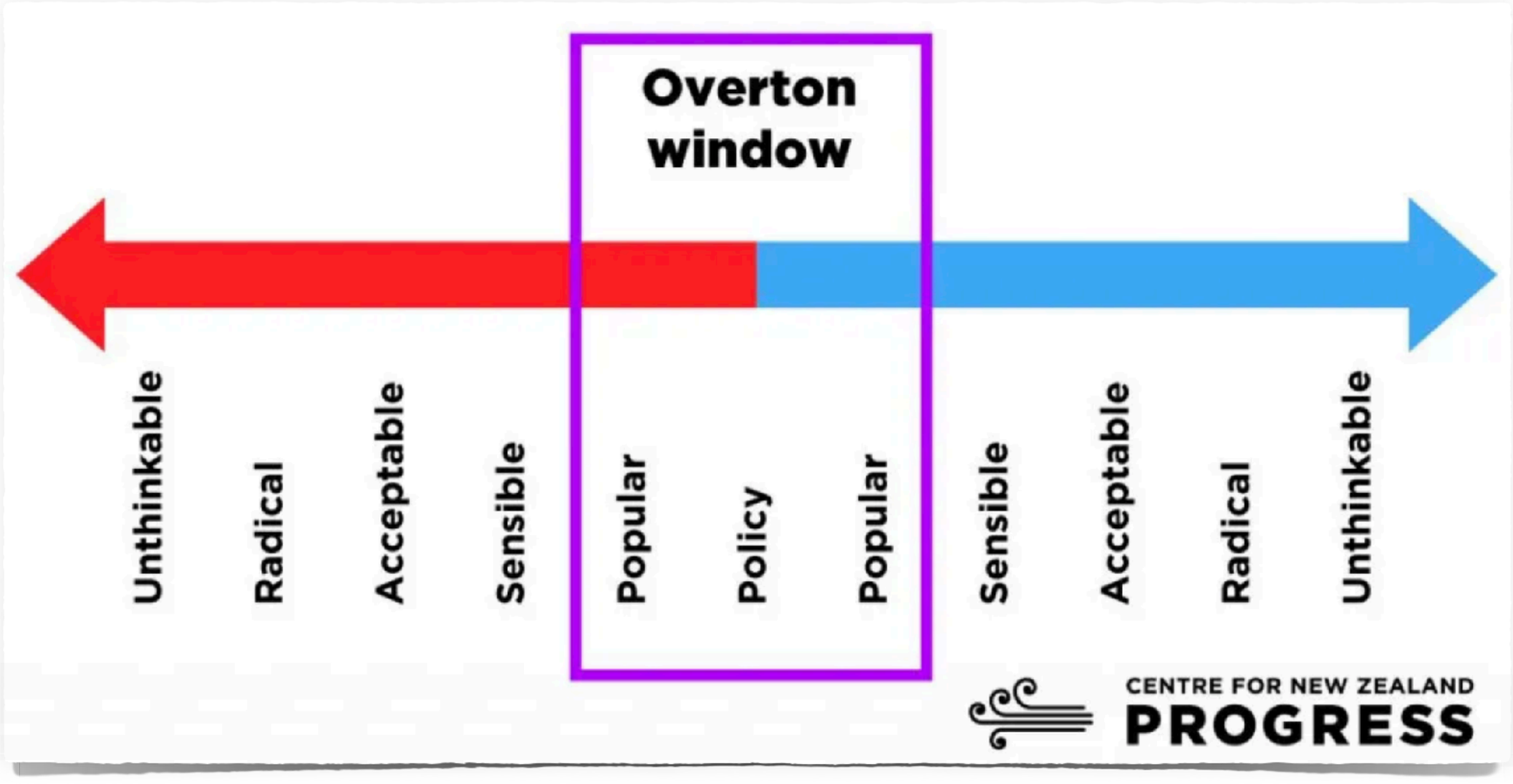
https://www.bbc.co.uk/worklife/article/20210226-the-darkly-soothing-compulsion-of-doomscrolling

2

YOU ARE NOT THE PROBLEM

THE PROBLEM IS
THE SYSTEM

ALL SYSTEMS CHANGE


Overton window
Unthinkable
Radical
Acceptable
Sensible
Popular
Policy
Popular
Sensible
Acceptable
Radical
Unthinkable
CENTRE FOR NEW ZEALAND
PROGRESS

3

YOU CAN CHANGE SYSTEMS

One drop of water does not make an ocean

But an ocean is nothing more than drops of water

(With apologies to oceanographers)


SKOLSTREJK
FÖR
KLIMATET
CLIMATE
SYSTEM
CHANGE
#BeSCHEUERT
NOT


What part of EMERGENCY do you NOT understand?
We SLEEP while our Planet WEEPS
RISE UP
CAPITAL
There is no Planet
NATURE ISNT CAPITAL
REBEL FOR LIFE
Climate
NON VIOLENT
STOP
REBEL FOR LIFE
THE SCIENCE IS EVIDENT WE HAVE THE TECHNOLOGY NOW WE NEED TO ACT
REBEL FOR LIFE
REBEL FOR LIFE
extinction rebellion


VOTES FOR WOMEN
MEETING
SSEX HALL ESSEX ST. STRAND
ON MONDAY, NOV. 25
IRS. DESPARD
ISS IRENE MILLER
MRS. EDITH HOW MARTYN
MISS NEILANS
VOTES FOR WOMEN
VOTES FOR WOMEN
MEETING
SSEX HALL ESSEX ST. STRAND
ON MONDAY, NOV. 25
MRS DESPARD
MISS IRENE MILLER
MRS. EDITH HOW MARTYN
MISS NEILANS
VOTES FOR WOMEN
MEETING
ON MONDAY NOV. 25
MRS. DESPARD
VOTES FOR WOMEN
MEETING


'HEARTBREAKINGLY SUBLIME'
IN CINEMAS OCTOBER 22
POLICE
INSULATE BRITAIN
INSULATE BRITAIN


CAZOO
CAZOO

Sabotage

Vandalism

Arson

Bombings

Physical attacks

The wins of the grassroots climate movement in the University of California

Monica Nelson[1], Cathy Gere[2], Adam Cooper[3], Varykina G. Thackray[4] and Adam R. Aron[5*]

https://www.frontiersin.org/journals/education/articles/10.3389/feduc.2025.1491439/full

The wins of the grassroots

Decarbonization and Electrification, Cutting Ties with Fossil Finance, and Climate Education for All. From shifting the focus to emission reductions rather than carbon offsets, to pushing Chase Bank out of the campus student center, to providing new undergraduate curricula, these wins are now reverberating throughout higher education in the United States and beyond. This movement has also provided an important pedagogical role by teaching organizing and activist skills to undergraduates so they can go forth and fight for their futures.

Varykina G. Thackray[4] and Adam R. Aron[5]*

https://www.frontiersin.org/journals/education/articles/10.3389/feduc.2025.1491439/full

4

DON’T BE
ALONE
JOIN OTHERS


THE wildlife TRUSTS
Warwickshire


Wild Futures
Protecting primates and habitats worldwide


Dormice in Danger
APPEAL


Suffolk Owl Sanctuary
Regd. Charity No. 1086565


Centre for Alternative Technology


THE wildlife TRUSTS
Derbyshire


MARINE STEWARDSHIP
COUNCIL


Scottish
Seabird
Centre


THE wildlife TRUSTS
SOMERSET


THE
NATURESAVE
TRUST


Bumblebee
Conservation
Trust


THE BARN OWL
TRUST
www.barnowltrust.org.uk


THE wildlife TRUSTS
Devon


LANCASTER
BEEKEEPERS


FIRTH of FORTH
LOBSTER
HATCHERY
NORTH BERWICK


CETACEAN RESEARCH
& RESCUE UNIT


THE wildlife TRUSTS
DURHAM

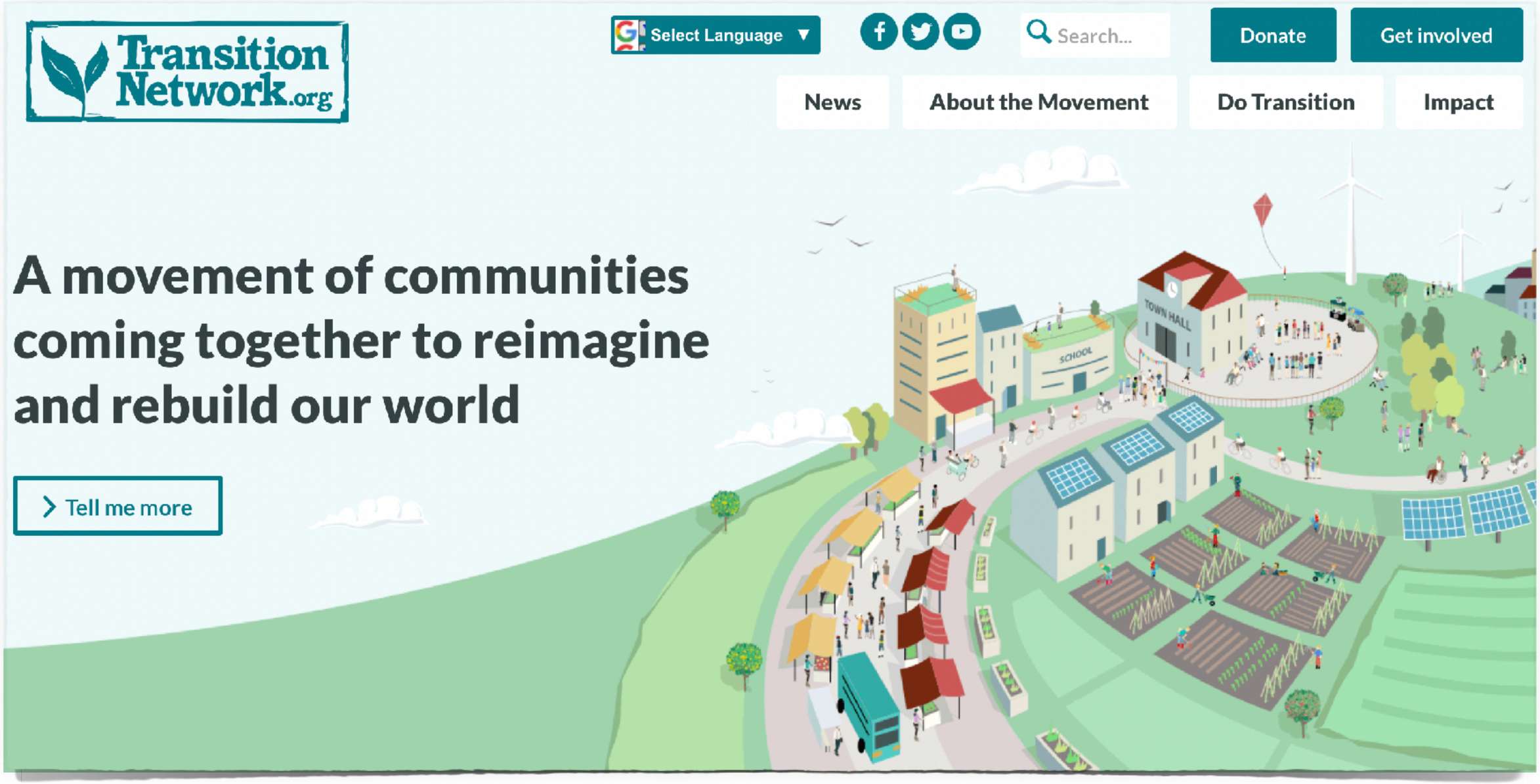

HELP FOR HEDGEHOGS


GREENPEACE

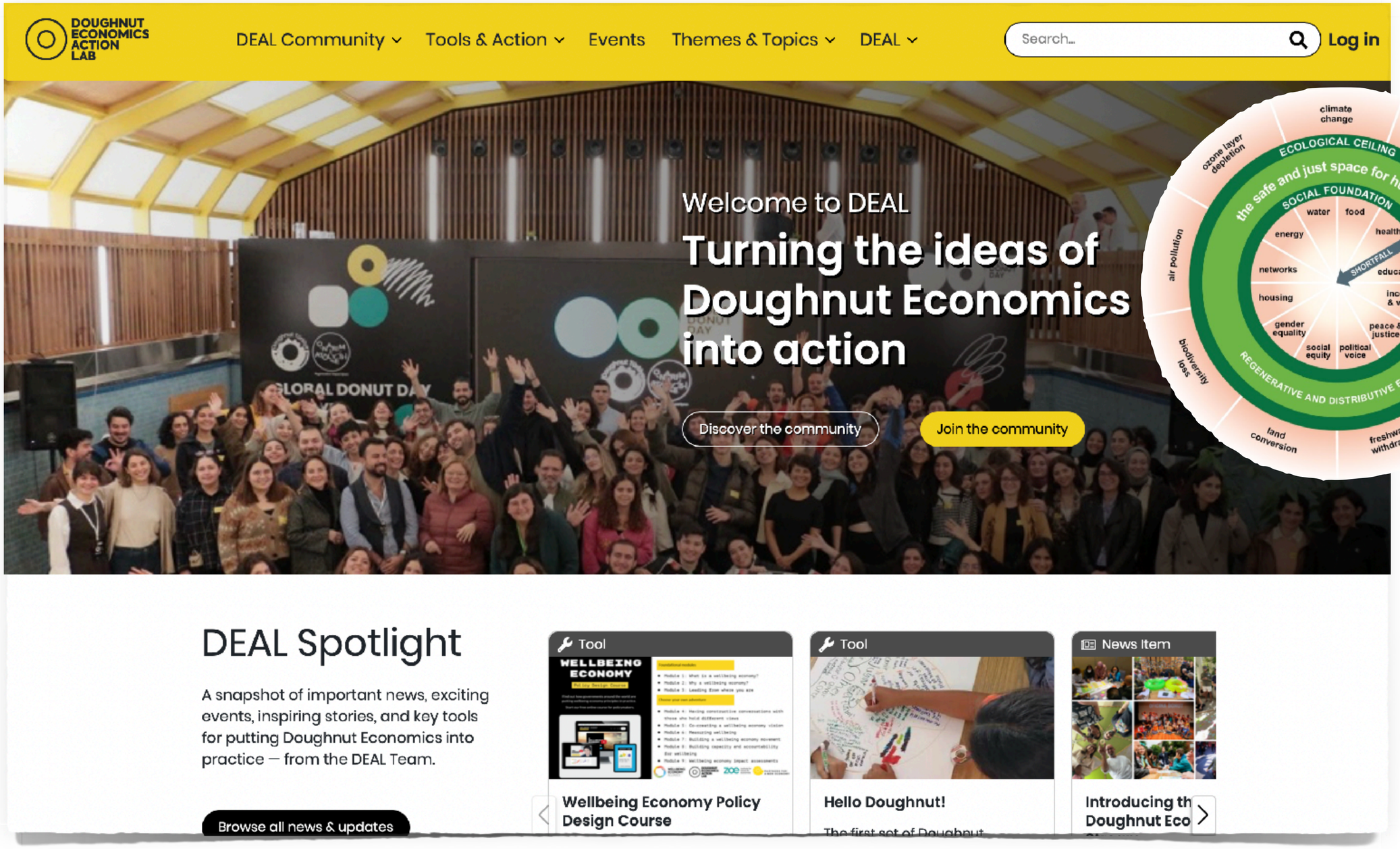

WDC
WHALE AND
DOLPHIN
CONSERVATION


Friends of
the Earth


Operation Wallacea
www.opwall.com



https://transitionnetwork.org/



https://exeterdoughnut.org/

Free and
open to all

EXETER DOUGHNUT ECONOMICS GATHERING

Tues 21 **MAY 2024** Wed 22

EXETER

Phoenix Theatre
& University of Exeter Campus

Hosted by EXETER DOUGHNUT · DOUGHNUT ECONOMICS ACTION LAB

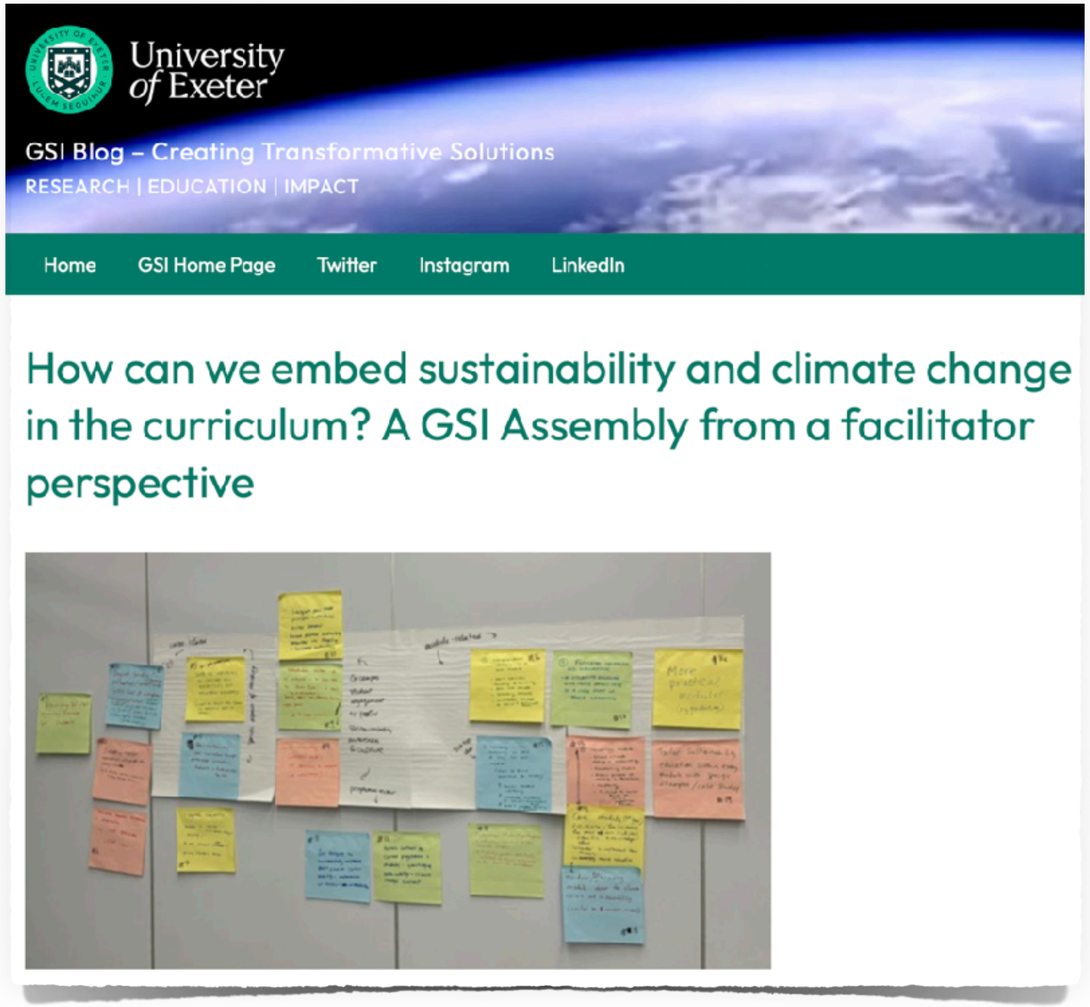
https://exeterdoughnut.org/

Hands Up if you're a fan of Doughnut Economics 🙂

https://exeterdoughnut.org/

5

WORK COLLECTIVELY



https://sites.exeter.ac.uk/gsi/how-can-we-embed-sustainability-and-climate-change-in-the-curriculum-a-gsi-assembly-from-a-facilitator-perspective/

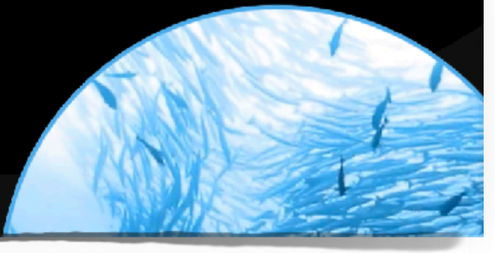
ProSocial World

About Courses Community Donate Resources Magazine Login

Our impact is woven into the lives of diverse groups and communities around the world.

Consciously evolving a world that works for all.

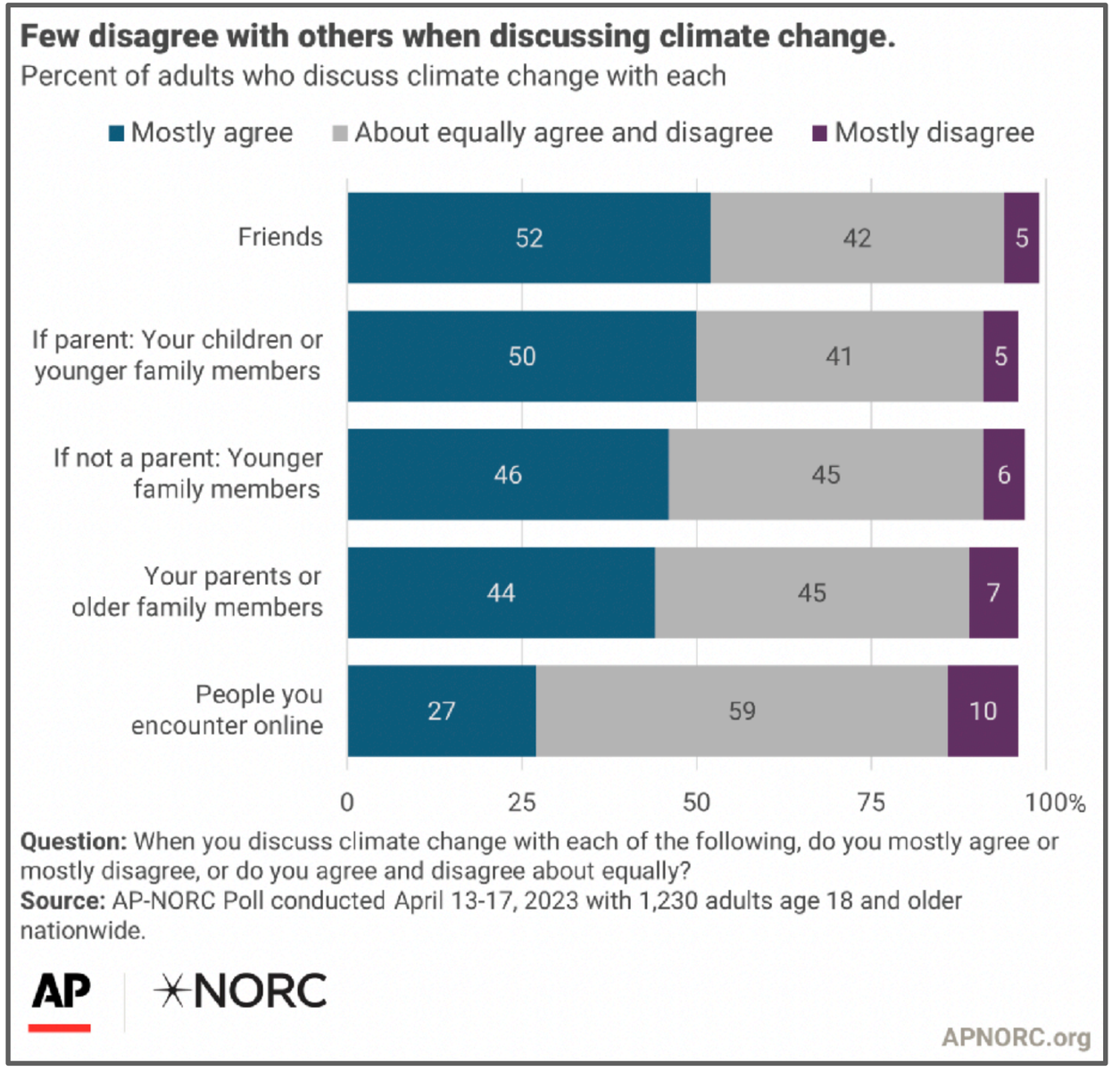
Explore stories of change



https://www.prosocial.world/

6

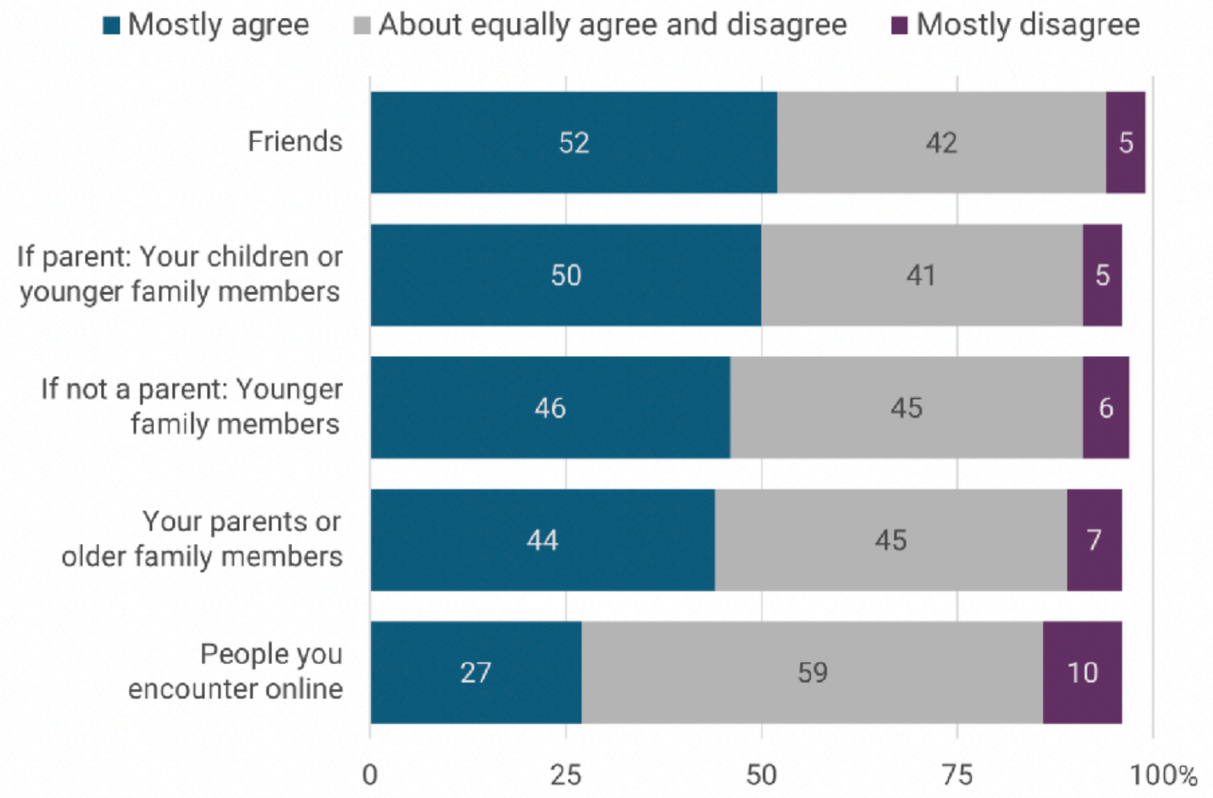
REACH OUT TO PEOPLE



https://apnorc.org/projects/attitudes-toward-climate-change-continue-to-be-divisive/

Few disagree with others when discussing climate change.

Percent of adults who discuss climate change with each



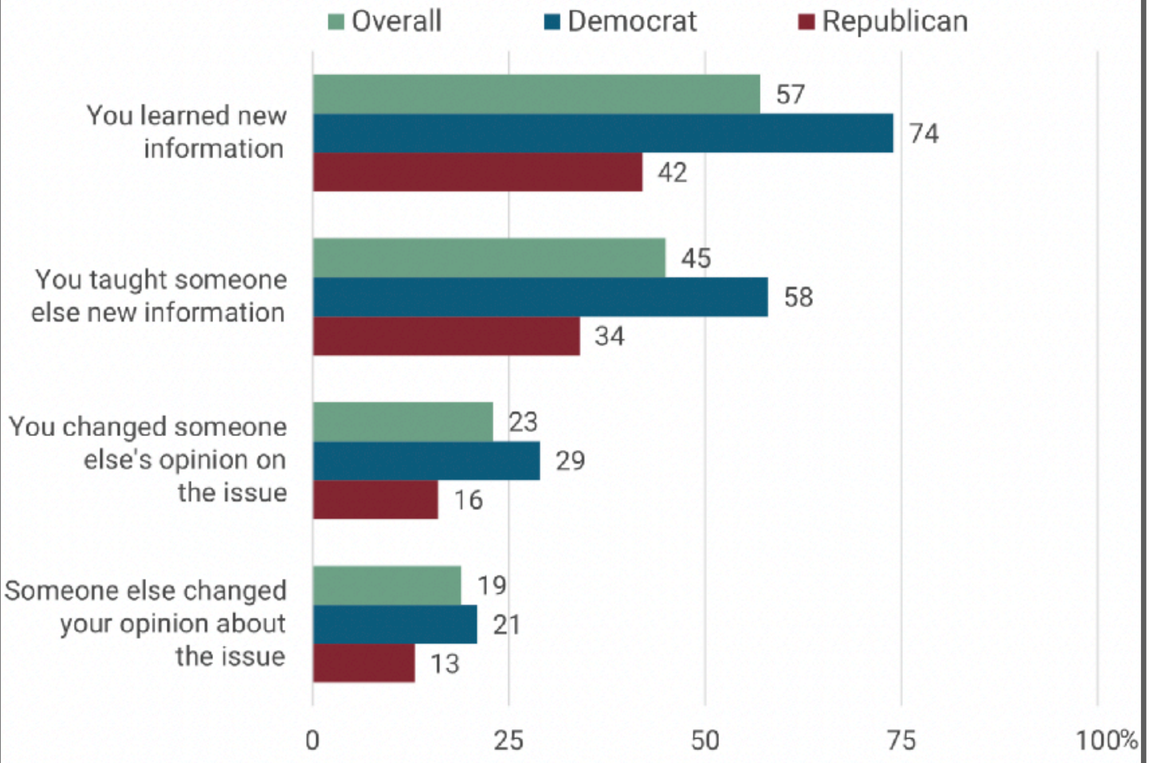
Question: When you discuss climate change with each of the following, do you mostly agree or mostly disagree, or do you agree and disagree about equally?
Source: AP-NORC Poll conducted April 13-17, 2023 with 1,230 adults age 18 and older nationwide.

AP | NORC

APNORC.org

Many adults learn or teach new information in conversations about climate change, though fewer report changing opinions.

Percent of adults who say each of the following has happened to them because of a conversation about climate change



Question: Has each of the following ever happened to you because of a conversation you had about climate change?
Source: AP-NORC Poll conducted April 13-17, 2023 with 1,230 adults age 18 and older nationwide.

AP | NORC

APNORC.org

https://apnorc.org/projects/attitudes-toward-climate-change-continue-to-be-divisive/

MUCK RACK

For PR Pros ▾ For Journalis

James Dyke

Contributor, The Independent
Columnist, The i Paper
Freelance Journalist, Freelance
United Kingdom
Environment

As seen in: The Independent, The i Paper, The Guardian, Business Insider, ABC News (Australia), Newsweek Europe, Yahoo, MDPI, Quartz, Springer, The Conversation, The Conversation UK and more

Covers: Climate change, sustainability, ecology, evolution, game theory, complex systems.

@jamesdyke@mastodonapp.uk | Prof @GSI_Exeter | Columnist @theipaper | Book Fire Storm & Flood tinyurl.com/bddxbtr3

JAMES DYKE'S BIOGRAPH

READ FULL BIO

I write environment, sustainability, career I stumbled into writing, first research interests, then anything Independent, The i and many othe scale civilisation they do n...

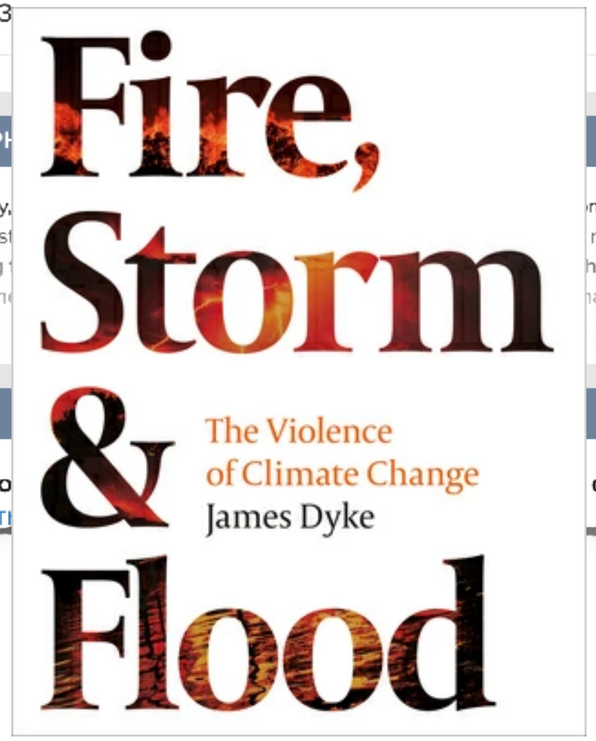
ngside my academic my research, then he Guardian, The ans built a planetary-

ARTICLES

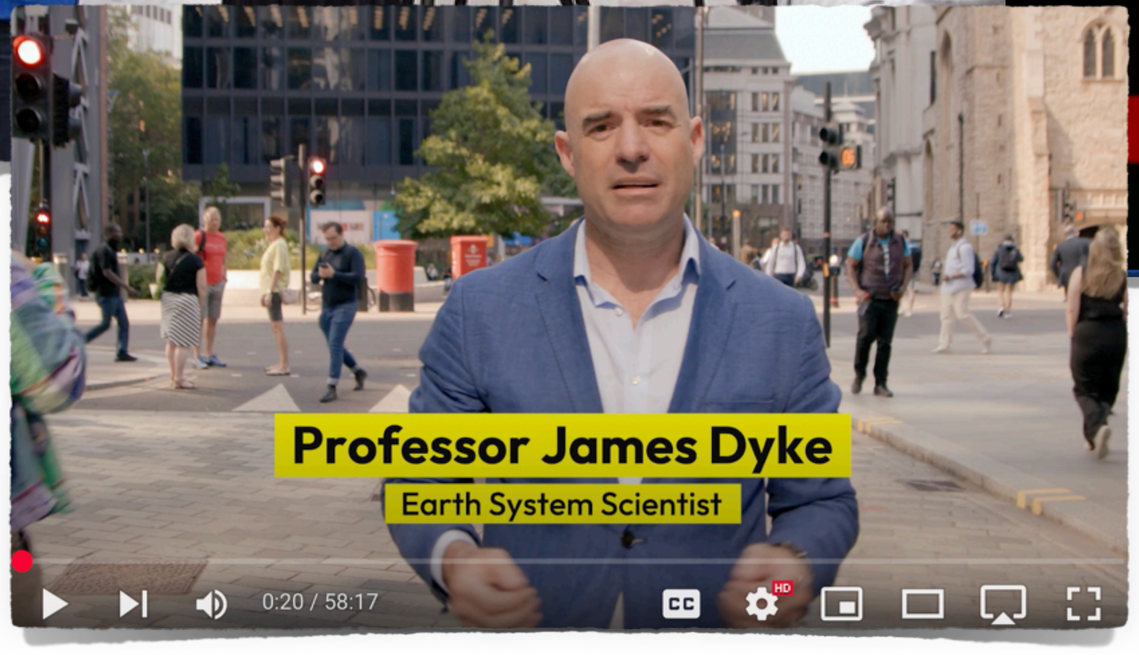
SEARCH ARTICL

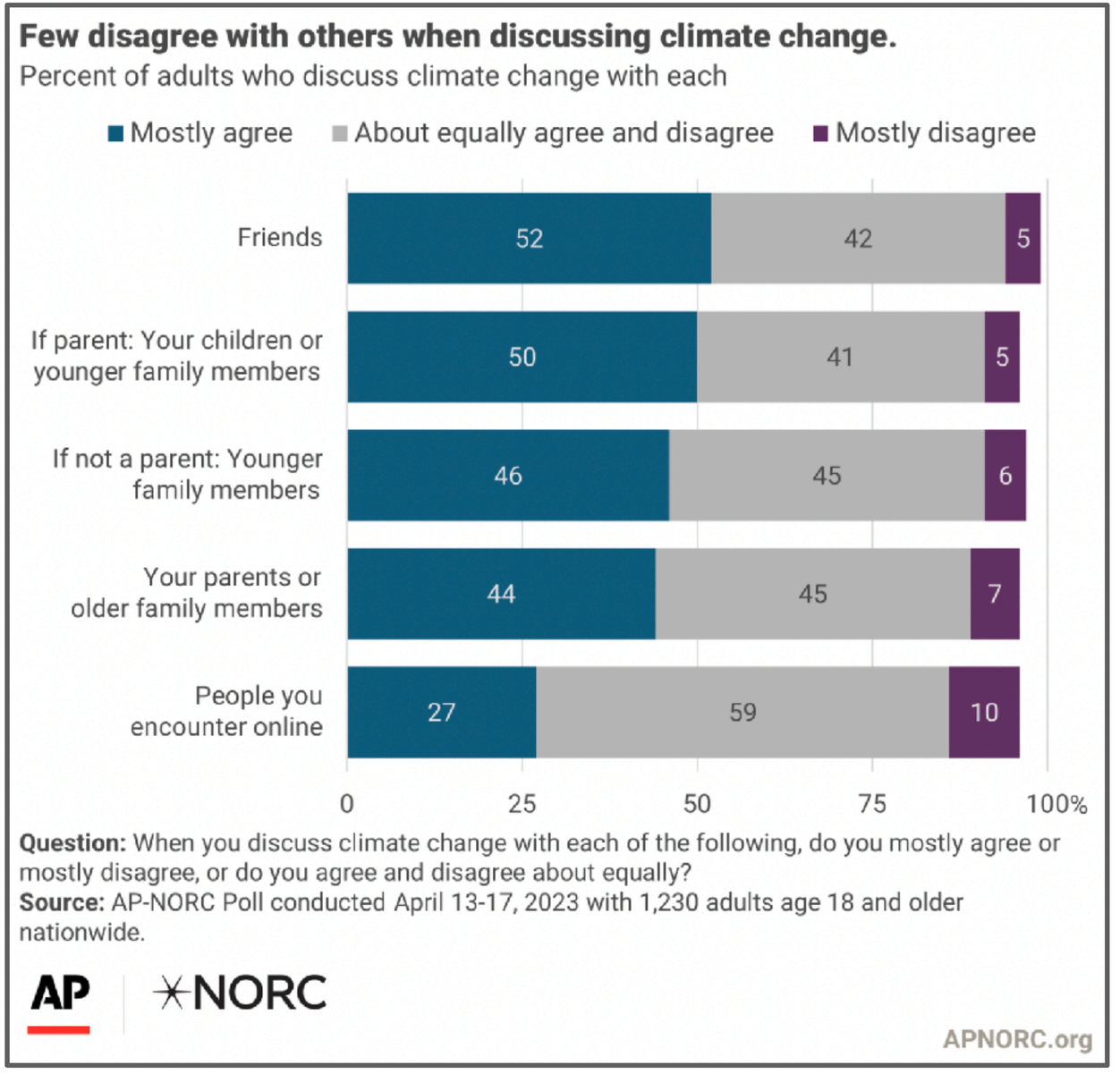
The ecosystems that surro continues

A DAY AGO | By James Dyke | T

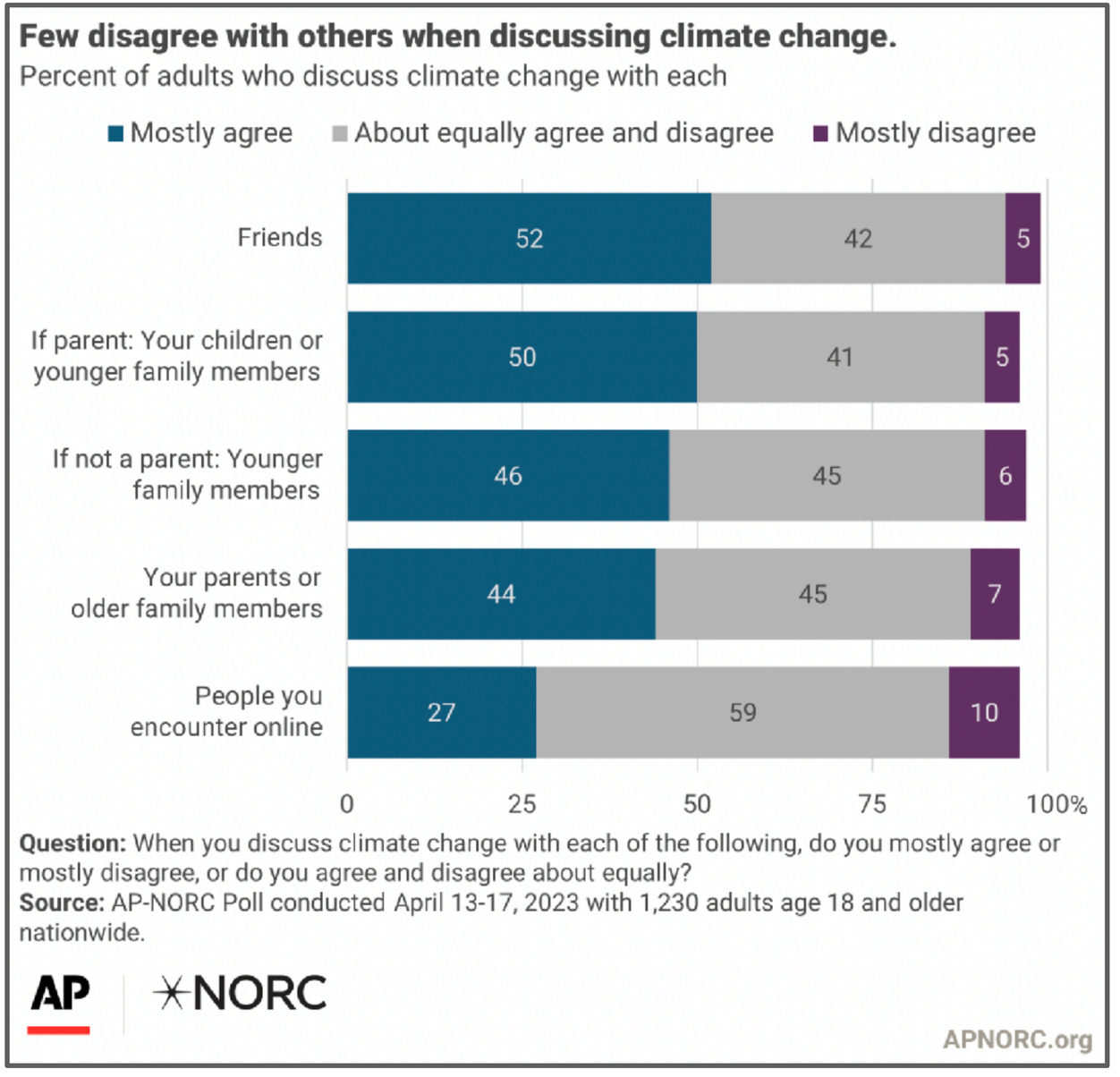



We must end our wishful thinking about net zero


Professor James Dyke
Earth System Scientist
0:20 / 58:17
CC
HD



https://apnorc.org/projects/attitudes-toward-climate-change-continue-to-be-divisive/



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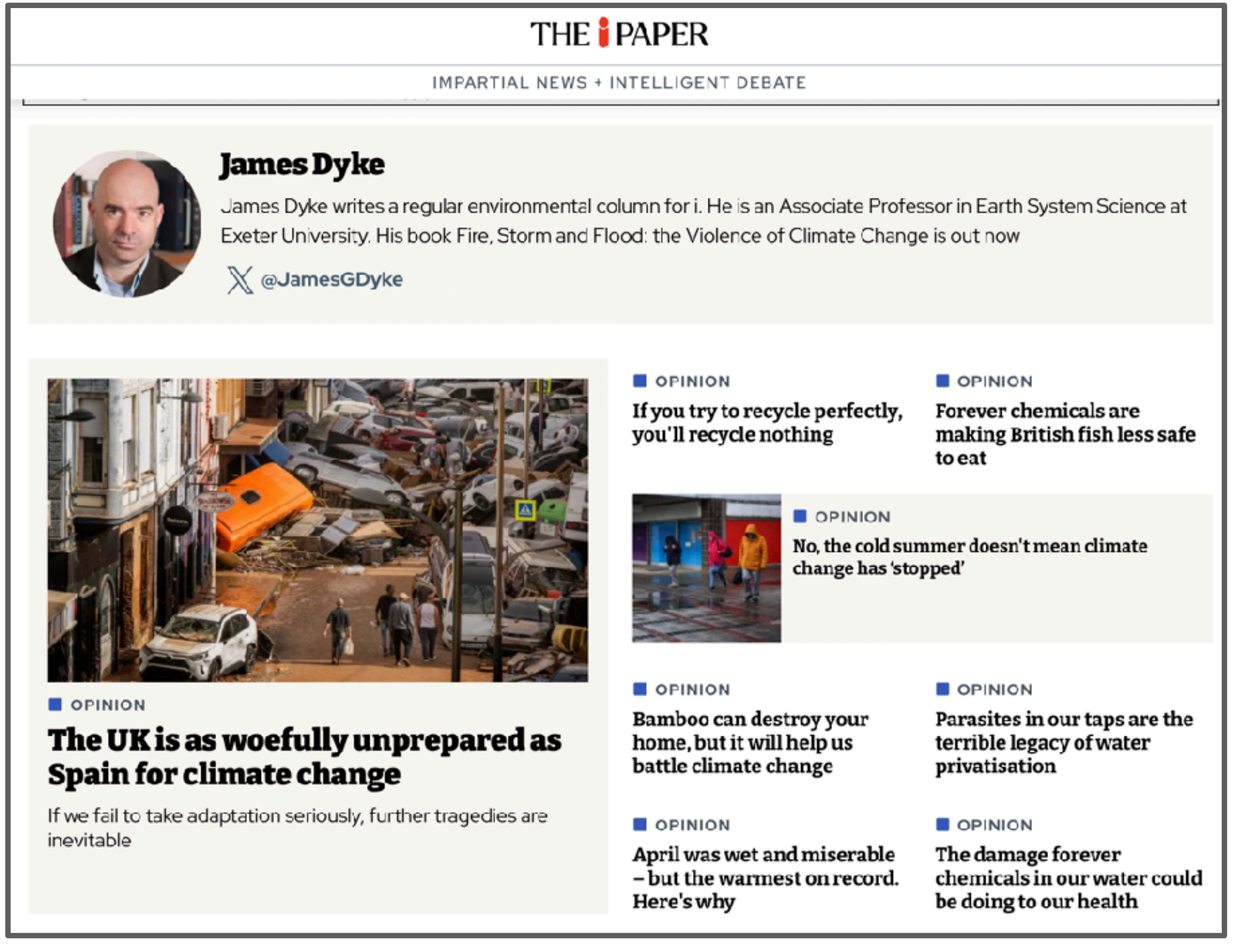
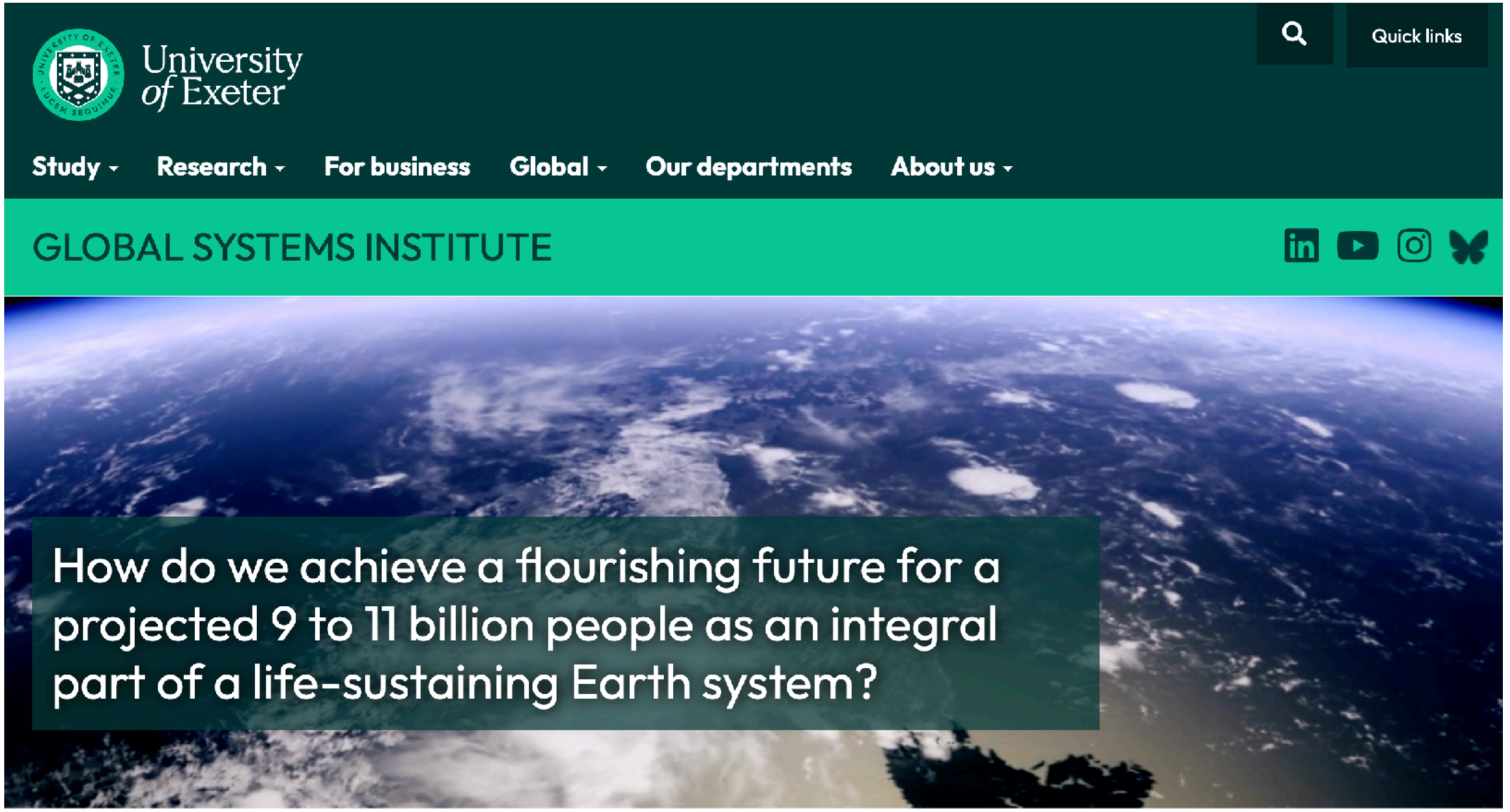


https://inews.co.uk/author/james-dyke

7

USE THE TOOLS TO HAND



https://www.exeter.ac.uk/research/institutes/gsi/

https://www.exeter.ac.uk/study/postgraduate/courses/geography/gss/

MSc Global Sustainability Solutions

"Enrolling on the MSc in Global Sustainability Solutions was one of the best decisions I made for my career. The program equipped me with a deep understanding of the interconnectedness between social, environmental and economic systems, and provided me with the tools and skills necessary to lead sustainable change."

Charlotte McNichol-Fardon, Head of Sustainability, UK Hydrographic Office and Chair of NERC's advisory panel, The Future Leaders Council.

More alumni profiles

https://www.exeter.ac.uk/study/postgraduate/courses/geography/gss/

Tom Doidge

Year of graduation: 2023
Employer: ITV
Current role: Sustainability Analyst

Eloise Conley

Year of graduation: 2022
Employer: PwC UK
Current role: Senior Sustainability Consultant

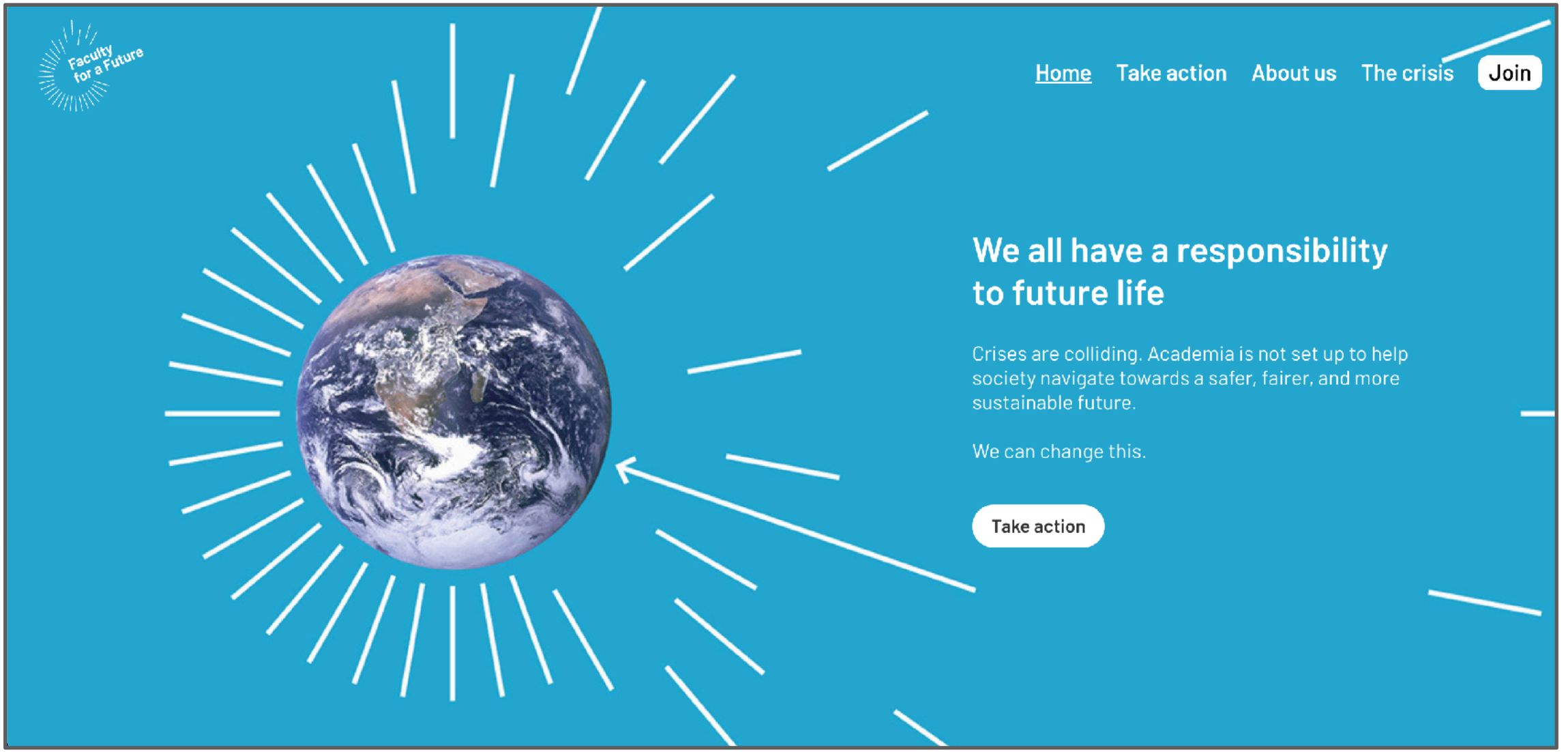
Zach Clarke

Year of graduation: 2023
Employer: CO2balance
Current role: Carbon Projects Officer

Jen Guy

Year of graduation: 2022
Employer: Galapagos Conservation Trust
Current role: Finance & Operations Officer

https://www.exeter.ac.uk/study/postgraduate/courses/geography/gss/



https://facultyforafuture.org/

8

WALK THE TALK

PEOPLE NOTICE

https://www.youtube.com/watch?v=8ScmwbBxgpA

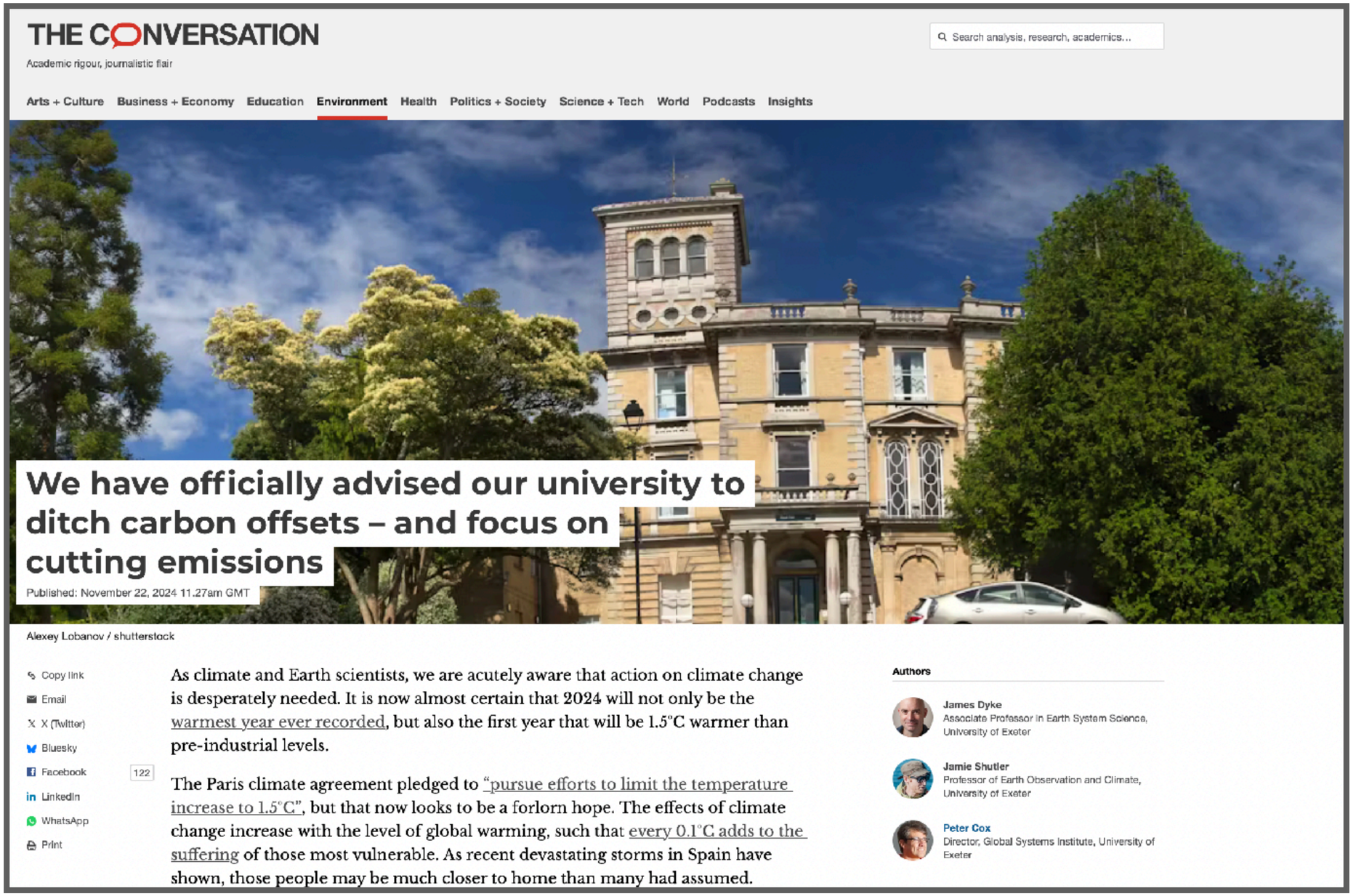
Walking the talk

- From 2026, Geography at the University of Exeter will **only offer no-fly field courses to Europe**
- Changes Geography has made to field course travel emissions (to and from the destination):
  - 2019 estimated tonnes CO_2e: 249.21
  - 2025 estimated tonnes CO_2e: 13.75

2026 Destination (calculations based on travel to and from destination, based on 44 people per trip)	**Total no-fly tonnes CO_2e**	***Comparison total tonnes CO_2e by flying***	**No-fly % carbon saving**
Freiburg, Germany	1.58	*11.55*	86.32
Avignon, France	1.65	*15.56*	89.36
Paris, France	1.28	*6.48*	80.20
Antwerp, Belgium	1.25	*8.34*	84.97
Picos de Europa, Spain	9.53	*17.37*	45.14
All trips	**15.30**	***59.30***	**74.20**

Table: Indicative comparison between no-fly and flight-based carbon emissions for 2026 field courses (all Geography field courses in 2026 will be no-fly)

https://www.youtube.com/watch?v=8ScmwbBxgpA



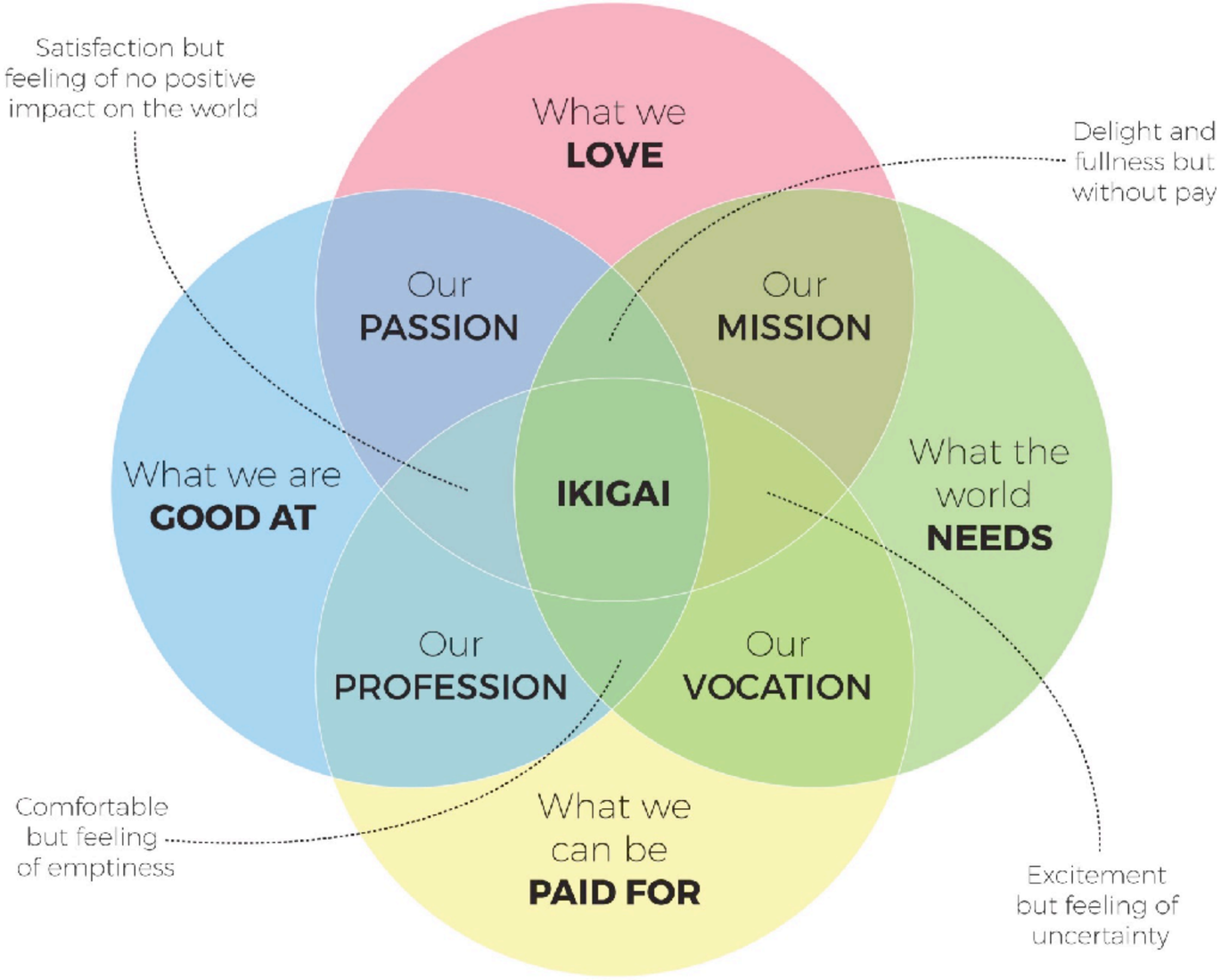
https://theconversation.com/we-have-officially-advised-our-university-to-ditch-carbon-offsets-and-focus-on-cutting-emissions-243727

9

USE YOUR PRIVILEGE TO FIND YOUR IKIGAI

IKIGAI

A Japanese concept meaning 'a reason for being'



10

START TODAY

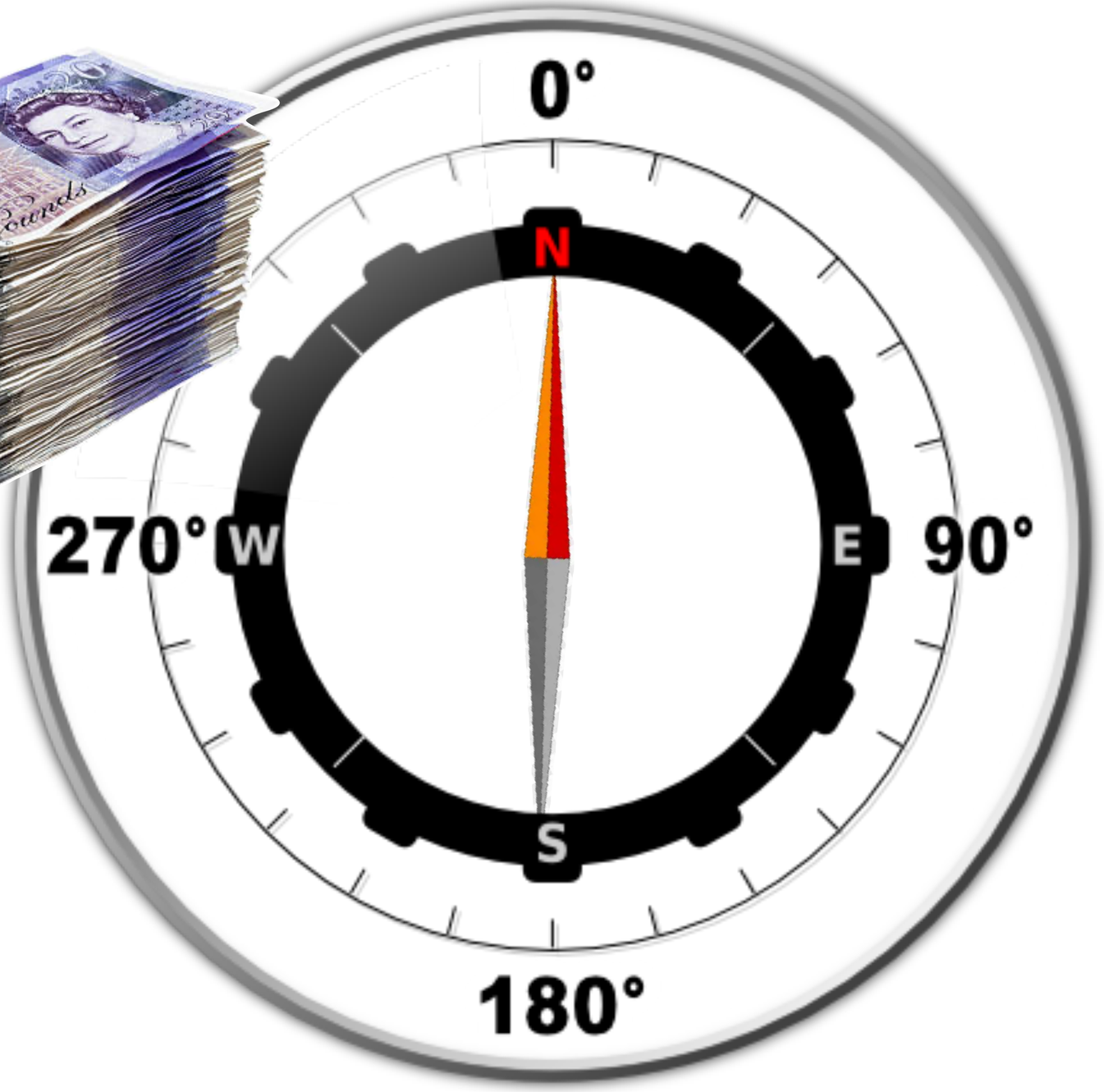
What does success mean to you?

Image a future world that you would love to live in. What does it look like?

10

RESPECT YOUR MORAL COMPASS


£20
Pounds


0°
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180°


NEVER
GIVE UP


Finding hope,
meaning, and purpose
in the midst of a climate & ecological crisis