



DR MATT WINNING

CHI-Innovate Conference

5th July 2024

Chapter 3

The 2030 emissions levels in the NDCS announced prior to COP26 also tighten the remaining space to limit warming to 2°C (>67%). As shown in Figure 3.30b, the 67th percentile of peak warming reaches values above 1.7°C in pathways with 2030 emissions levels in this range. To still limit warming to 2°C (>67%), the global post-2030 GHG emission reduction rates would need to be abruptly raised in 2030 from 0–0.7 GtCO₂-eq yr⁻¹ to an average of 1.4–2.0 GtCO₂-eq yr⁻¹ during the period 2030–2050 (Figure 3.30c), around 70% higher than in immediate mitigation pathways confirming findings in the literature (Winning et al. 2019). Their average reduction rate of 0.6–1.4 GtCO₂ yr⁻¹ would already be unprecedented at the global scale and, with a few exceptions, national scale for an extended period of time (Riahi et al. 2015). For comparison, the impact of COVID-19 on the global economy is projected to have led to a decline of around 2.5–3 GtCO₂ of global CO₂ emissions from fossil fuels and industry in 2020 (Friedlingstein et al. 2020) (Section 2.2).

The increased post-2030 transition challenge in mitigation pathways with moderate near-term action is also reflected in the timing of reaching net zero CO₂ emissions (Figure 3.30d and Cross-Chapter Box 3 in this chapter). As 2030 emission levels and the cumulated CO₂ emissions until 2030 increase, the remaining time for dropping to net zero CO₂ and staying within the remaining carbon budget shortens (Figure 3.29). This gives rise to an inverted v-shape of the lower bound on the year of reaching net zero as a function of 2030 emissions levels. Reaching low emissions in 2030 facilitates

THE LANCET

November, 2023

www.thelancet.com

The 2023 Report of the *Lancet* Countdown on Health and Climate Change: The imperative for a health-centred response in a world facing irreversible harms



“With climate change claiming millions of lives annually and its threats rapidly growing, seizing the opportunity to secure a healthier future has never been more vital.”



A Review by *The Lancet*

← Renewable
and circular
now and forever



FEFCO
Corrugated Packaging



Follow Back

FEFCO

@FEFCO Follows you

Welcome to the info portal of the European Corrugated Board Industry. We tweet about packaging innovations, corrugated usage, industry news and circular economy

📍 Brussels, Belgium 📅 Joined September 2012

3,352 Following **12.1K** Followers

1. Must we change?

2. Can we change?

3. Will we change?

1. Must we change?

2. Can we change?

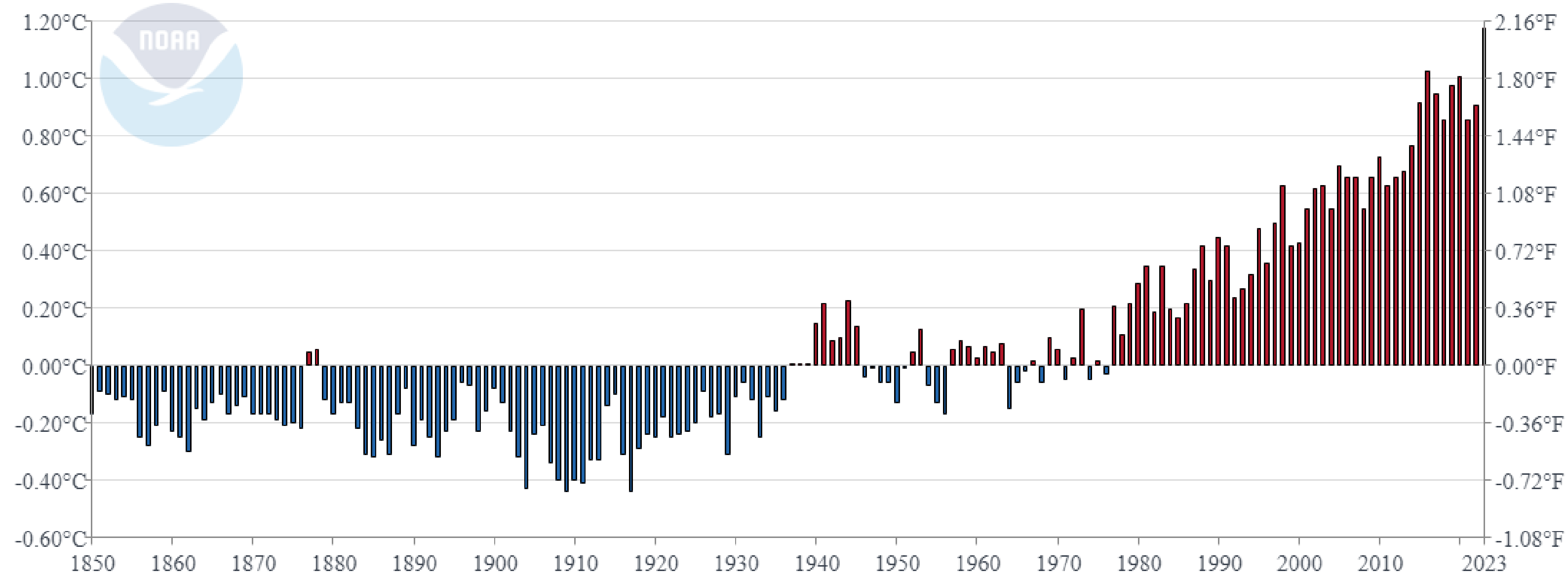
3. Will we change?

The hottest year ever recorded was

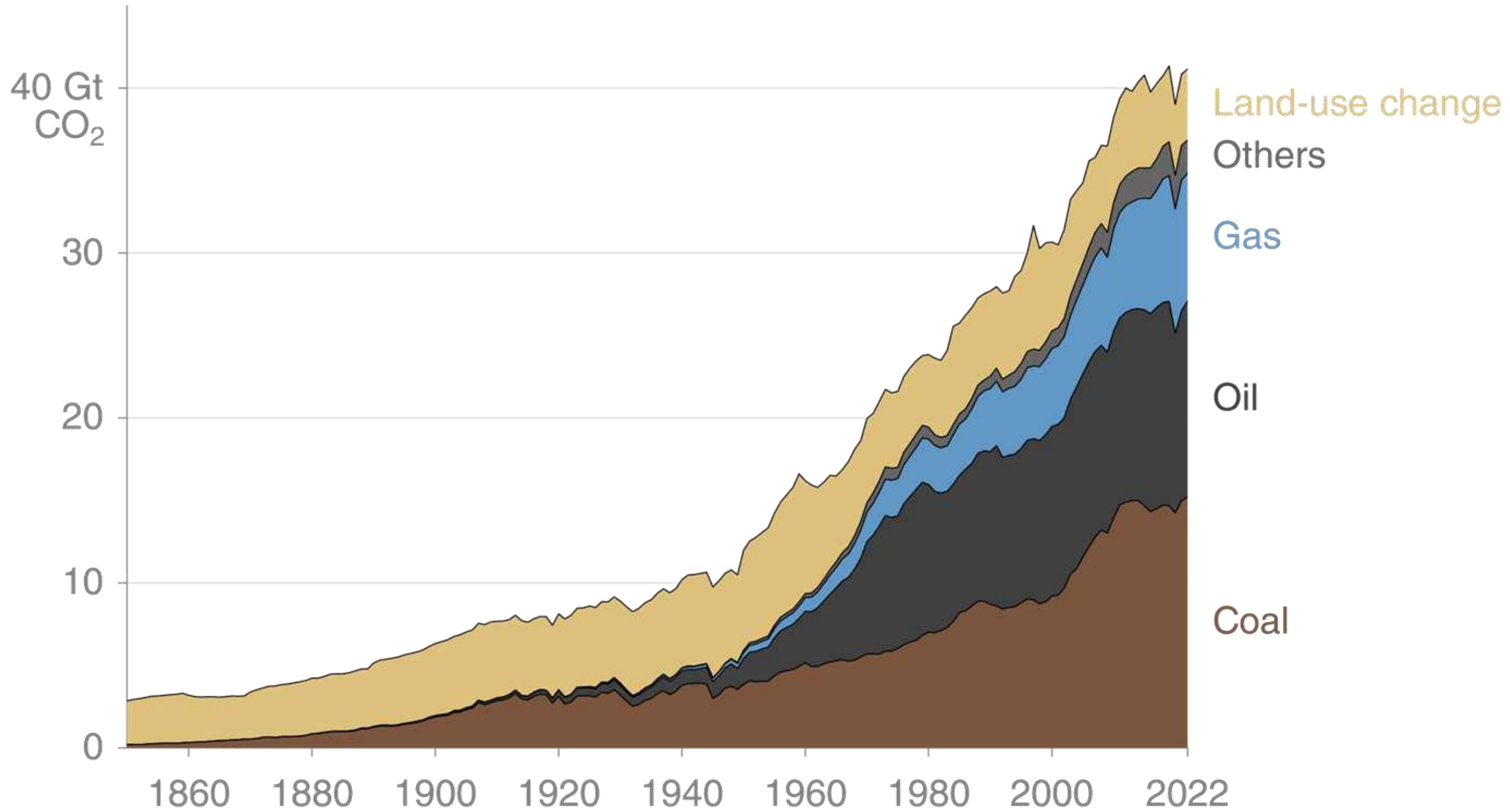
2023

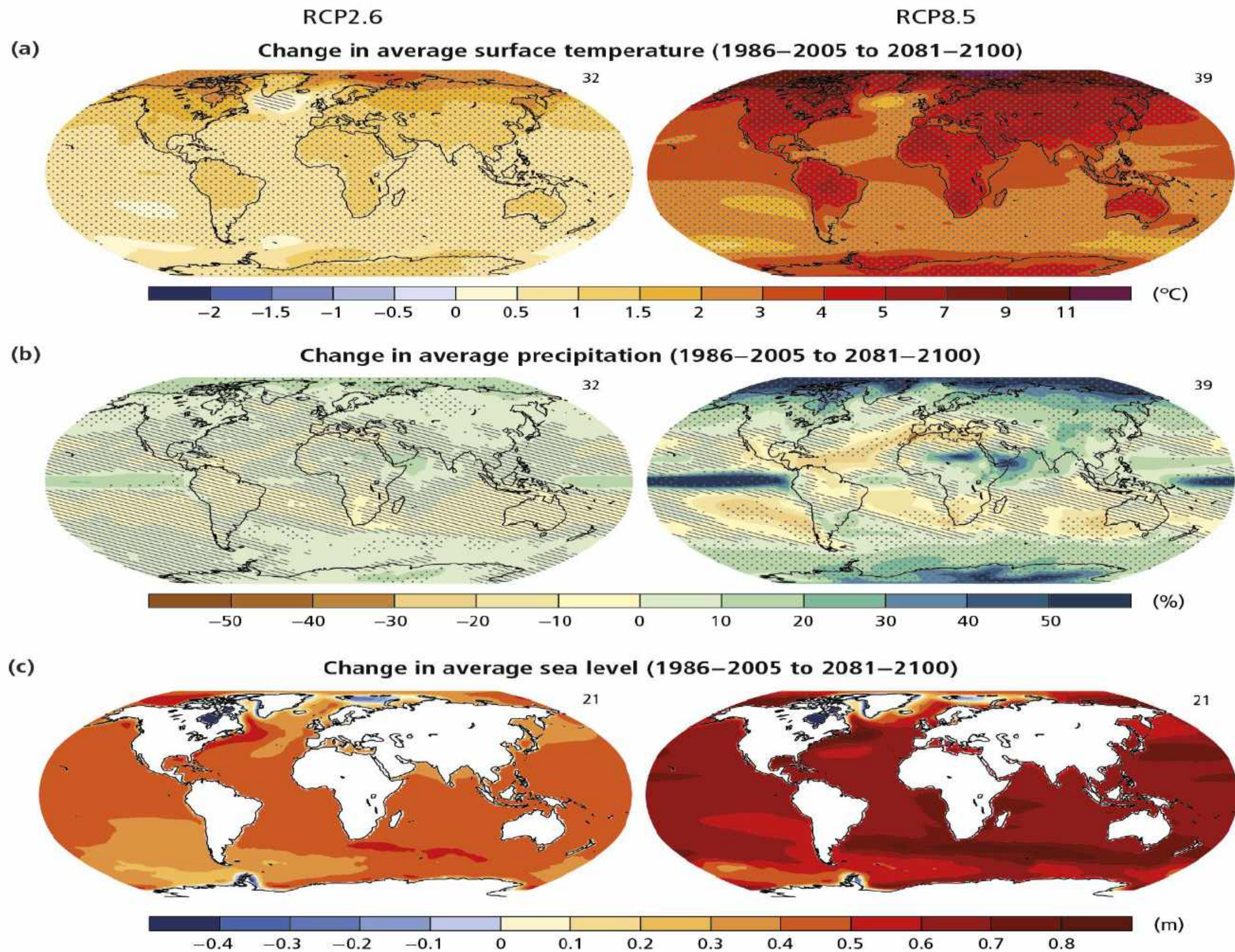
Global Land and Ocean

January-December Temperature Anomalies



Annual Global Emissions





Source: IPCC AR5

São Paulo State, Brazil

HEATWAVES

England could run short of water within 25 years

Exclusive: Environment Agency chief calls for use to be cut by a third



▲ The Wayoh reservoir near Bolton. The UK's population is expected to rise from 67 million to 75 million in 2050, increasing the demand for water Photograph: Christopher Furlong/Getty Images

He wants to see wasting water become "as socially unacceptable as blowing smoke in the face of a baby".

"We all need to use less water and use it more efficiently," he said.

Sir James Bevan was appointed chief executive of the Environment Agency - the public body responsible for protecting the environment and wildlife in England - in 2015 after a career as a diplomat.

He told his audience that, in around 20 to 25 years, England would reach the "jaws of death - the point at which, unless we take action to change things, we will not have enough water to supply our needs".



**He wants to see
wasting water become
“as socially
unacceptable as
blowing smoke in the
face of baby”**



News > Health

British chips shrink by an inch as climate change slashes potato yields

'Farmers are used to dealing with fluctuations in the weather but if we have two or three extreme years in a row it has the potential to put growers out of business'

Josh Gabbatiss Science Correspondent | @josh_gabbatiss | Tuesday 05 February 2019 01:10

| [comments](#)



Wildfires



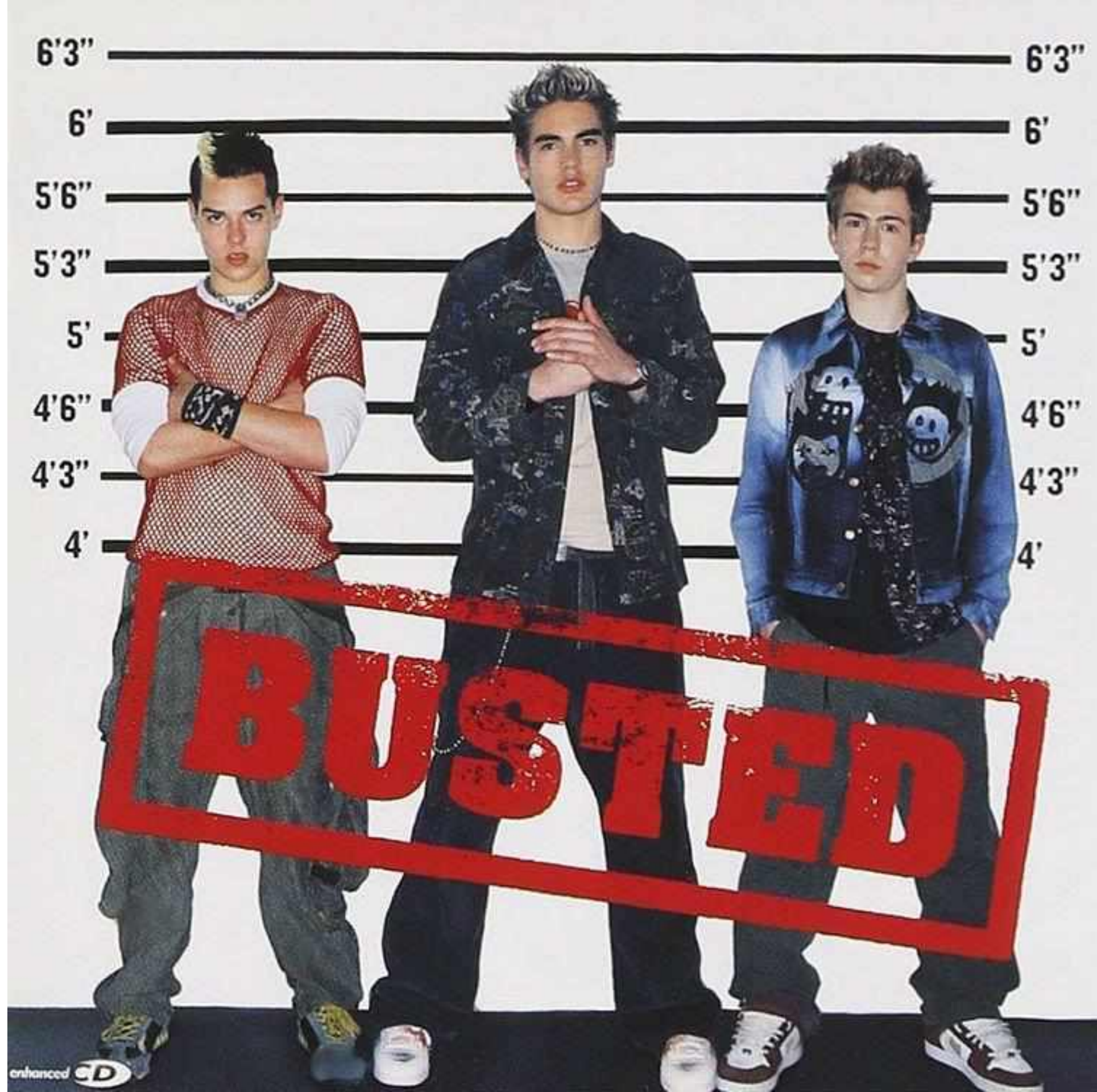
FLOODING



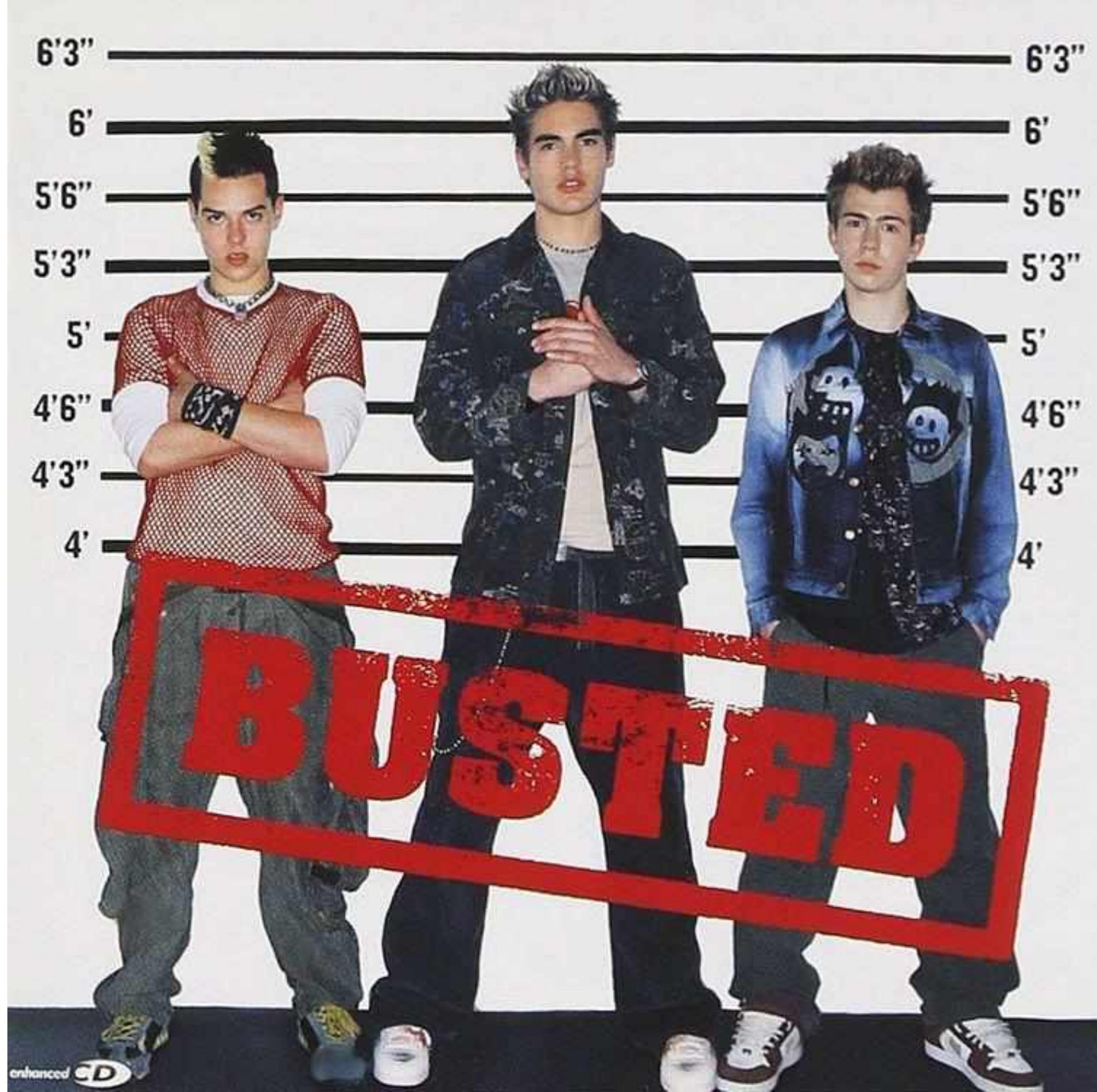


An aerial photograph of a vast sea ice field. The ice is broken into numerous irregular floes of varying sizes, separated by dark blue water. Two people, wearing bright orange and red gear, are walking across a large, flat ice floe in the lower-left quadrant. The overall scene is a stark, high-contrast landscape of white and blue.

ICE AND SEA



**I've been to the Year 3000
Not much has changed but we lived underwater
And your great, great, great granddaughter
is pretty fine**



2°C



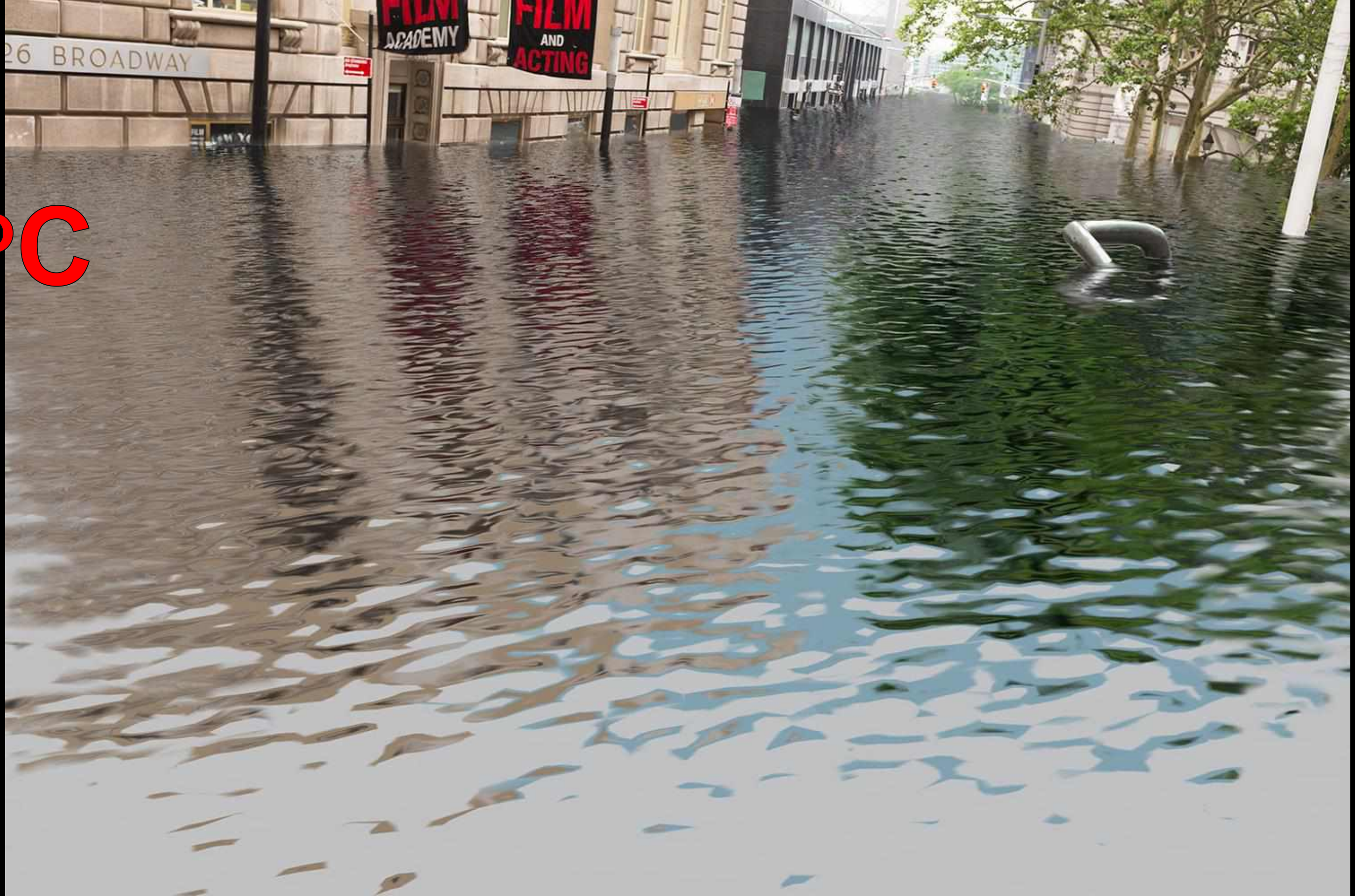
4°C



2°C



4°C



[Home](#) > [People, population and community](#) > [Births, deaths and marriages](#) > [Life expectancies](#) >

National life tables – life expectancy in the UK

National life tables – life expectancy in the UK: 2018 to 2020

Trends in period life expectancy, a measure of the average number of years people will live beyond their current age, analysed by age and sex for the UK and its constituent countries.

This is the latest release. [View previous releases](#)



Contact:

[Julian Buxton](#)

Release date:

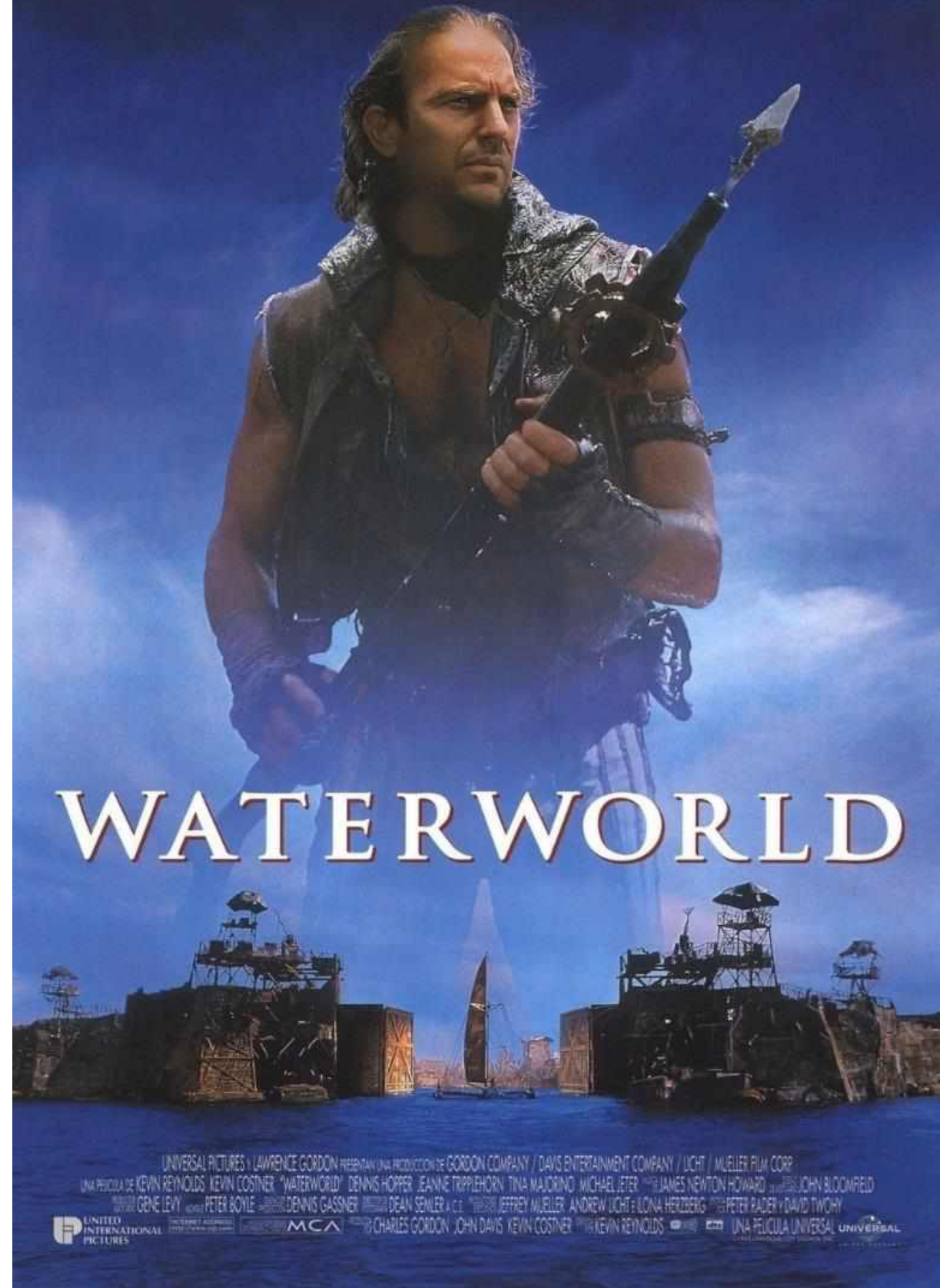
23 September 2021

Next release:

To be announced

786

KEVIN COSTNER



WATERWORLD

UNIVERSAL PICTURES y LAWRENCE GORDON PRESENTAN UNA PRODUCCION DE GORDON COMPANY / DAVIS ENTERTAINMENT COMPANY / LICHT / MUELLER FILM CORP.
UNA PELICULA DE KEVIN REYNOLDS KEVIN COSTNER "WATERWORLD" DENNIS HOPPER JEANNE TRIppLEHORN TINA MAJORINO MICHAEL JETER JAMES NEWTON HOWARD JOHN BLOOMFIELD
MUSIC BY GENE LEVY COSTUME DESIGNER PETER BOYLE EDITOR DENNIS GASSNER EXECUTIVE PRODUCERS DEAN SENLER & C. PRODUCED BY JEFFREY MUELLER ANDREW LICHT & LONA HERZBERG DIRECTED BY PETER RADER & DAVID TWICHY
UNIVERSAL INTERNATIONAL PICTURES MCA CHARLES GORDON JOHN DAVIS KEVIN COSTNER KEVIN REYNOLDS UNA PELICULA UNIVERSAL UNIVERSAL

CAN WE CHANGE?



(keithjardine/iSt

ENVIRONMENT

Scotland Is Now Generating So Much Wind Energy, It Could Power Two Scotlands

DAVID NIELD 17 JUL 2019



Dogger Bank Windfarm

In 2026 will power 6 million homes

Dogger Bank Windfarm

x47



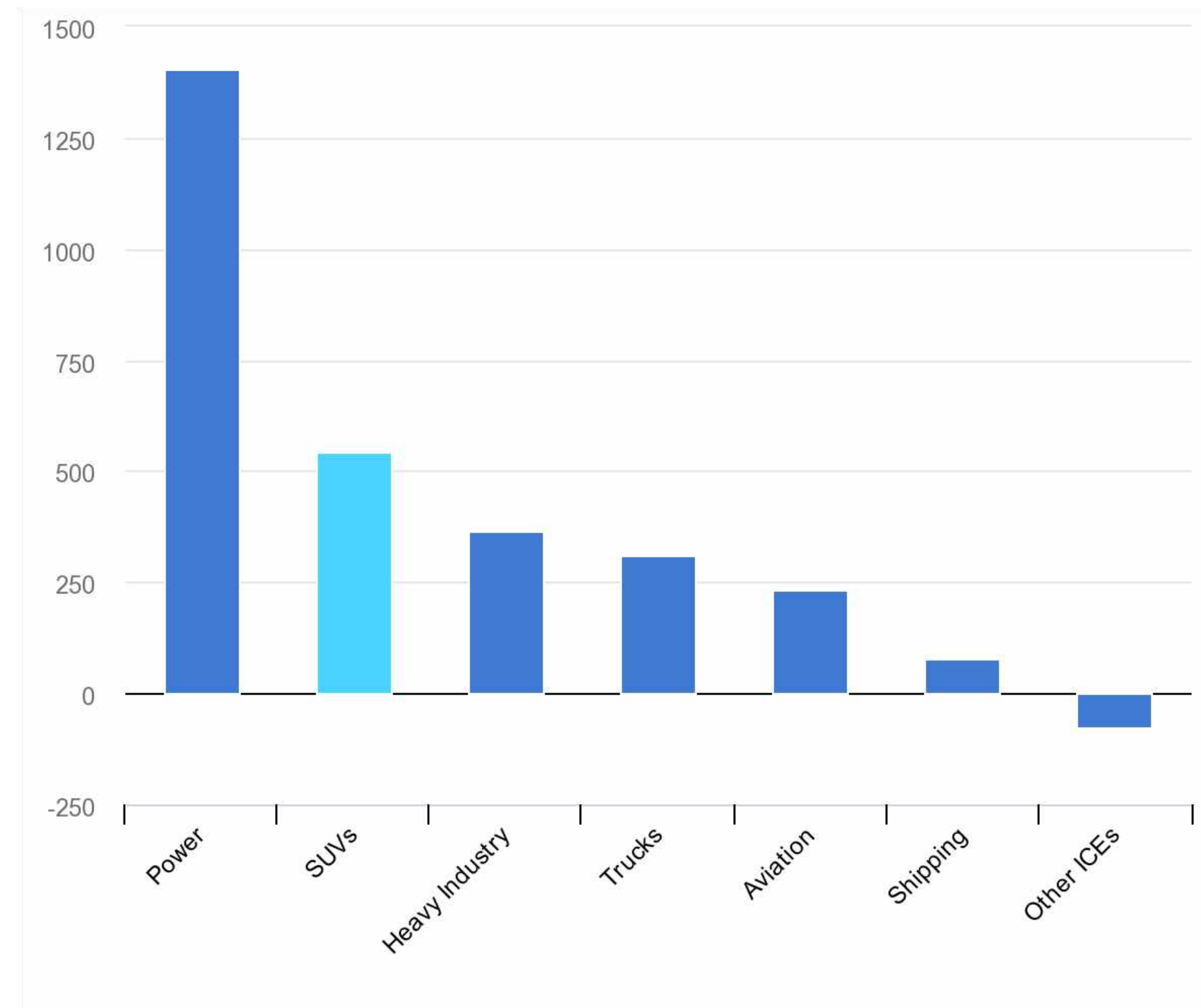
Dogger Bank Windfarm

x56



ROAD TRANSPORT

SUVs consume about a quarter more energy than medium-size cars



ELECTRIC VEHICLES

Uptake of electric vehicles set to take-off

7.2 million total electric vehicles in the world, with 2.1 million sold in 2019 (2.6% of sales).



FLYING





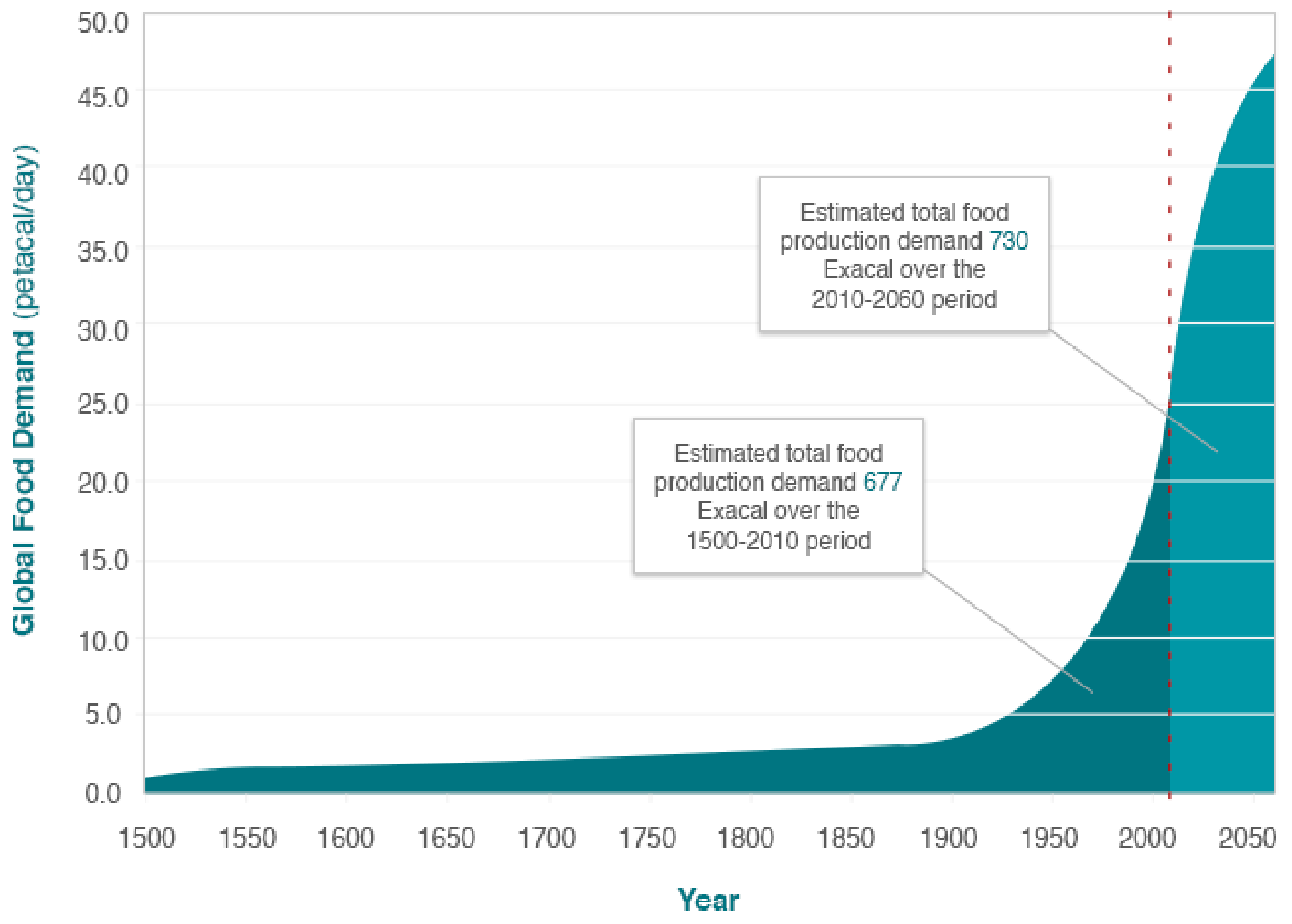
FOOD

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FOOD

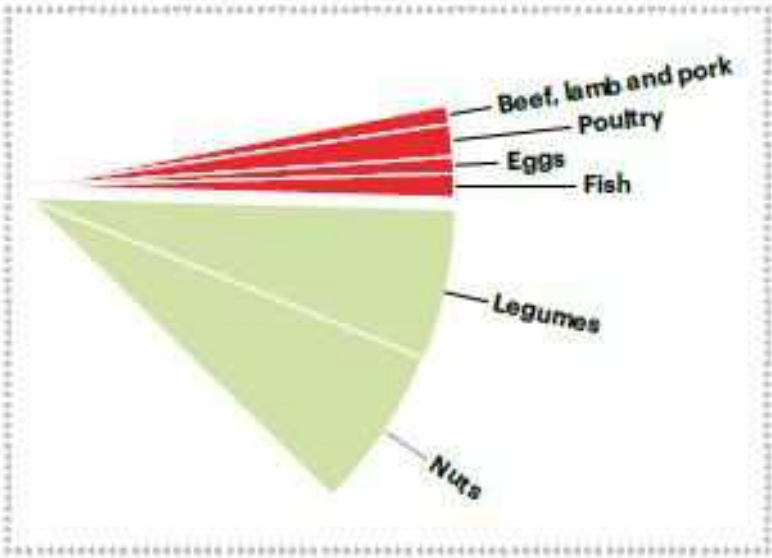




Photo by [Austin Poon](#) on [Unsplash](#)

WE'RE

ALL

GOING

TO

DIE

YOU

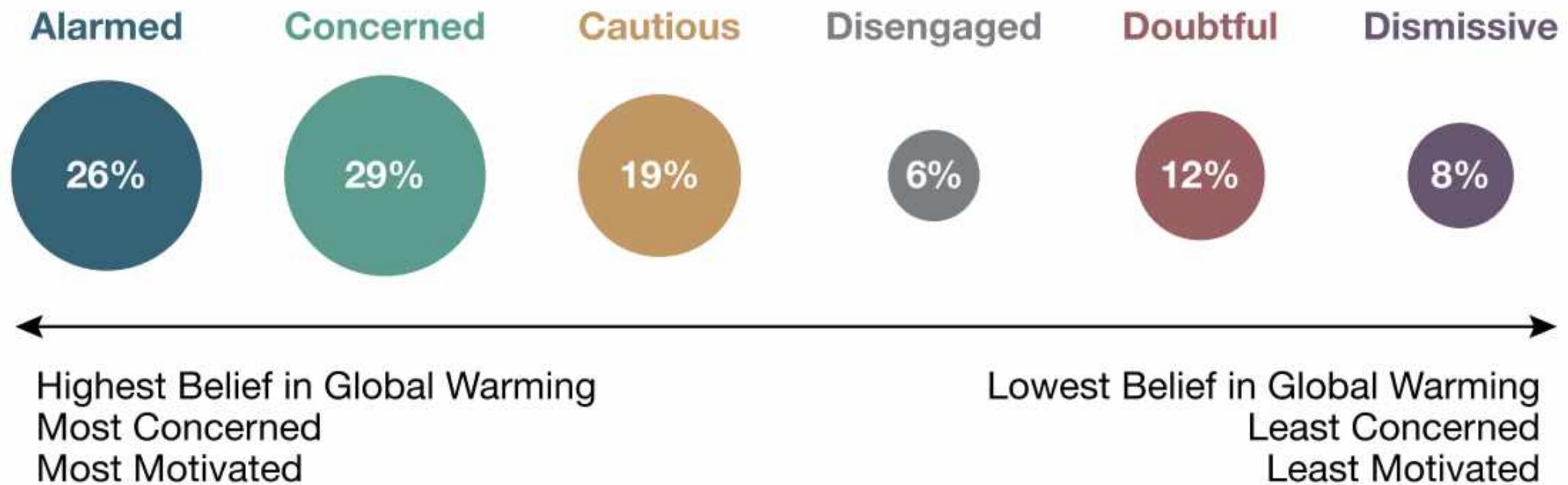
IDIOTS

WILL WE CHANGE?



ATTITUDES

Global Warming's Six Americas December 2020



December 2020 (n=1,036)

ATTITUDES



Alarmed



Concerned



Cautious



Disengaged



Doubtful



Dismissive



Highest Belief in Global Warming
Most Concerned
Most Motivated

Lowest Belief in Global Warming
Least Concerned
Least Motivated

December 2020 ($n=1,036$)

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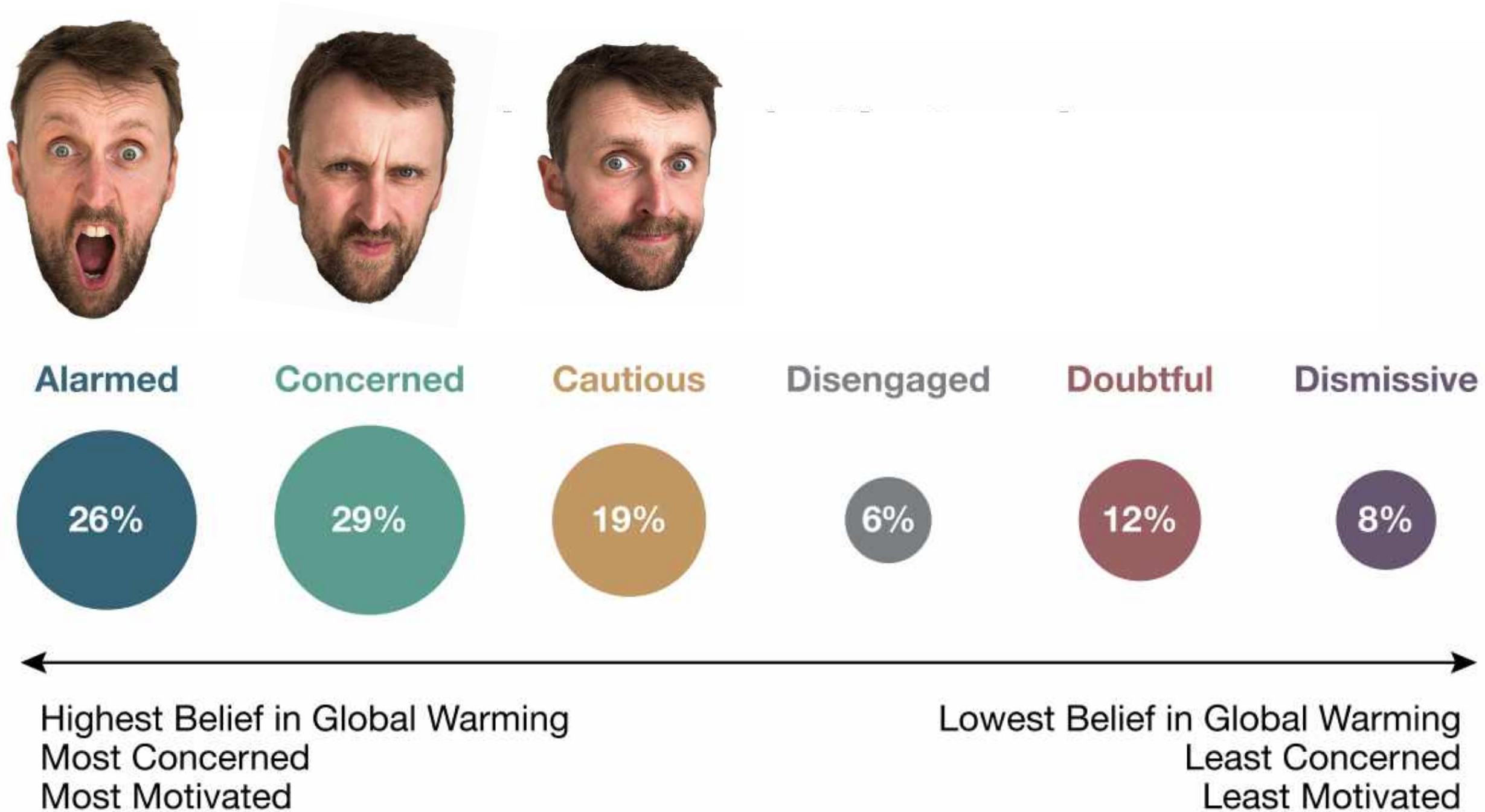


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Least Concerned
Least Motivated

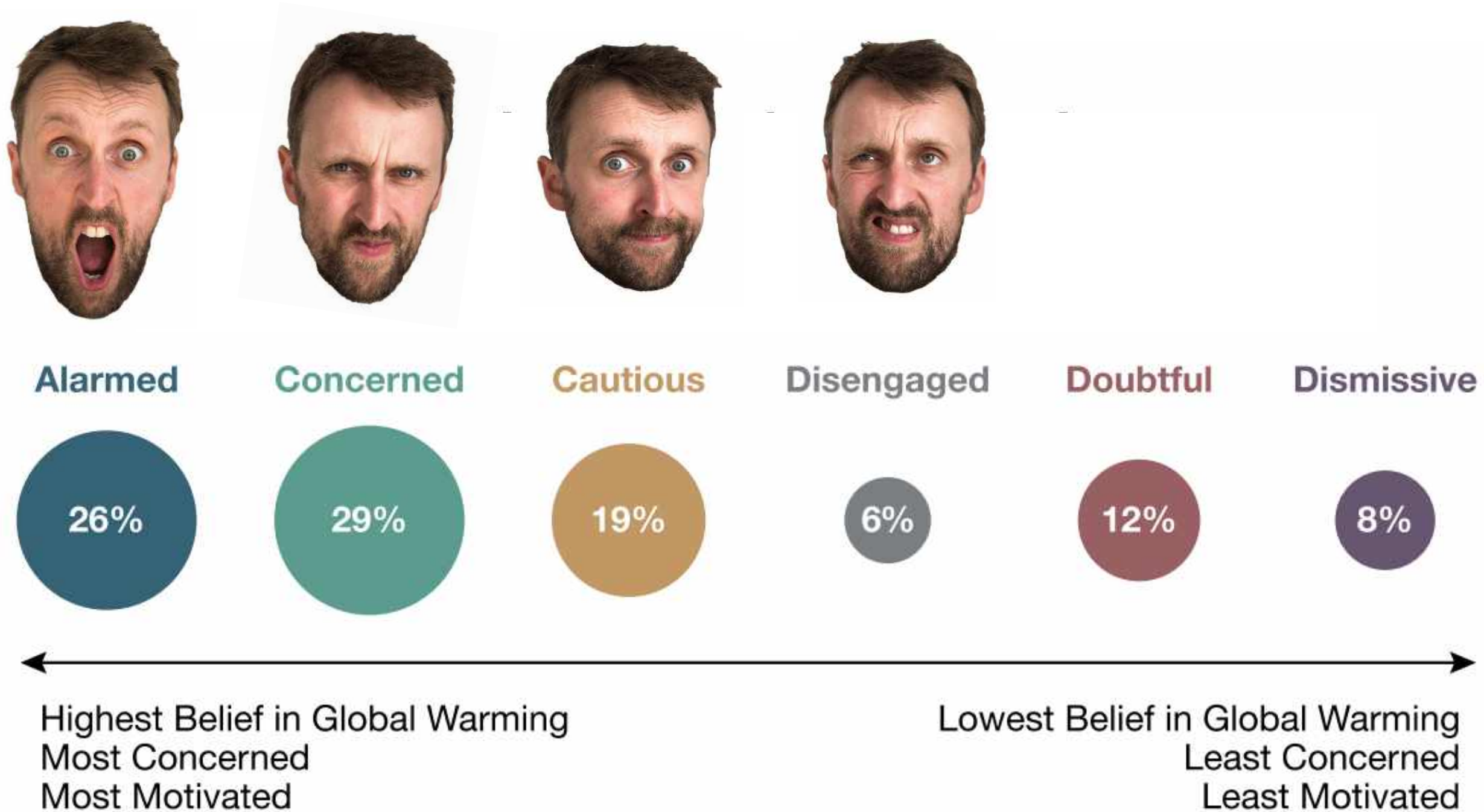
December 2020 ($n=1,036$)

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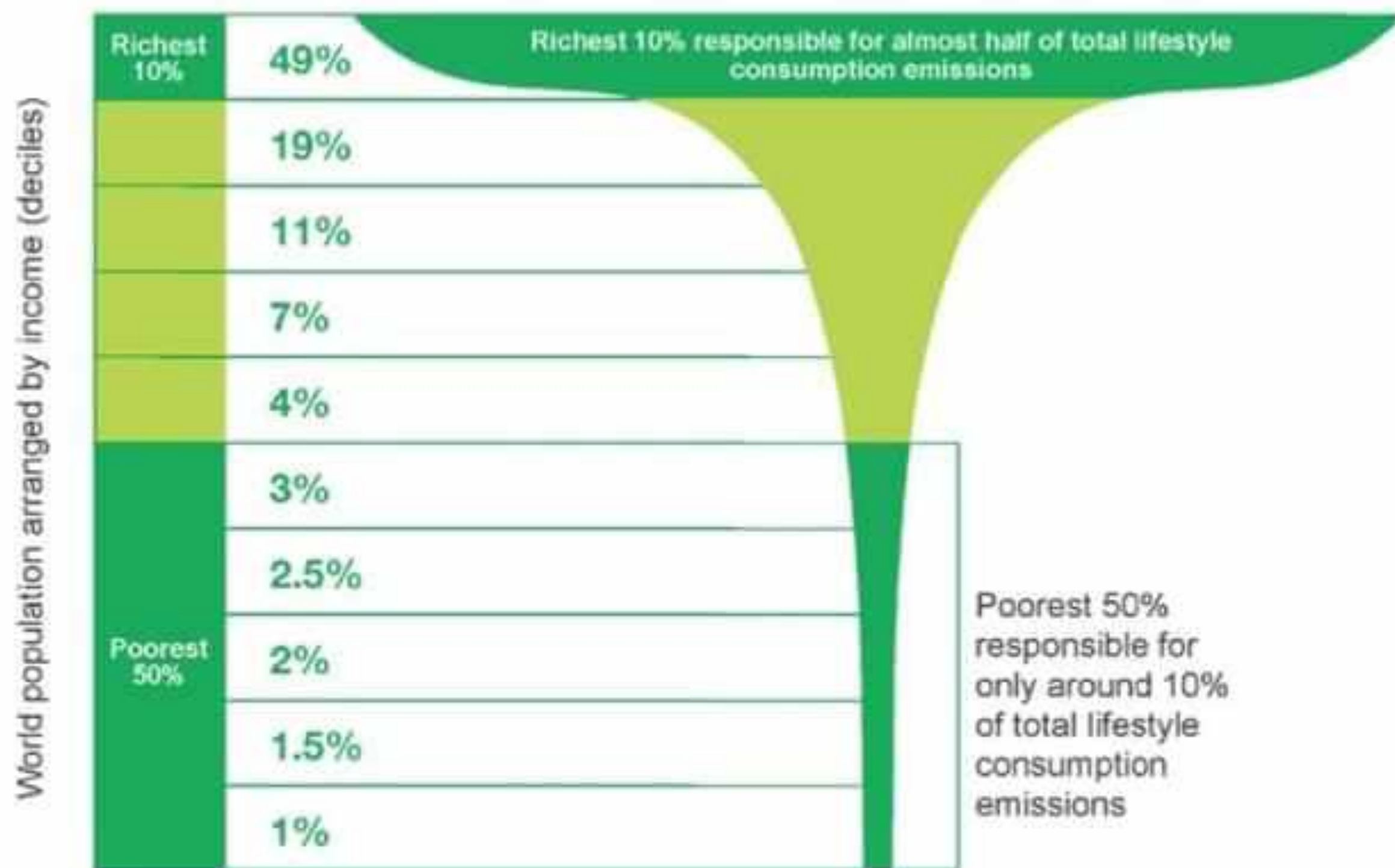
Lowest Belief in Global Warming
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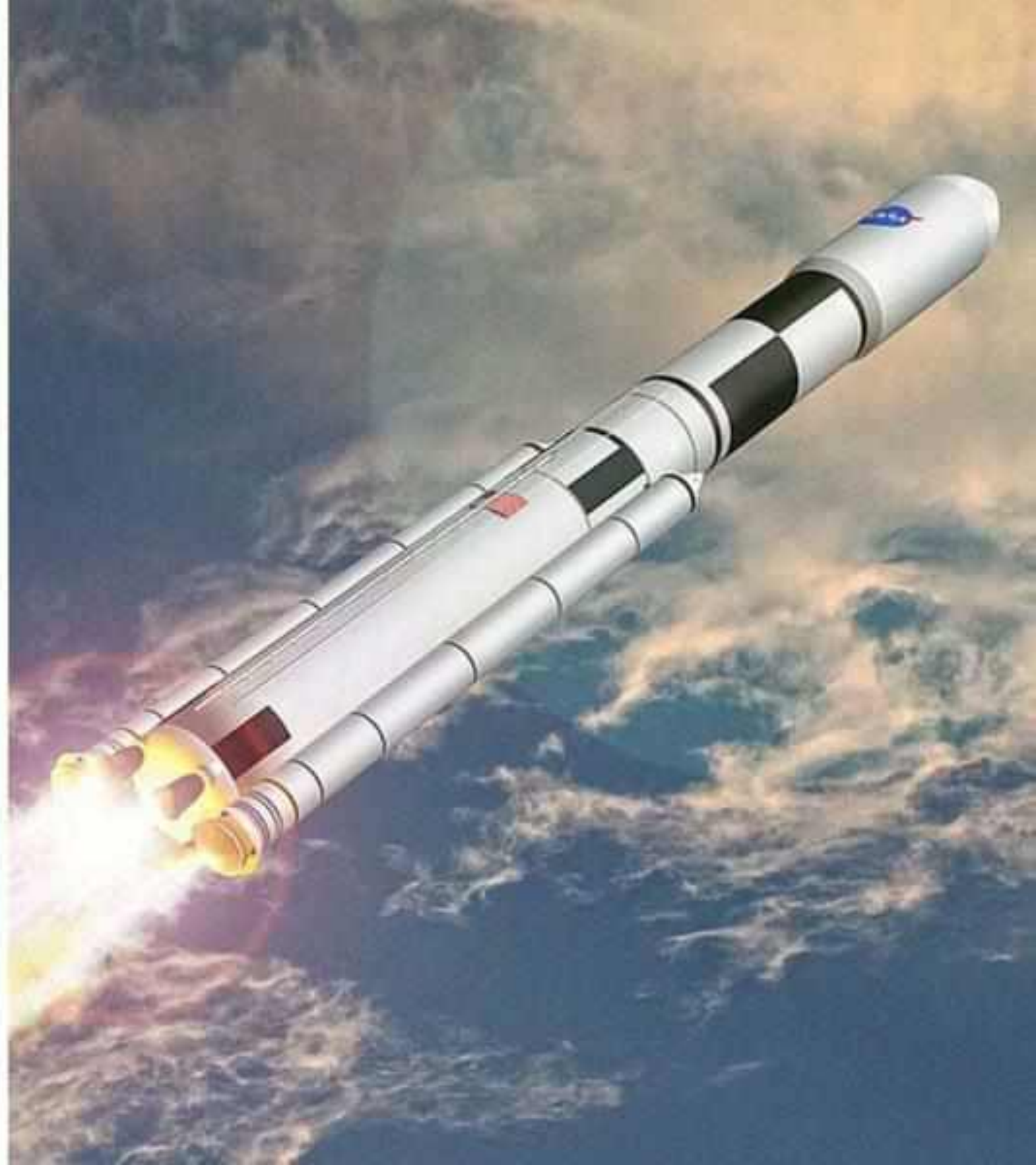
December 2020 (n=1,036)



Photo: NASA

Percentage of CO₂ emissions by world population







Steve Milloy ✓

@JunkScience

Follow



DeFazio on climate: "This is the existential threat to the future of the planet."

Insanity.

For comparison, the atmosphere Venus is 96.5% CO₂ -- and the planet is still there.

In contrast, Earth's atmosphere is only ~0.04% CO₂.



BBC Breaking News ✓
@BBCBreaking



BP reports huge profits of nearly £7bn (\$8.45bn), the second highest in the company's history, after oil and gas prices soared



BBC NEWS

bbc.co.uk

BP reports huge profits as energy bills soar



The Guardian ✓
@guardian



Shell's profits hit record \$11.5bn, as UK households face winter energy bill pain – business live



theguardian.com

Shell's profits hit record \$11.5bn, as UK households face winter energy bill pain – business...

Youth Strike for Climate

15th March 2019

1.5 million children worldwide



mattwinning.com



@mattwinning



@mattywin85

Matt Winning
**HOT
MESS**



What on earth can we do
about climate change?

1860

Now

2200

stylised global mean temperatures 1850-2200
design by @alxrdk based on warming stripes from @ed_hawkins
data and methodology on www.warningstripes.com