

Meaningful climate action

What does it look like and how can you achieve it?

Kamal Kapadia

Co-founder and Chief Learning Officer



Terra.do

Climate Change School and Community





Meaningful climate action

truth



courageous
action

Quick check-in

On a scale of 1-5, how do you feel?

1 = Very relaxed

5 = Very anxious



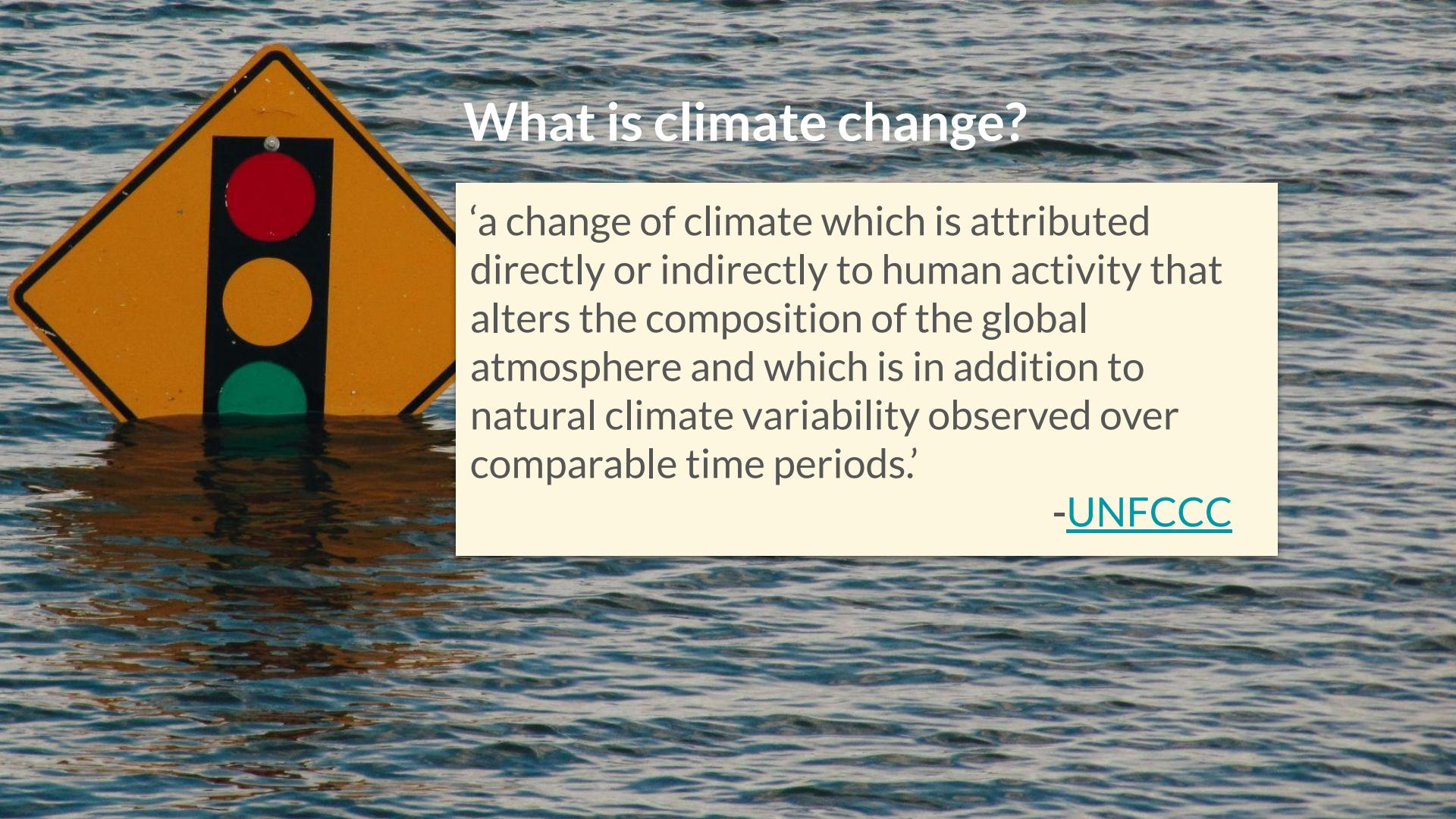
Meaningful climate action

truth





Truth, Part 1: The problem



What is climate change?

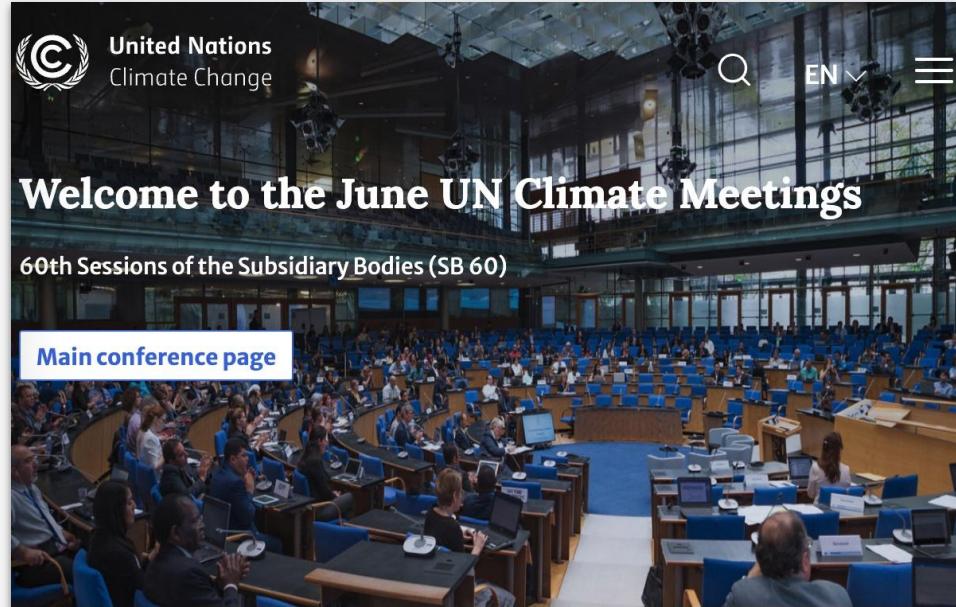
'a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.'

-[UNFCCC](#)

AR6 Synthesis Report: Climate Change 2023 –

[REPORT](#)

The IPCC finalized the Synthesis Report for the Sixth Assessment Report during the Panel's 58th Session held in Interlaken, Switzerland from 13 - 19 March 2023.

[READ THE REPORT](#)[CORE WRITING TEAM](#)United Nations
Climate Change

EN ▾

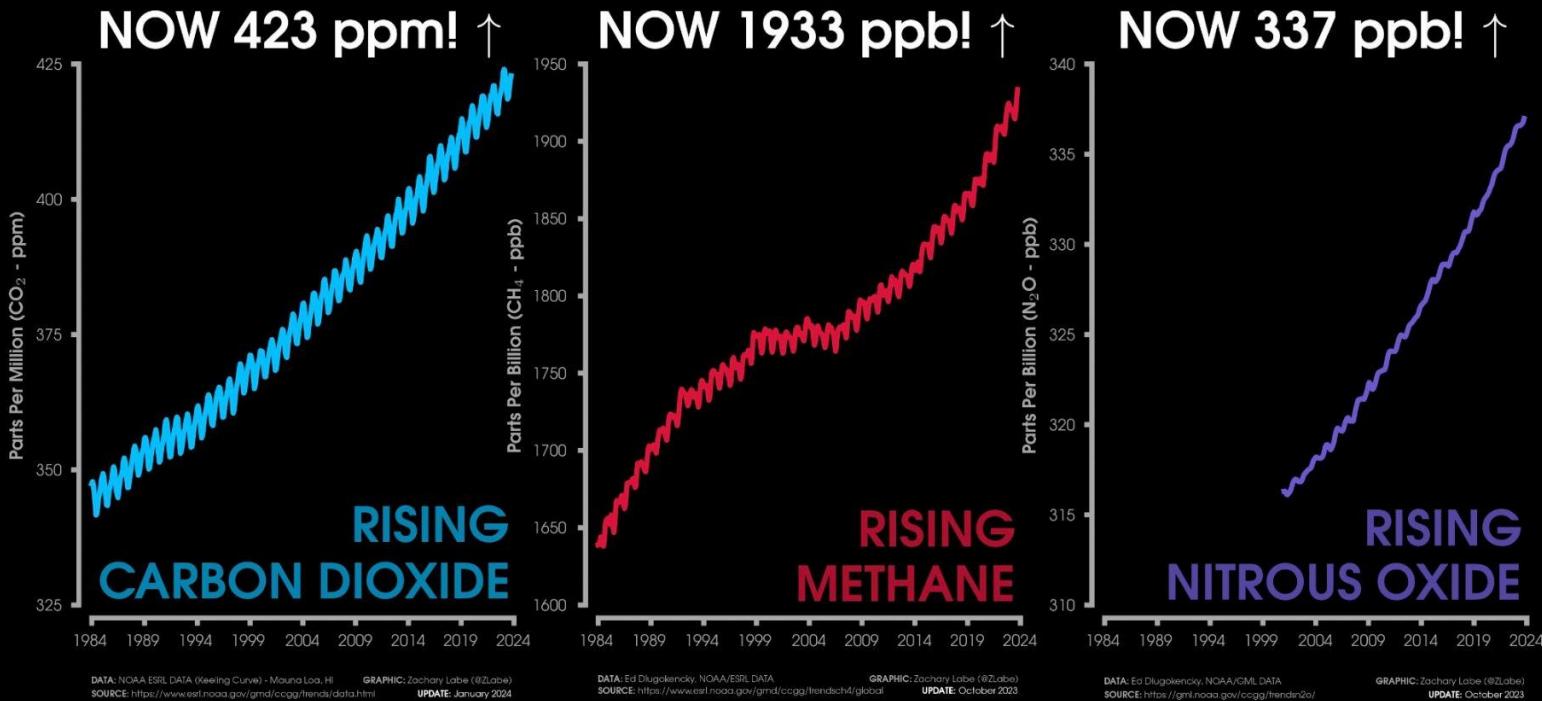


Welcome to the June UN Climate Meetings

60th Sessions of the Subsidiary Bodies (SB 60)

[Main conference page](#)[Session information](#)[From the podium](#)[SB 60 Agendas & documents](#)[The Road to Baku](#)

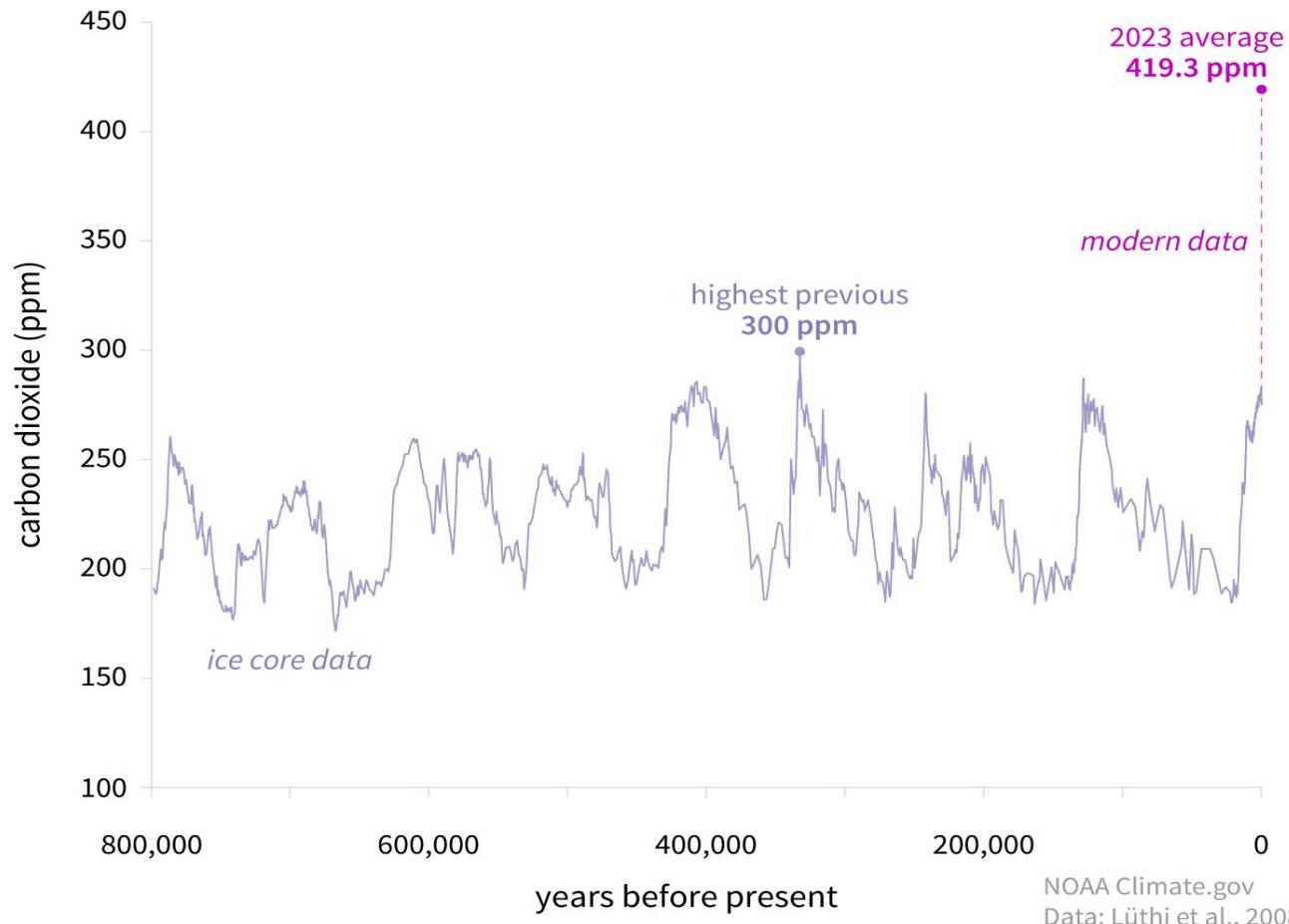
1. Climate change is real and we are the cause



Created on 5 February 2024

Source: [Dr. Zack Labe on X](#), May 24, 2024

CARBON DIOXIDE OVER 800,000 YEARS

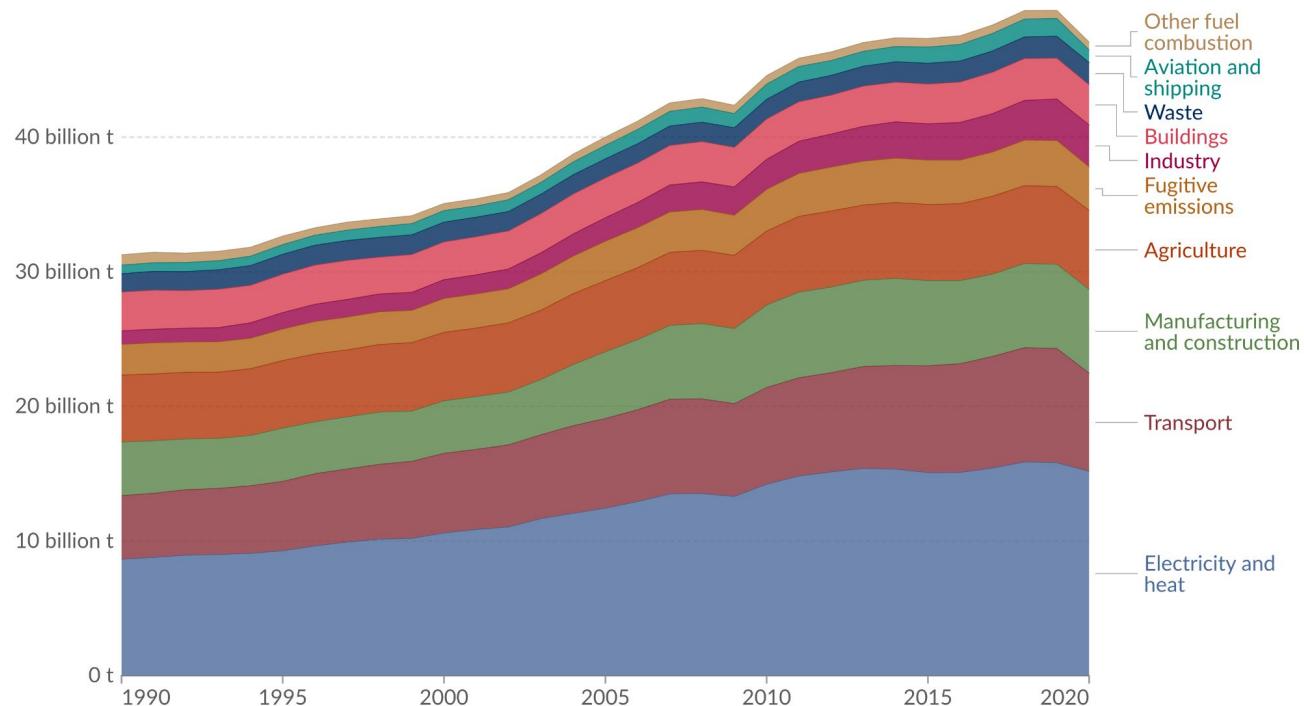


Source: [NOAA](#)

Greenhouse gas emissions by sector, World, 1990 to 2020

Our World
in Data

Greenhouse gas emissions¹ are measured in tonnes of carbon dioxide-equivalents² over a 100-year timescale.
Land-use change emissions are not included.



Data source: Climate Watch (2023)

OurWorldInData.org/co2-and-greenhouse-gas-emissions | CC BY

Change in global mean surface temperature ($^{\circ}\text{C}$)

0

-2

-4

-6

-8

-10

20,000

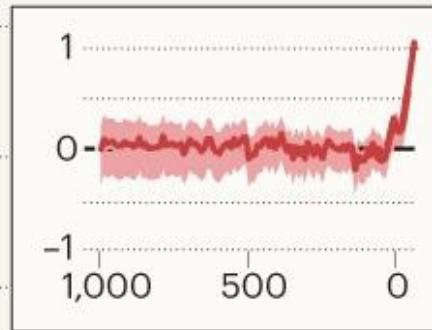
15,000

10,000

5,000

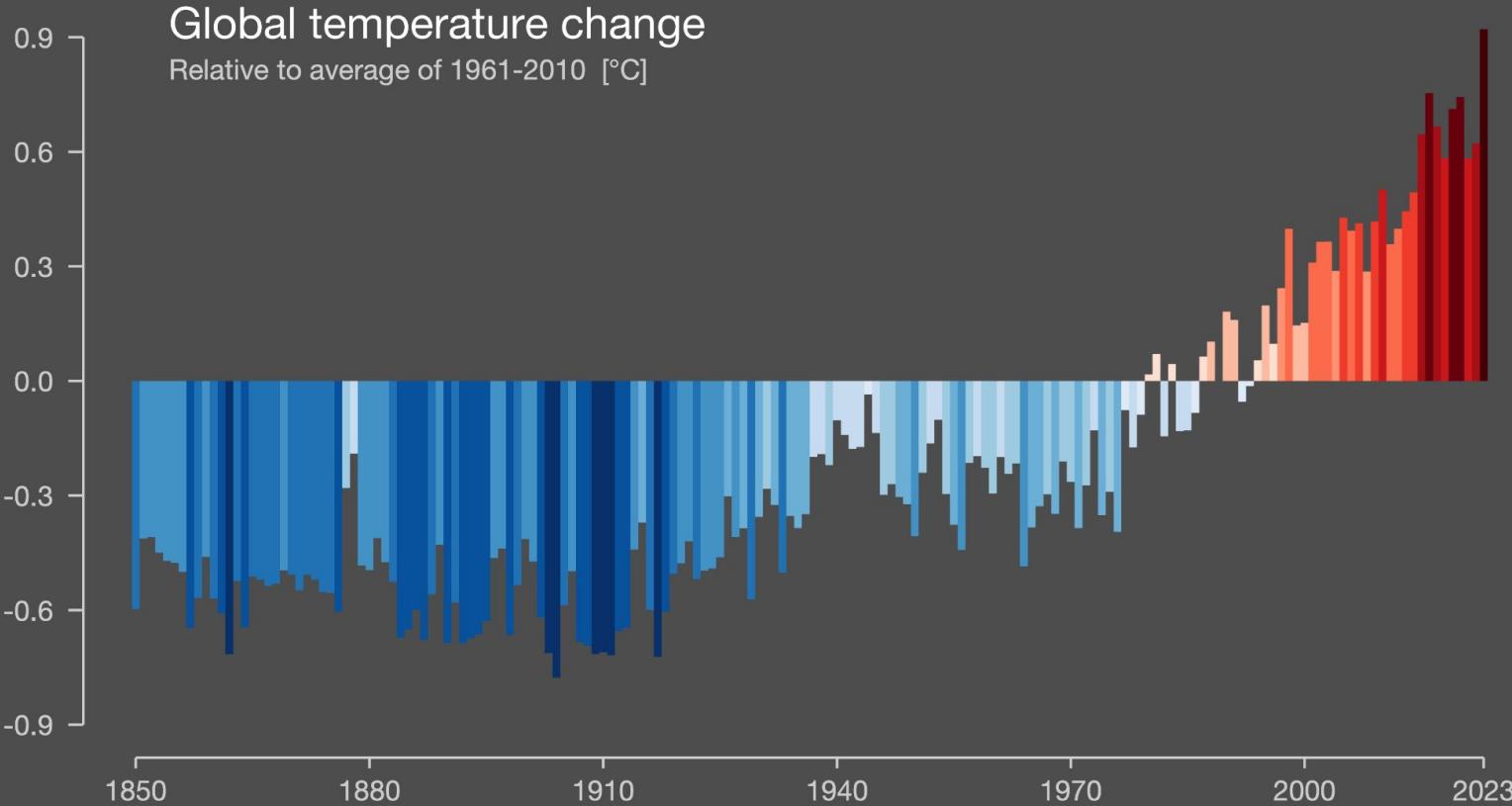
0

Years before present



©nature

Source: [Osman et al., 2021](#)

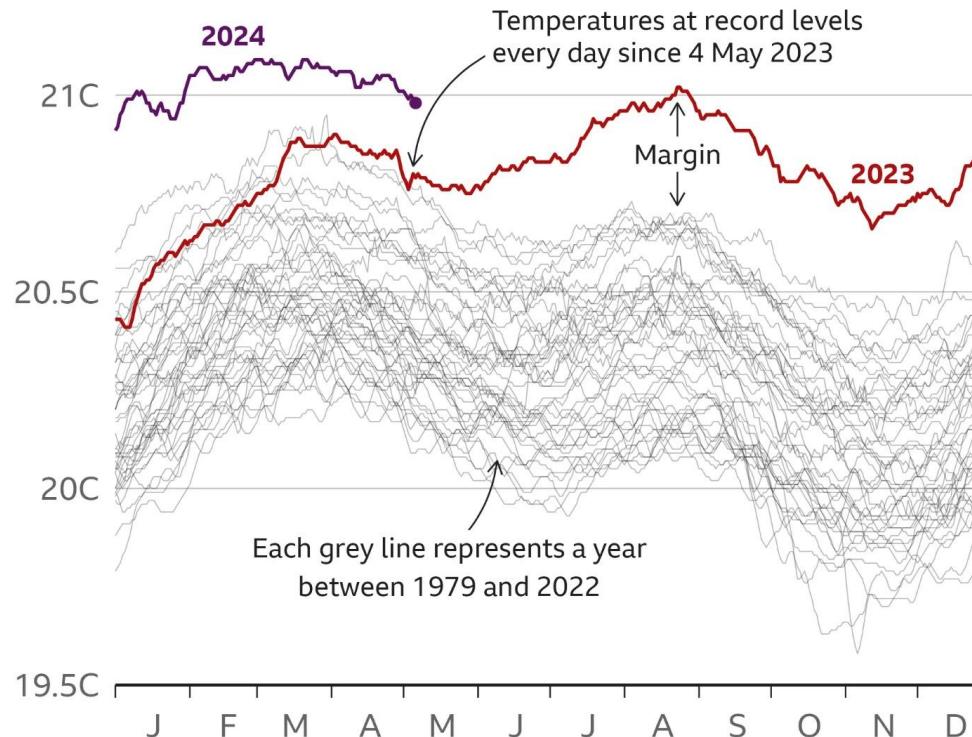


Source: [Show Your Stripes](#)

2. Climate change is here and now

A year of record-breaking ocean temperatures

Daily average sea surface temperature, 1979-2024



Source: ERA5, C3S/ECMWF

BBC

Source: [BBC](#)

'Unliveable': Delhi's residents struggle to cope in record-breaking heat

Temperatures of more than 45C have left population of 29 million exhausted - but the poorest suffer most



■ A farm labourer in Delhi rests as high temperatures continue. Photograph: Anushree Fadnavis/Reuters



World
Weather
Attribution

≡



On average, wildfires burn about 2.5 million hectares in Canada each year. In 2023, wildfires have already burned nearly 14 million hectares.
Photo by Audrey Marcoux, SOPFEU.

Climate change more than doubled the likelihood of extreme fire weather conditions in Eastern Canada

22 August, 2023

Source: [World Weather Attribution](#)

THE GREAT CLIMATE MIGRATION

By Abraham Lustgarten | Photographs by Meredith Kohut

"As their land fails them, hundreds of millions of people from Central America to Sudan to the Mekong Delta will be forced to choose between flight or death. The result will almost certainly be the greatest wave of global migration the world has seen."



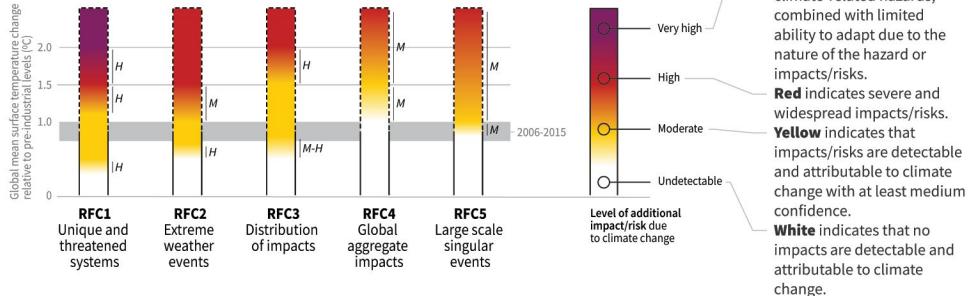
Source: [ProPublica and The New York Times Magazine](#)

**3. Exceeding 1.5° C of average global warming
is dangerous**

How the level of global warming affects impacts and/or risks associated with the Reasons for Concern (RFCs) and selected natural, managed and human systems

Five Reasons For Concern (RFCs) illustrate the impacts and risks of different levels of global warming for people, economies and ecosystems across sectors and regions.

Impacts and risks associated with the Reasons for Concern (RFCs)



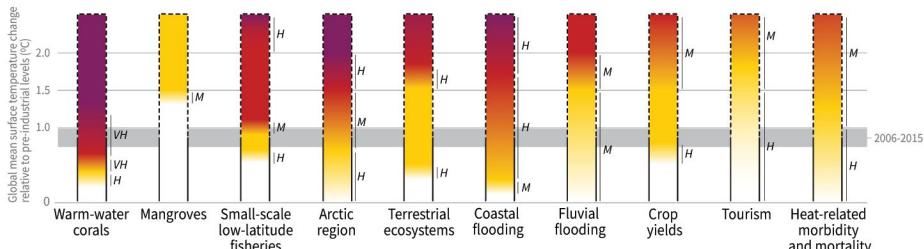
Purple indicates very high risks of severe impacts/risks and the presence of significant irreversibility or the persistence of climate-related hazards, combined with limited ability to adapt due to the nature of the hazard or impacts/risks.

Red indicates severe and widespread impacts/risks.

Yellow indicates that impacts/risks are detectable and attributable to climate change with at least medium confidence.

White indicates that no impacts are detectable and attributable to climate change.

Impacts and risks for selected natural, managed and human systems



Think of 1.5° C degrees not as an absolute line in the sand, but as a point on a continuum at which we begin to cross into multiple “danger zones.”

Graphic source. IPCC's special report on global warming of 1.5 C: [figure SPM 2](#)

Global Tipping Points

Welcome

Global Tipping Points is led by Professor Tim Lenton from the **University of Exeter's Global Systems Institute** with the support of more than 200 researchers from over 90 organisations in 26 countries.

The Global Tipping Points Report was launched at COP28 on 6 December 2023. The report is an authoritative assessment of the risks and opportunities of both negative and positive tipping points in the Earth system and society.

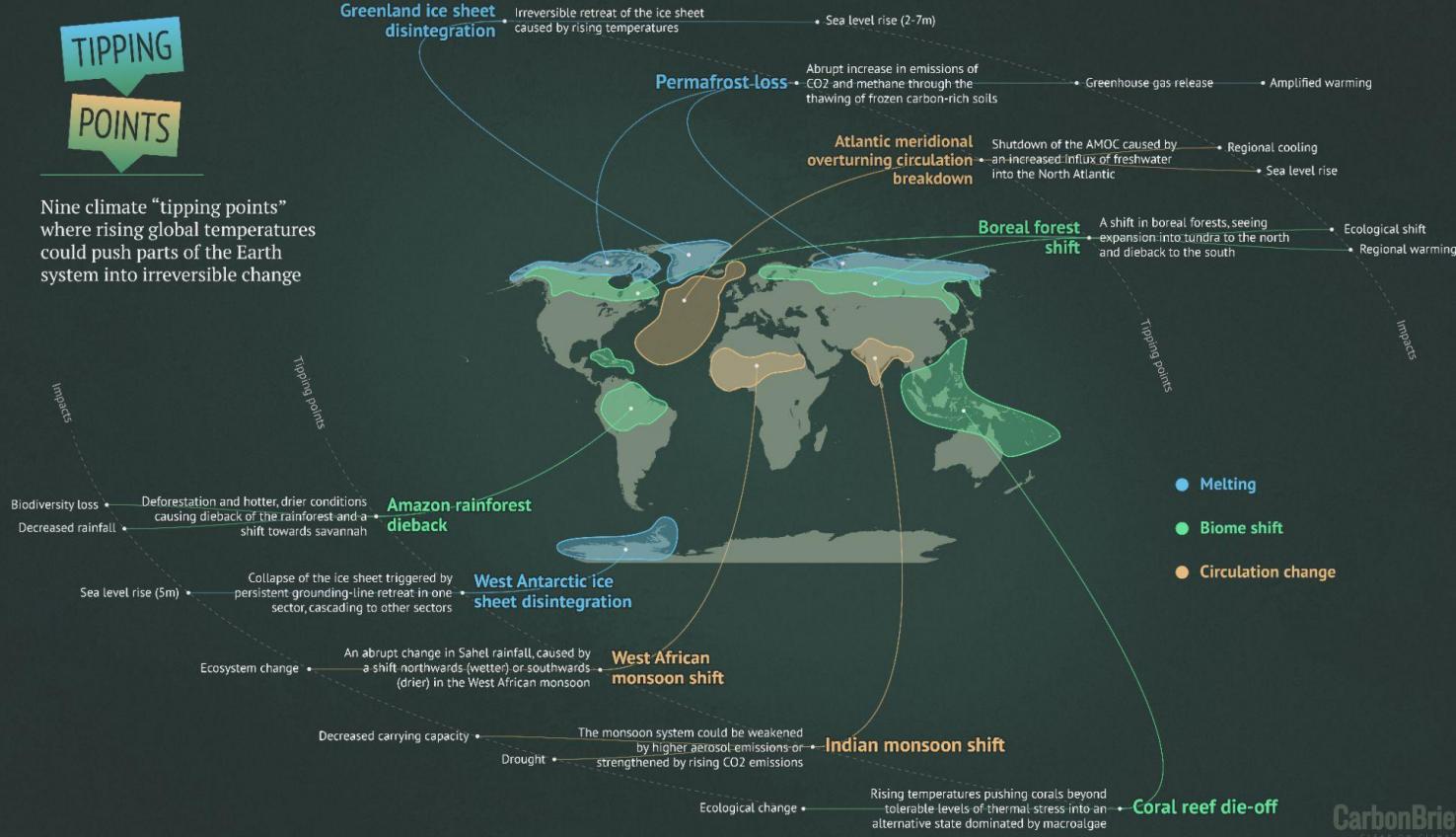
[Foreword](#) by Dr. Andrew Steer, President & CEO at Bezos Earth Fund.



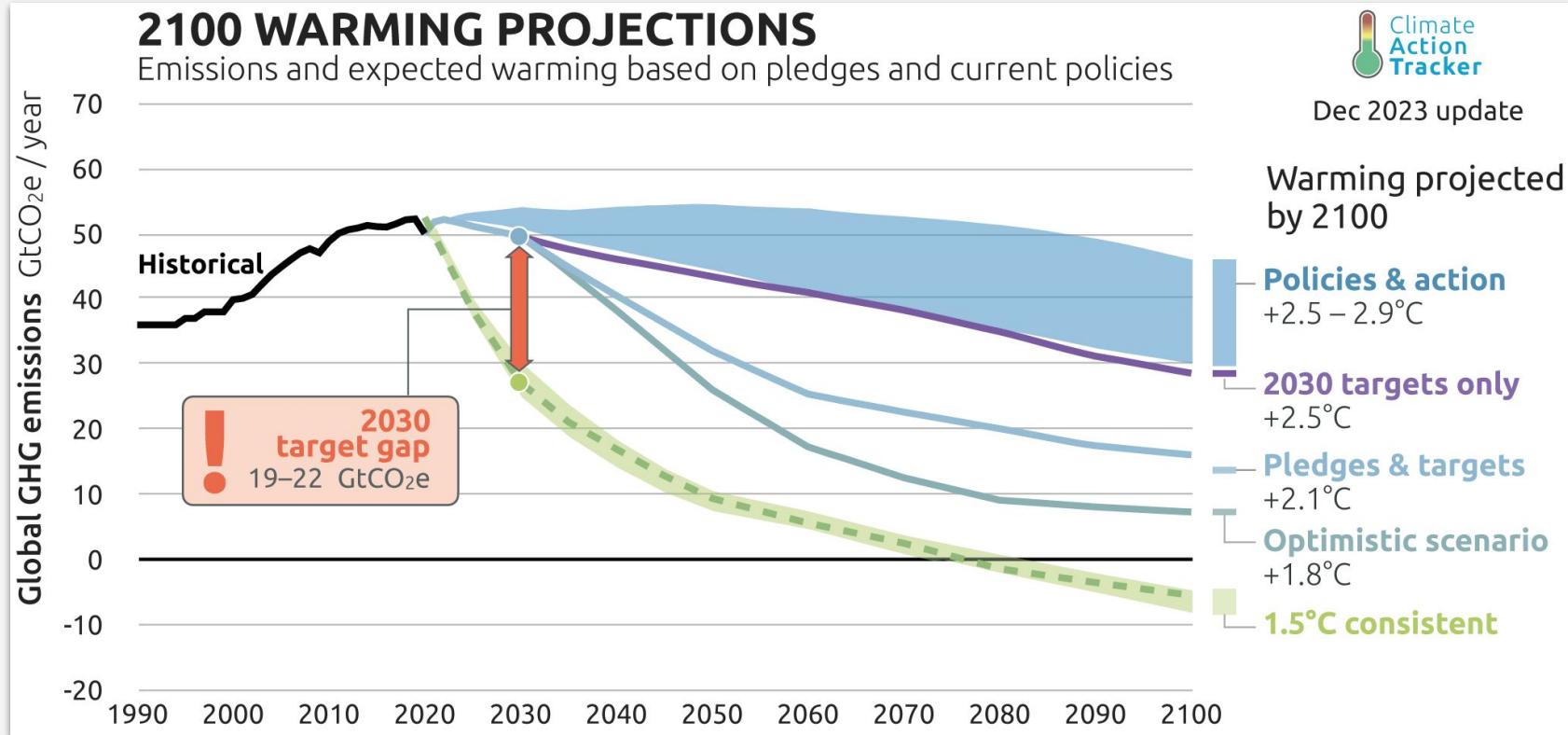
“a critical threshold that, when crossed, leads to large, accelerating and often irreversible changes in the climate.”

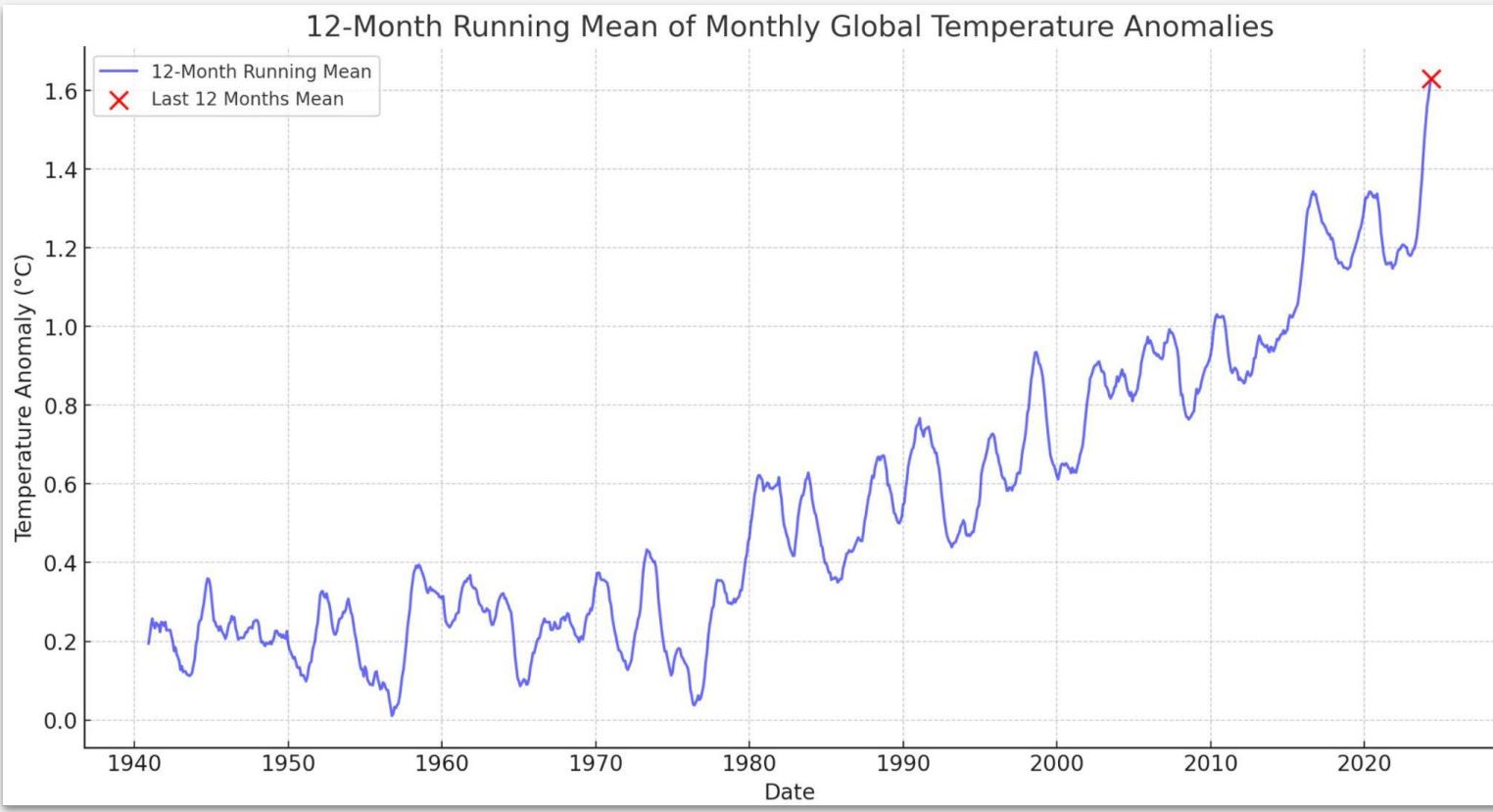
TIPPING POINTS

Nine climate “tipping points” where rising global temperatures could push parts of the Earth system into irreversible change



We are headed for dangerous temp. ranges by 2100





Source: [Dr. Zeke Hausfather on X](#), June 1, 2024

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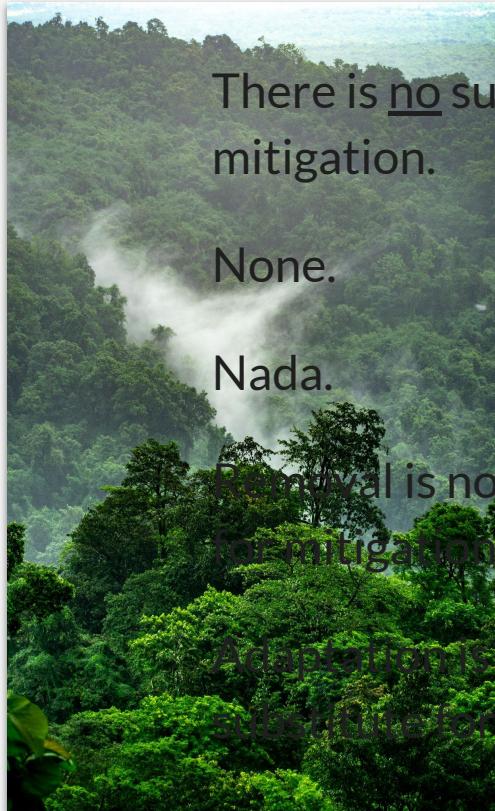


Truth, Part 2: Solutions

Mitigation



Removal



Adaptation



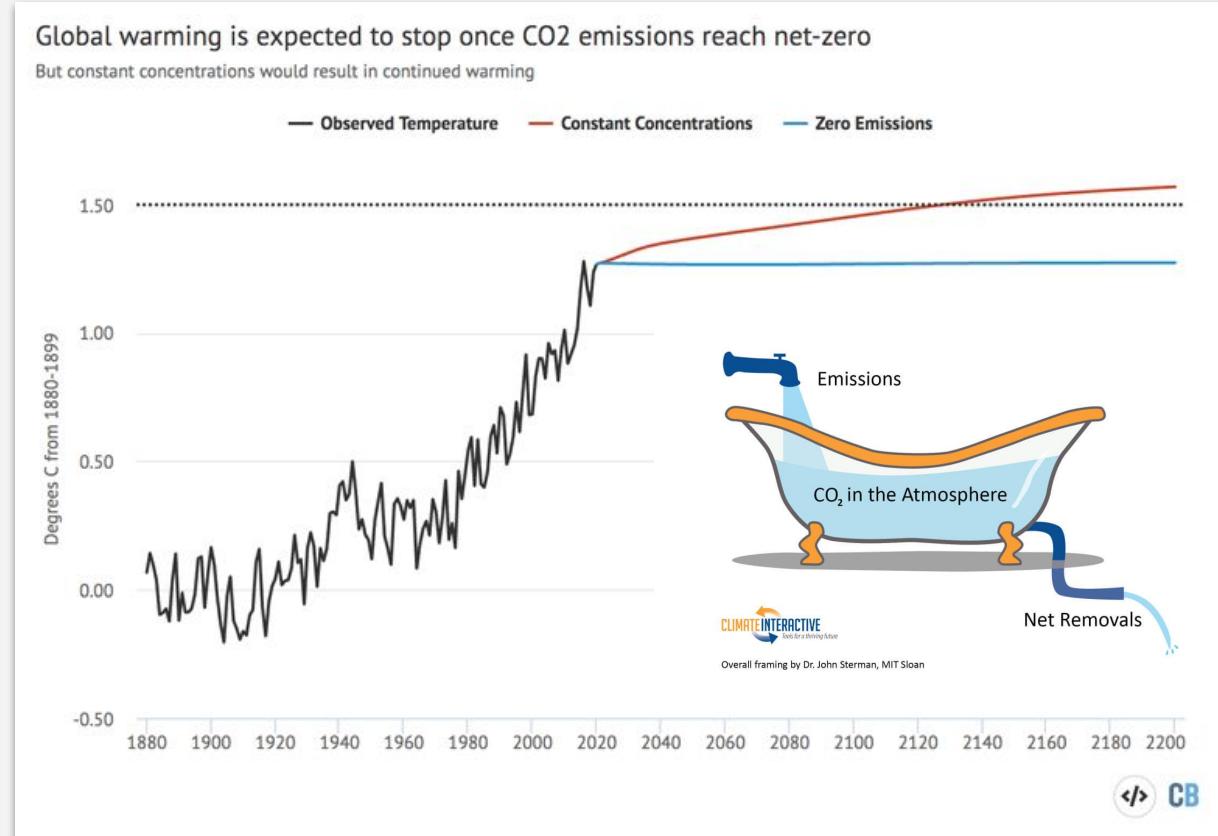
Photos: [Bruno Figueiredo](#), [Boudhayan Bardhan](#) and [Jamison Cameron](#) on [Unsplash](#)

There is no substitute for rapid emissions reductions...

...and now is vastly preferable to later.

We have to get to zero or *net-zero emissions* globally to stop global warming.

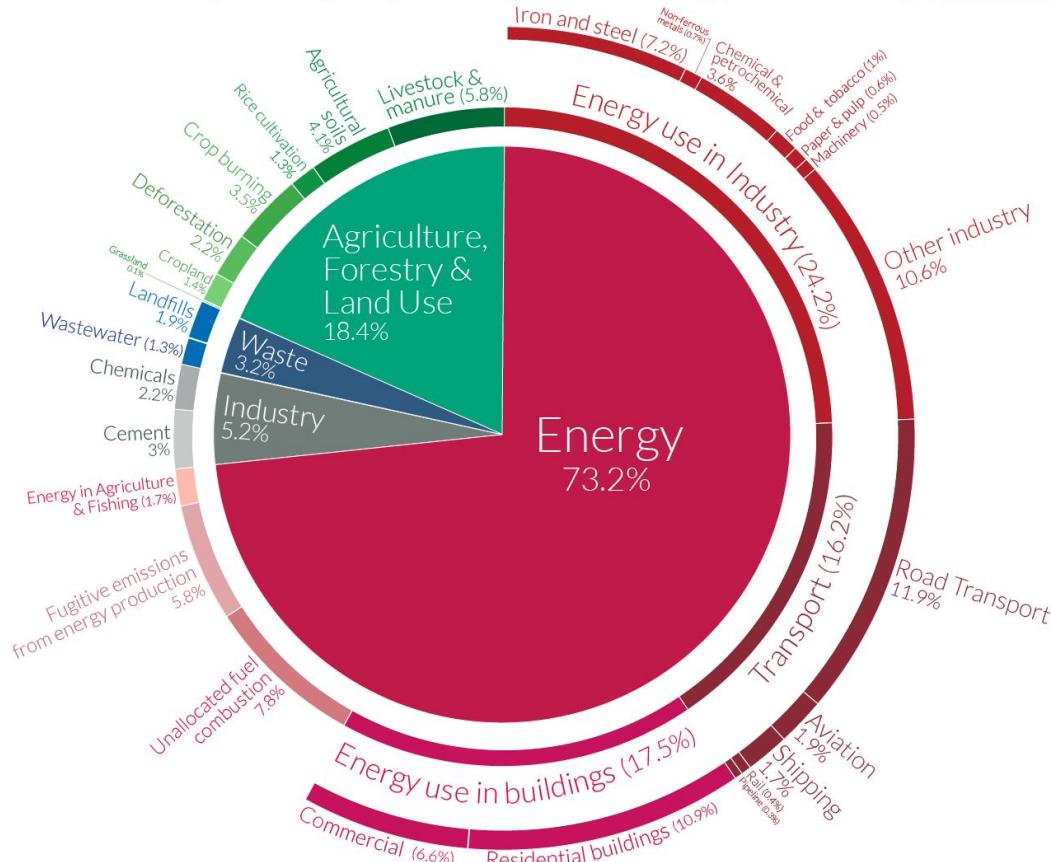
Net zero = eliminate almost all (>90%) emissions + remove the rest



Source. [Carbon Brief](#)

Global greenhouse gas emissions by sector

This is shown for the year 2016 – global greenhouse gas emissions were 49.4 billion tonnes CO₂eq.



We have all* the solutions

CLIMATE SOLUTIONS BY SECTOR

Within each of these sectors are solutions to climate change with actions that can be taken today.



ELECTRICITY



OTHER ENERGY



FOOD, AGRICULTURE,
AND LAND USE



INDUSTRY



TRANSPORTATION



BUILDINGS



HEALTH AND EDUCATION



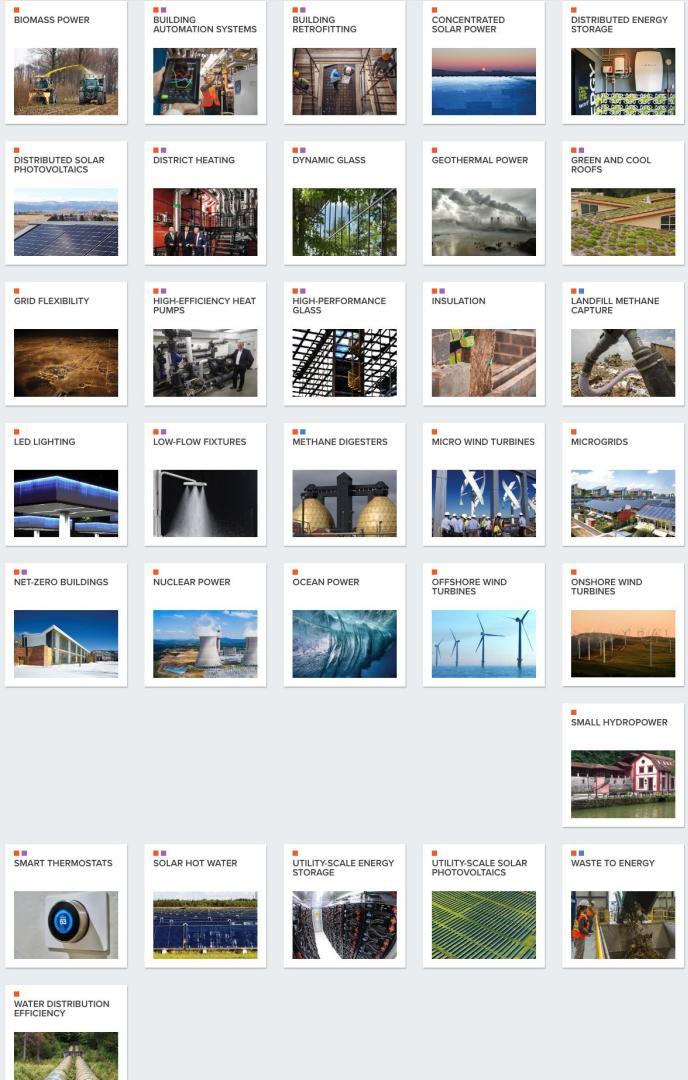
LAND SINKS



COASTAL AND OCEAN
SINKS

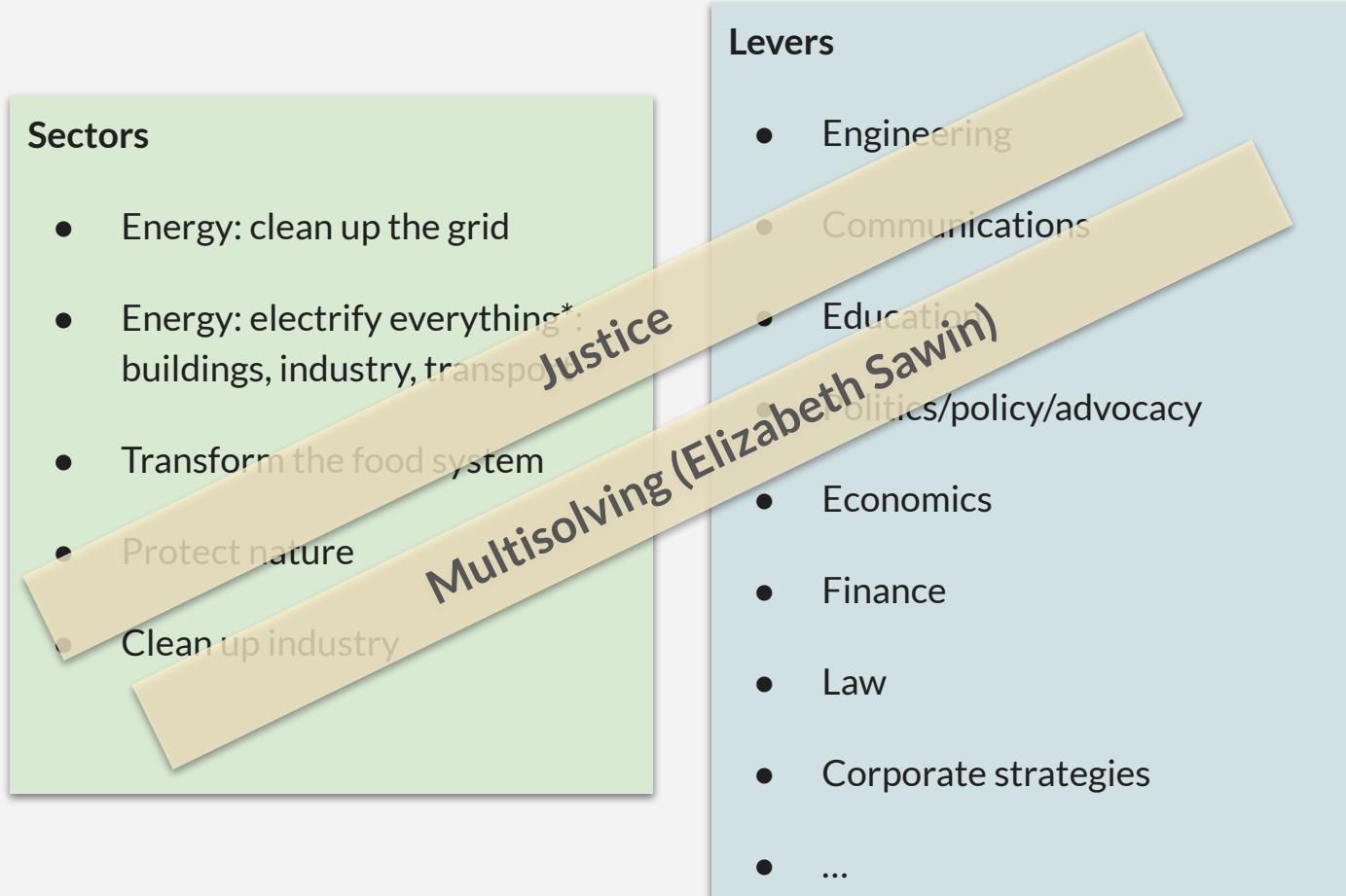


ENGINEERED SINKS



Source. [Project Drawdown](#)

Sectors, levers and justice are equally important



Meaningful climate action

truth



courageous
action

Systems change <> Individual action



Globally representative evidence on the actual and perceived support for climate action

Received: 13 July 2023

Accepted: 4 January 2024

Published online: 09 February 2024

Check for updates

Peter Andre ¹, Teodora Boneva ², Felix Chopra ³ & Armin Falk ²✉

Mitigating climate change necessitates global cooperation, yet global data on individuals' willingness to act remain scarce. In this study, we conducted a representative survey across 125 countries, interviewing nearly 130,000 individuals. Our findings reveal widespread support for climate action.

Notably, 69% of the global population expresses a willingness to contribute 1% of their personal income, 86% endorse pro-climate social norms and 89% demand intensified political action. Countries facing heightened vulnerability to climate change show a particularly high willingness to contribute. Despite these encouraging statistics, we document that the world is in a state of pluralistic ignorance, wherein individuals around the globe systematically underestimate the willingness of their fellow citizens to act. This perception gap, combined with individuals showing conditionally cooperative behaviour, poses challenges to further climate action. Therefore, raising awareness about the broad global support for climate action becomes critically important in promoting a unified response to climate change.

Our “learning for action” model



We nurture meaningful, supportive connections between learners and employers, experts and practitioners, and we teach career-enhancing skills.

We help people build sustainability skills and teach them how to apply these skills to real-world problems.

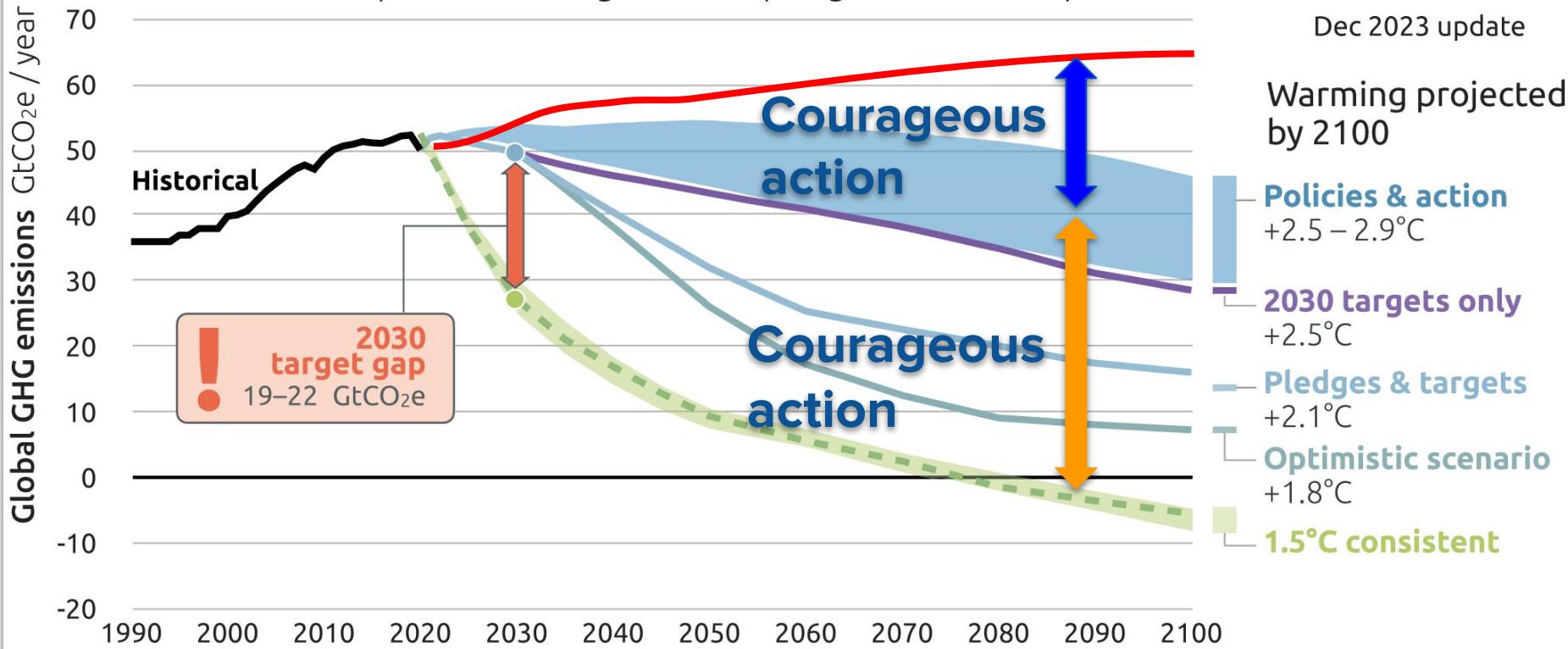
We focus on emotional resilience to help sustain doing the work in the face of personal and societal challenges related to addressing climate change.

2100 WARMING PROJECTIONS

Emissions and expected warming based on pledges and current policies



Dec 2023 update



Source: [Climate Action Tracker](#)

Systems change <> Individual action

Individual climate action:

- Consumer behavior
- Investment behavior
- Citizen behavior
- There's a big one missing...

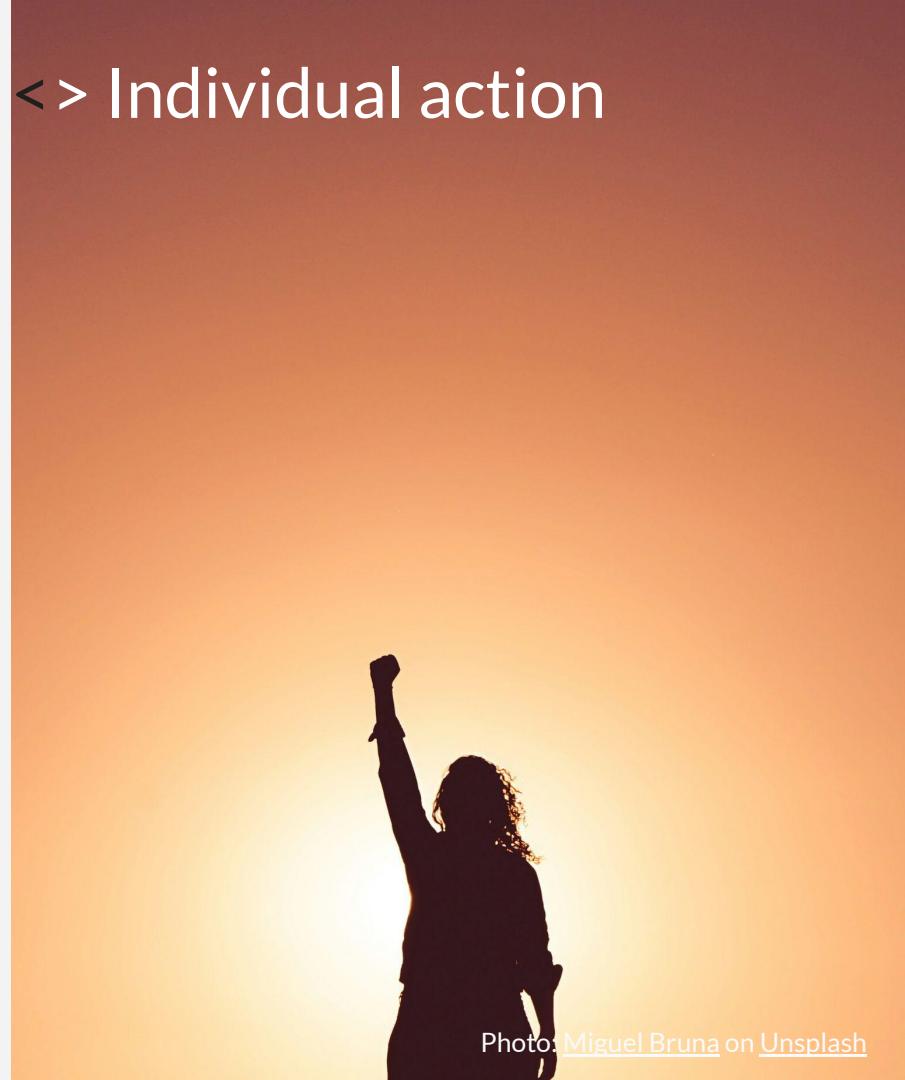


Photo: [Miguel Bruna](#) on [Unsplash](#)



Your job

Global climate action is bottlenecked on talent

Growth in demand for green skills is outpacing the increase in supply

Between 2022 and 2023

+12.3%

+22.4%

Share of green talent in the workforce

Share of job postings requiring at least one green skill



LinkedIn Economic Graph

There is a critical shortage of green energy workers with the right skills in the right place to advance global decarbonization efforts, according to new research from the BCG Henderson Institute.

BCG has calculated the skills gap in the green economy will rise to 7 million by 2030. This green skills gap is especially acute in solar, wind, and biofuels technologies—key pillars of the energy transition



Amid the many positive trends emerging for clean energy employment, skilled labour shortages are already plaguing the sector and require attention. The energy sector needs higher skilled workers than most other industries — 36% of energy jobs are within high-skilled occupations by International Labour Organization definitions, compared with 27% in the broader economy. Job vacancy rates, a key indicator of labour shortages, have been rising for years in many major economies in the construction, manufacturing, utility and other energy-related sectors.



International
Labour
Organization

Ambitious national commitments and sectoral priorities to implement the Paris Agreement underestimate the role of skills development measures

Sources. [LinkedIn](#), [BCG](#), [IEA](#), [ILO](#)

How do I use my skills to address climate change?

TERRA.DO > LEARNING FOR ACTION

CLIMATE FELLOWSHIP

Climate Change: Learning for Action

A 12-week climate fellowship to understand the complexities of climate change and arrive at your perfect climate role. Over a thousand alumni have found their climate solution... find yours now.

Course starting July 22, 2024 | Apply by July 12, 2024

[Apply now](#) [View syllabus](#)

Excellent  271 reviews on  Trustpilot

JOIN THOUSANDS OF ALUMNI ALREADY LEADING ON CLIMATE

BILL & MELINDA GATES FOUNDATION  THE WORLD BANK  SUNRISE MOVEMENT  BERKELEY UNIVERSITY OF CALIFORNIA  UNIVERSITY OF OXFORD  UNIVERSITY OF CAMBRIDGE  STANFORD UNIVERSITY  PENN 
Apple  Amazon  NIKE  Google  Meta  Slack  McKinsey & Company  HSBC 

- Rigorous, comprehensive, up-to-date curriculum
- Lifetime access to course material
- Access to supportive and active community
- Certificate of completion
- Personalized support
- Expert speakers





Pia Faustino
Director, Social Impact and Sustainability
@ Thinking Machines Data Science
Climate Change: Learning for Action



Pia Faustino (She/Her) • 1st

Building data-driven technology for climate action. | Insights, im...
5mo •

...

This time, our geo team is doing a different kind of mapping.

Instead of mapping roads, buildings, or land -- we're working with GIZ to map out the **#climatedata** ecosystem of the Philippines. It's an important step towards strengthening data-driven decision-making for **#climate #resilience**.

Looking forward to learning and sharing the team's research in the coming months.



JC Albert P. • 2nd

Climate Scientist | Data Scientist
5mo • Edited •

Truly grateful to **Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH** for giving us the opportunity to present our work in the Importance of Climate Data, Community of Practice, and Climate Information Services in Local Policy Symposium last November 24 as part of the South-South Collaboration on Climate Information Services (SSCIS) project.

The Geospatial team at **Thinking Machines Data Science** is thrilled to collaborate with GIZ to evaluate the maturity of Climate Information



Blair Swedeen
Managing Director, Partner Analytics,
Strategy and Business Development
@Meta
Climate Change: Learning for Action
Global Head, Net Zero and Sustainability
@ Meta



Blair Swedeen • 2nd

Operator and growth-focused tech executive...

1mo •

+ Follow ...

I'm really excited about the work our teams are doing to impact climate change leveraging AI. In this case, we've partnered with WRI to target one of the biggest blockers to the flow of capital to high quality nature-based carbon removal projects by launching a map allowing the detection of single trees at a global scale. To accelerate global progress in this area, all canopy height data and artificial intelligence models are free and publicly available on AWS, GitHub and Google Earth Engine.



Sarah Sasaki Tsien • 3rd+

Sustainability & Social Impact Strategy at Meta & Fellow at The Asp...

1mo •

+ Follow

The huge leaps in the Meta AI released last week are not only powering cool new features in our family of apps <https://lnkd.in/gEWEJGvy> but also support real world AI applications to address climate change.

Meta's path to net zero <https://lnkd.in/gBWZX3p8> is even more important this [#earthday](#). Proud to be on this journey with the team making this all happen!



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UNIVERSITY OF CAMBRIDGE

Stanford
University

Penn

Apple

amazon

NIKE

Google

Meta

slack

McKinsey
& Company

HSBC



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It's so much more
than a job

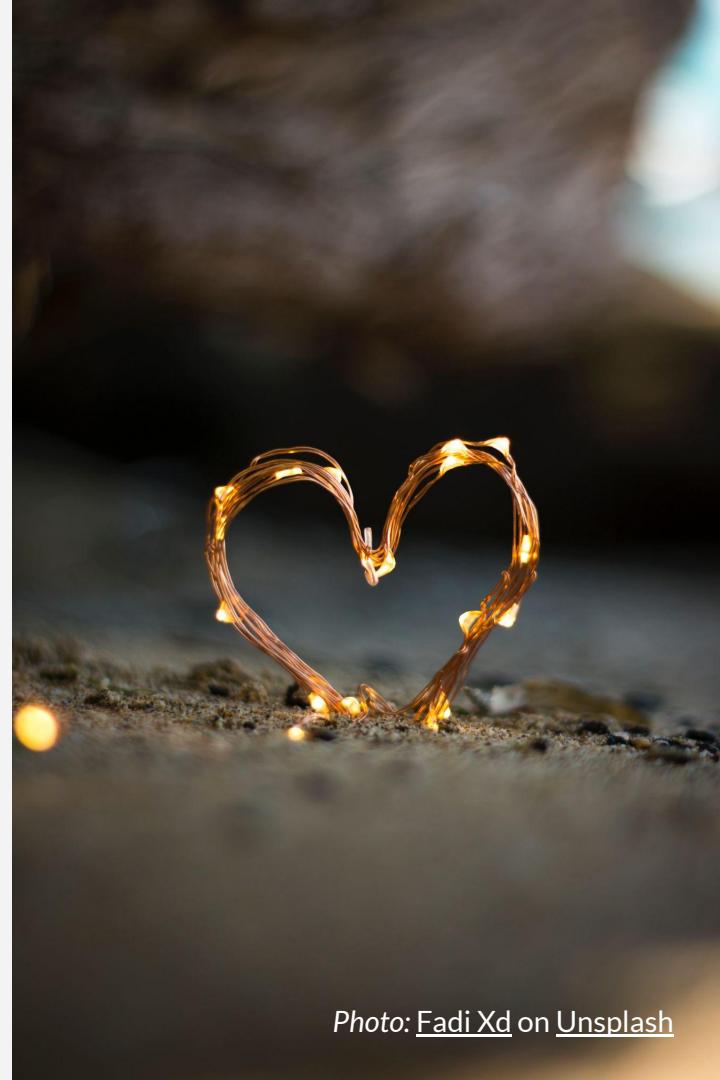


Photo: [Fadi Xd](#) on [Unsplash](#)

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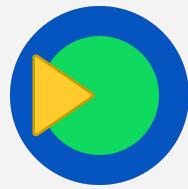


Action: What will your story be?

The year is 2045 and the world has successfully solved climate change. You are one of many heroes of this great transition and *your story* was inspiring to millions. You have been invited to share this story at a massive global Terra.do conference; Terra.do is now the world's leading online platform for climate action and learning, with 300 million subscribers globally.

What is one courageous act that will be part of your story?

- Go beyond your comfort zone and face one difficult truth about yourself, your organization, your sector (in the context of climate action)
- Not something you've already done but something you will do
- Use your imagination; think of courageous people you admire and their stories



THANK YOU!
Terra.do