

Climate Crisis Myths

Science, Racism, Ethics & Action



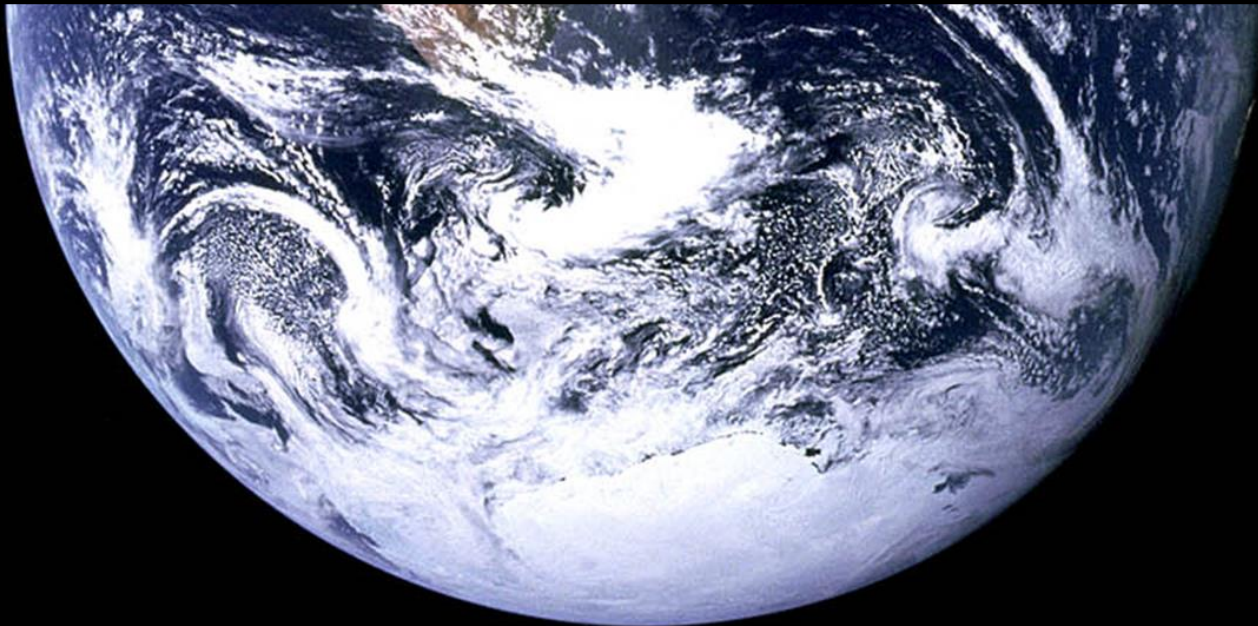
Kritee (Kanko), Ph.D.

Climate scientist, Zen teacher, Co-founder: Ecodharma Center

Website boundlessinmotion.org Twitter [@KriteeKanko](https://twitter.com/KriteeKanko)



Science



All life depends on three thin layers

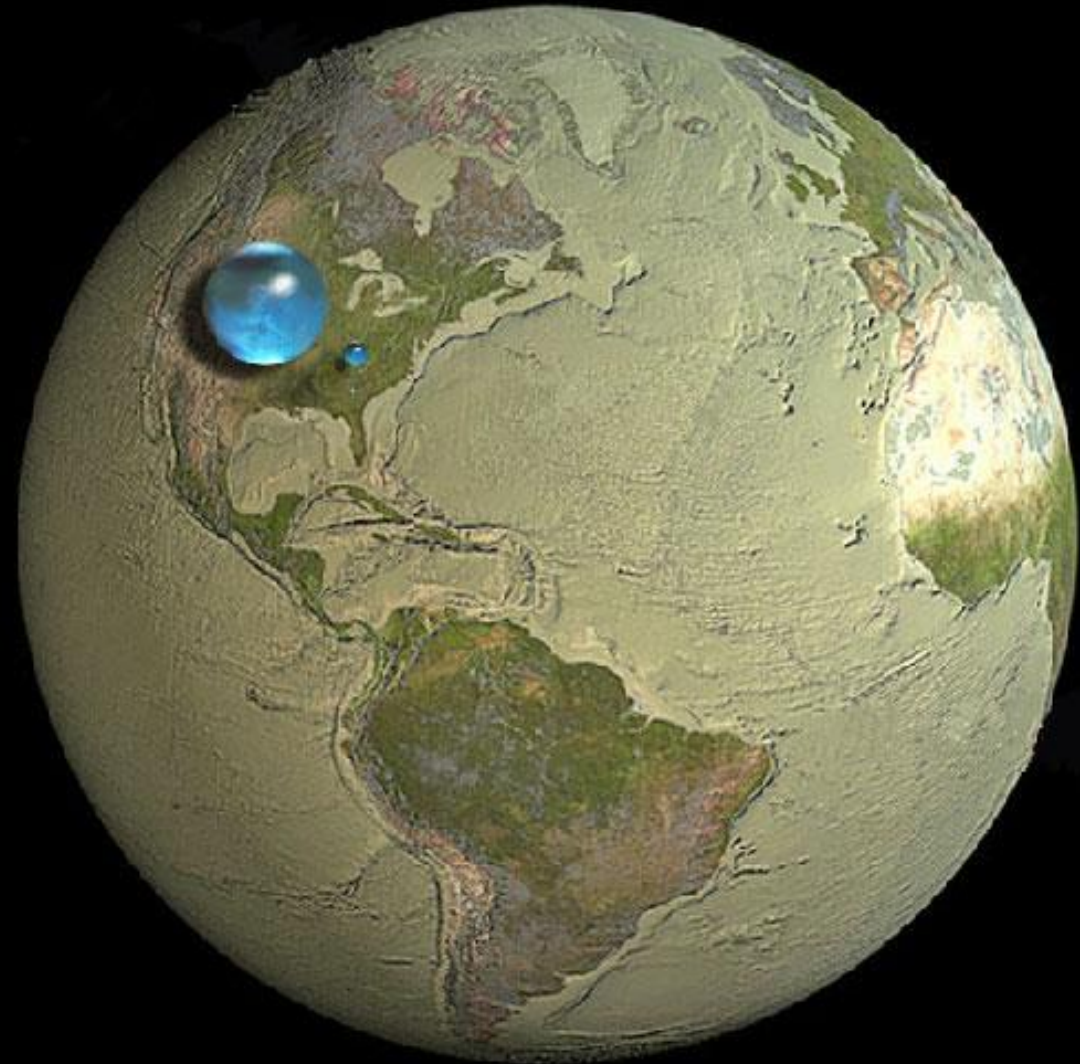
Freshwater
50-100 miles sphere



Topsoil
2-8 inches



Atmosphere
~20 miles

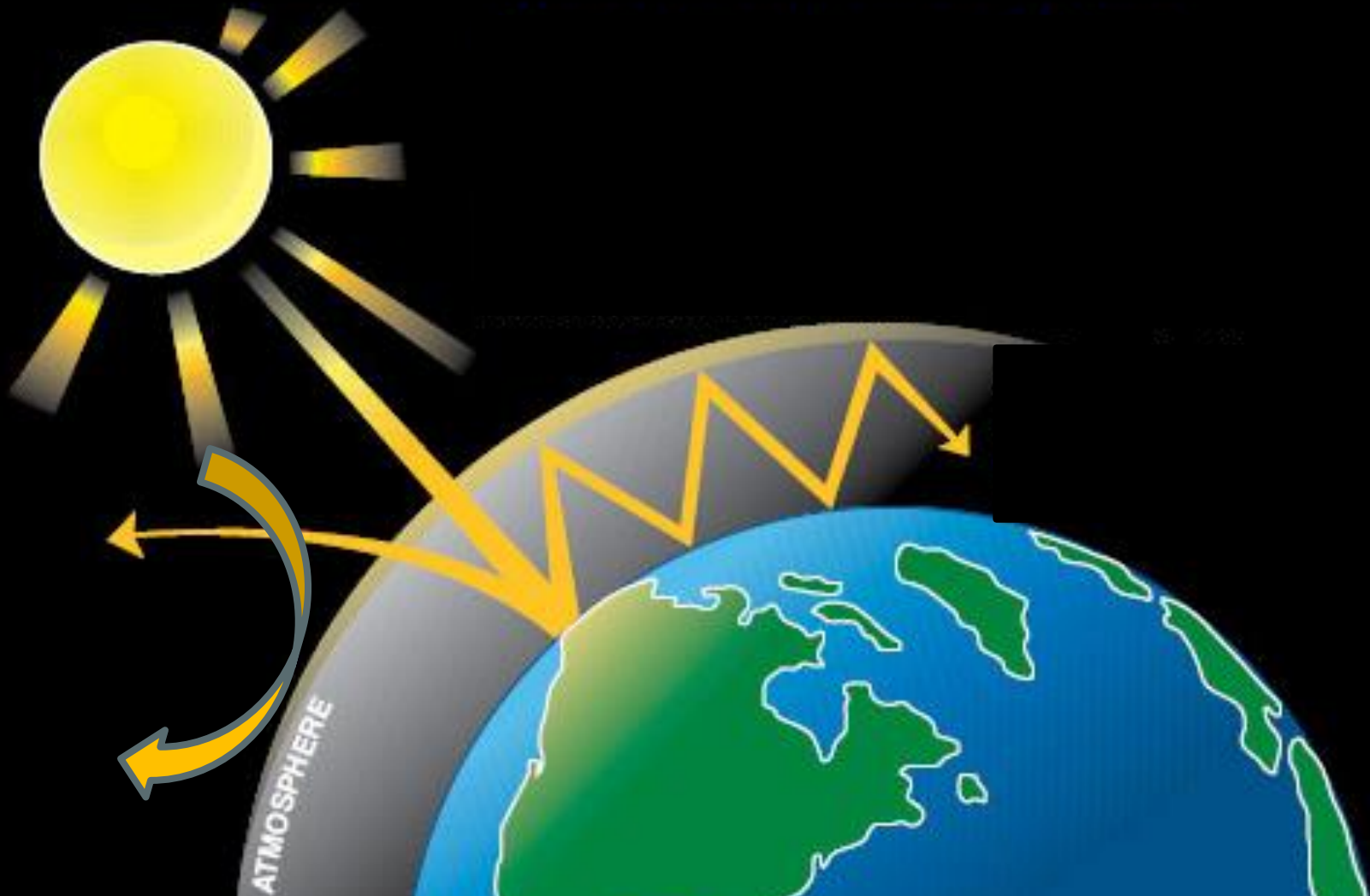


Water in, on, and above the Earth

• Liquid fresh water

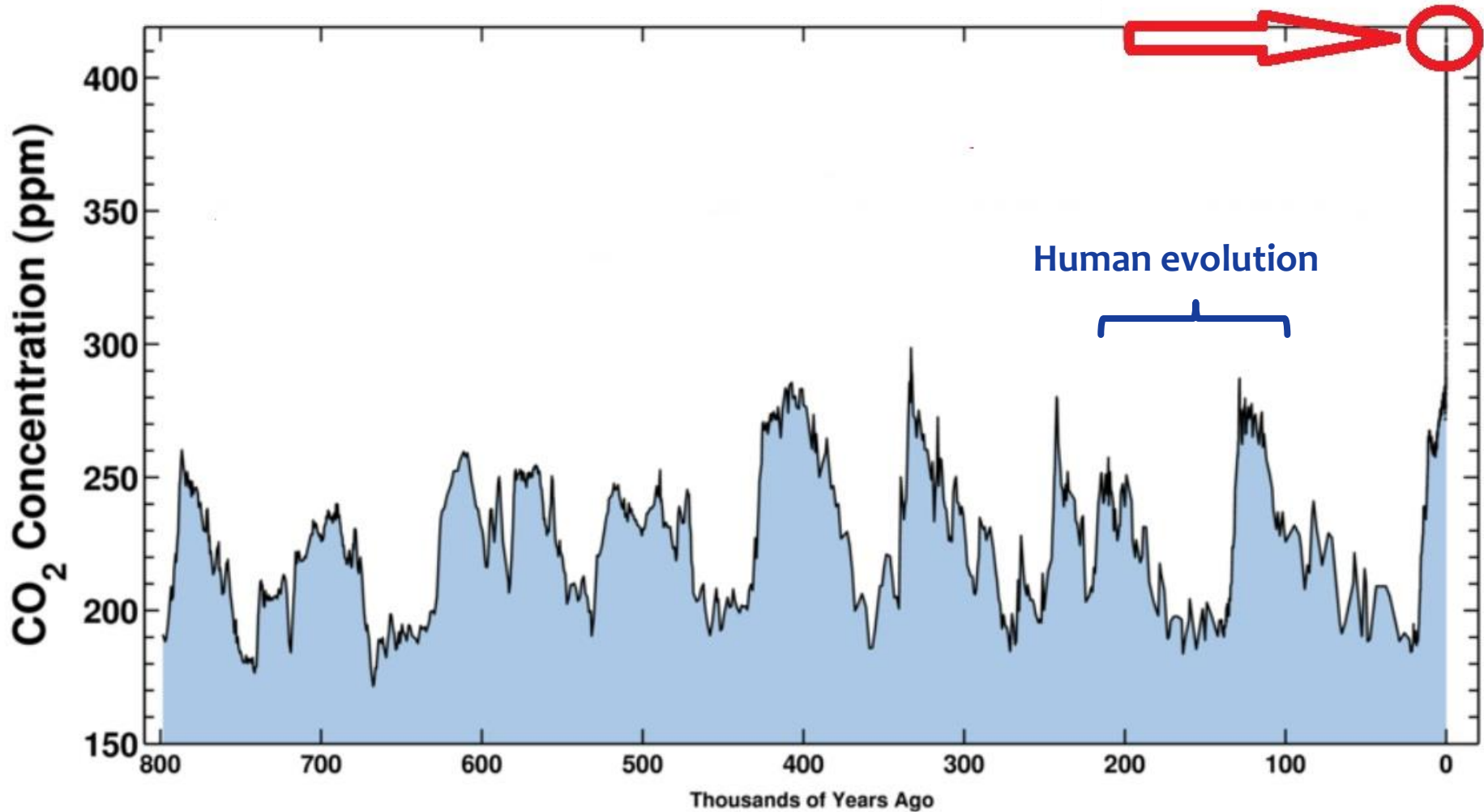
Physics of our thin atmosphere

Greenhouse effect = Blankets over Earth



Our planet's atmosphere's EKG

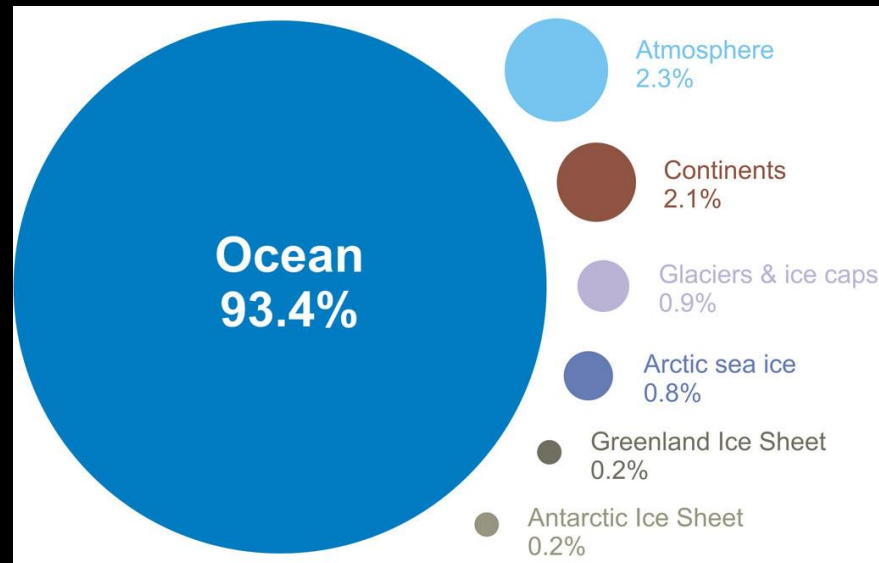
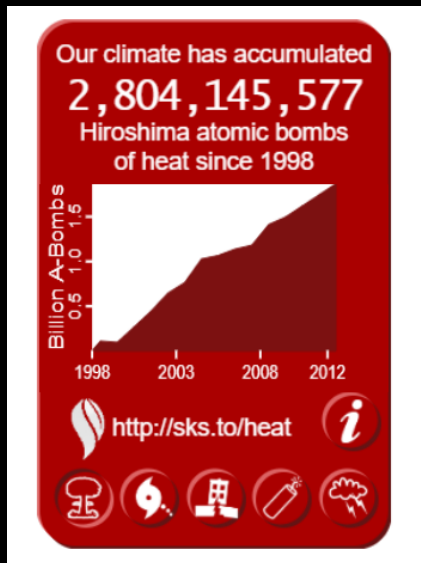
January 01, 2020



Planet's heating rate = 4 atomic bombs per second

Earth has accumulated ~3 billion Hiroshima bombs worth of heat since ~2000.

This heat is going primarily into oceans.



Direct result

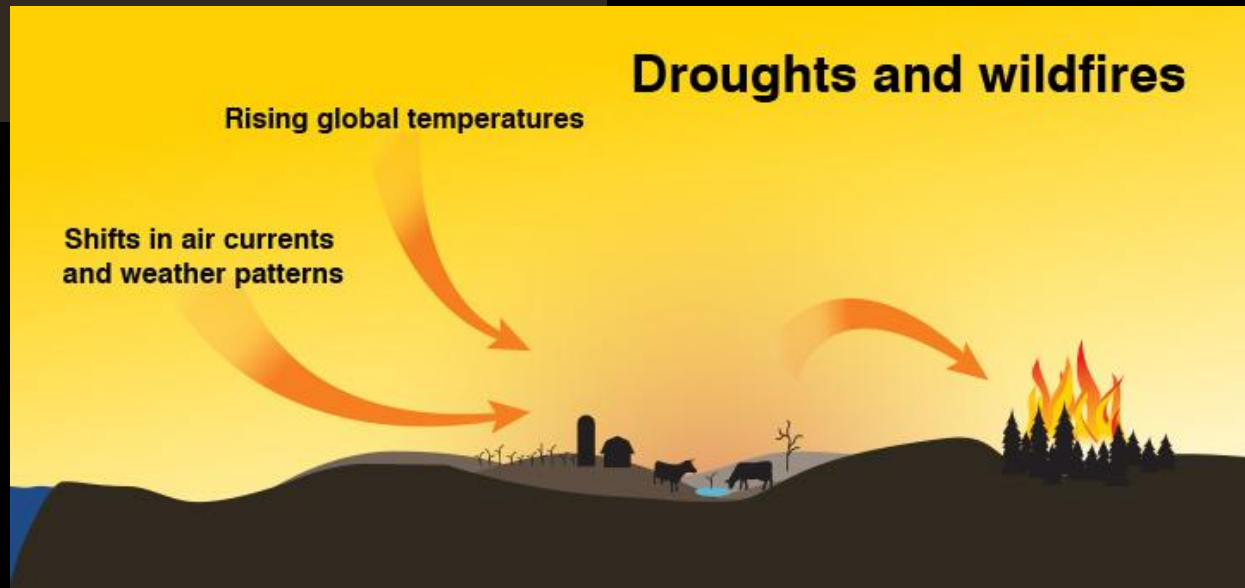
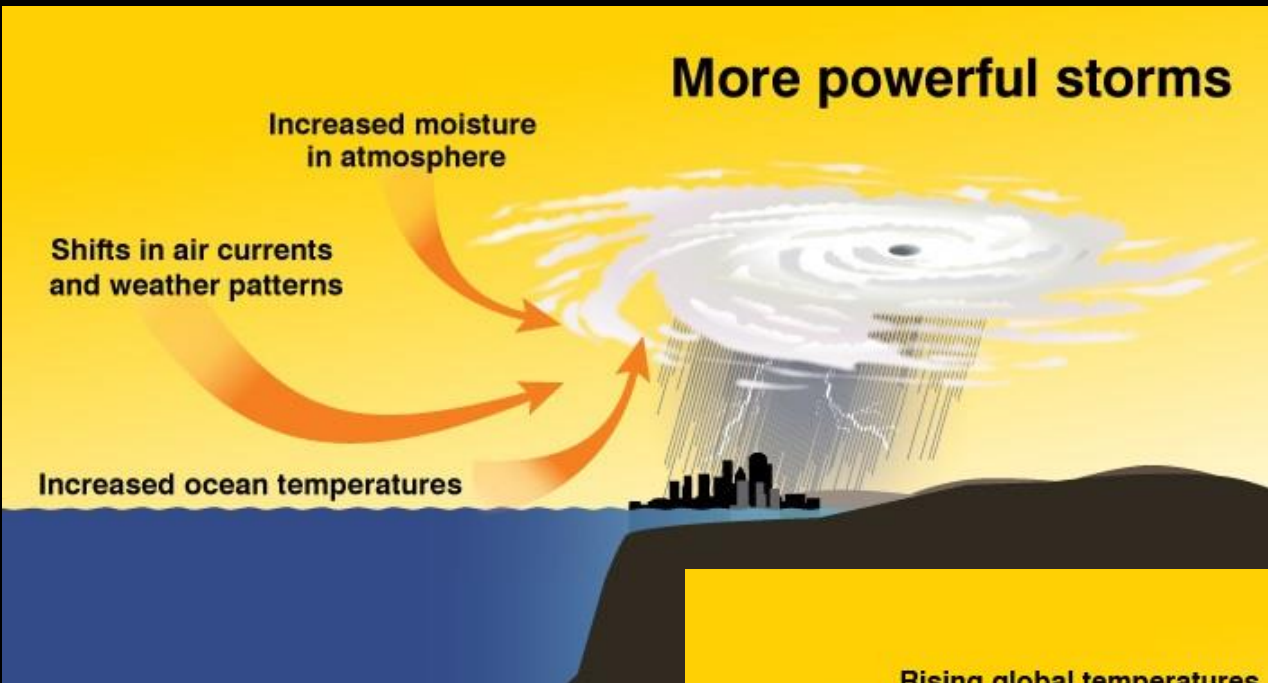
Temperature

Heat + Drought + Fires



Indirect result

Weather on steroids



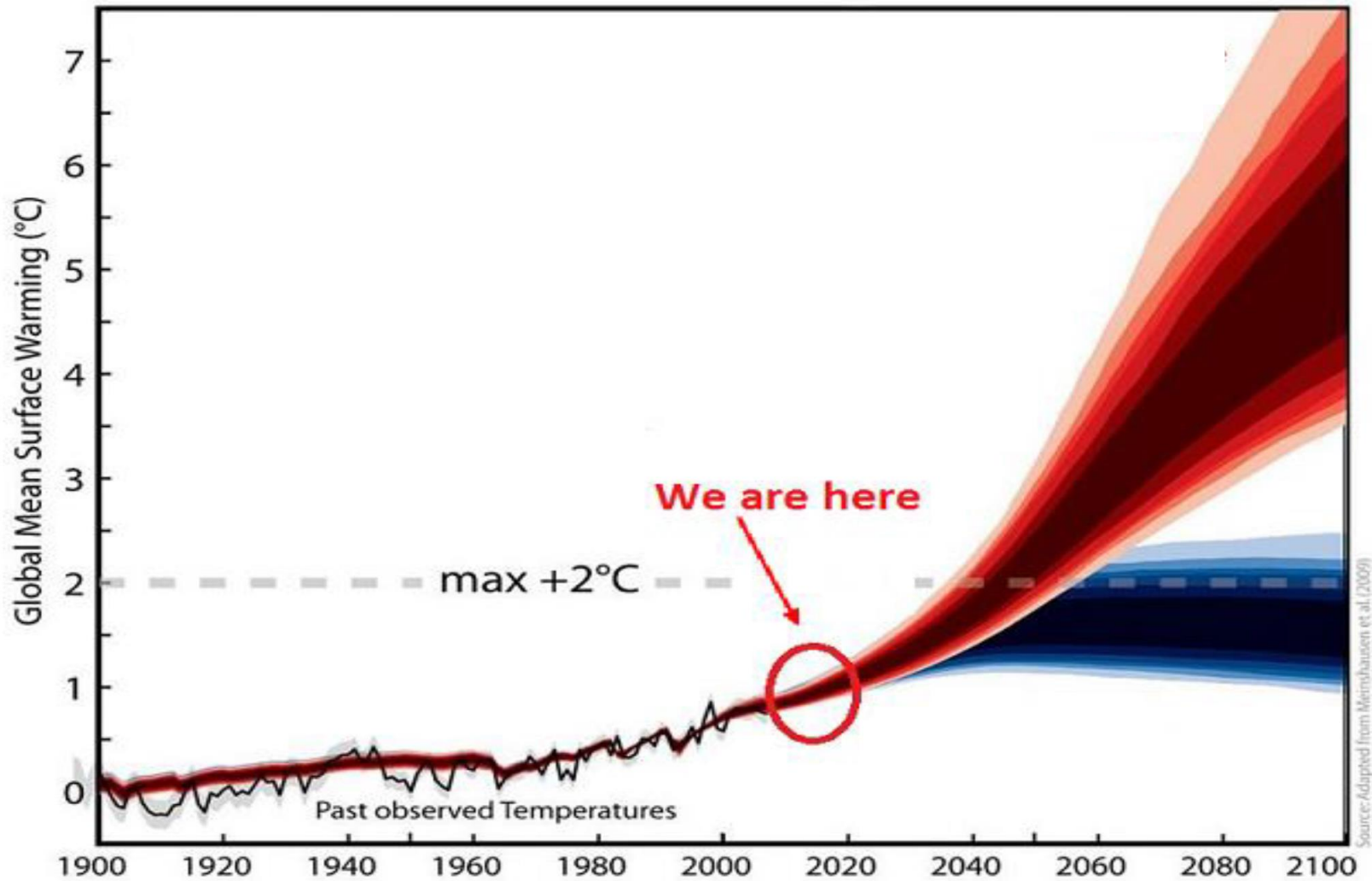
**Every weather event is impacted by
climate change.**

**But it wrong to say that climate crisis caused
any event.**

What is 1.5 or 2 degree goal mentioned in climate agreements?

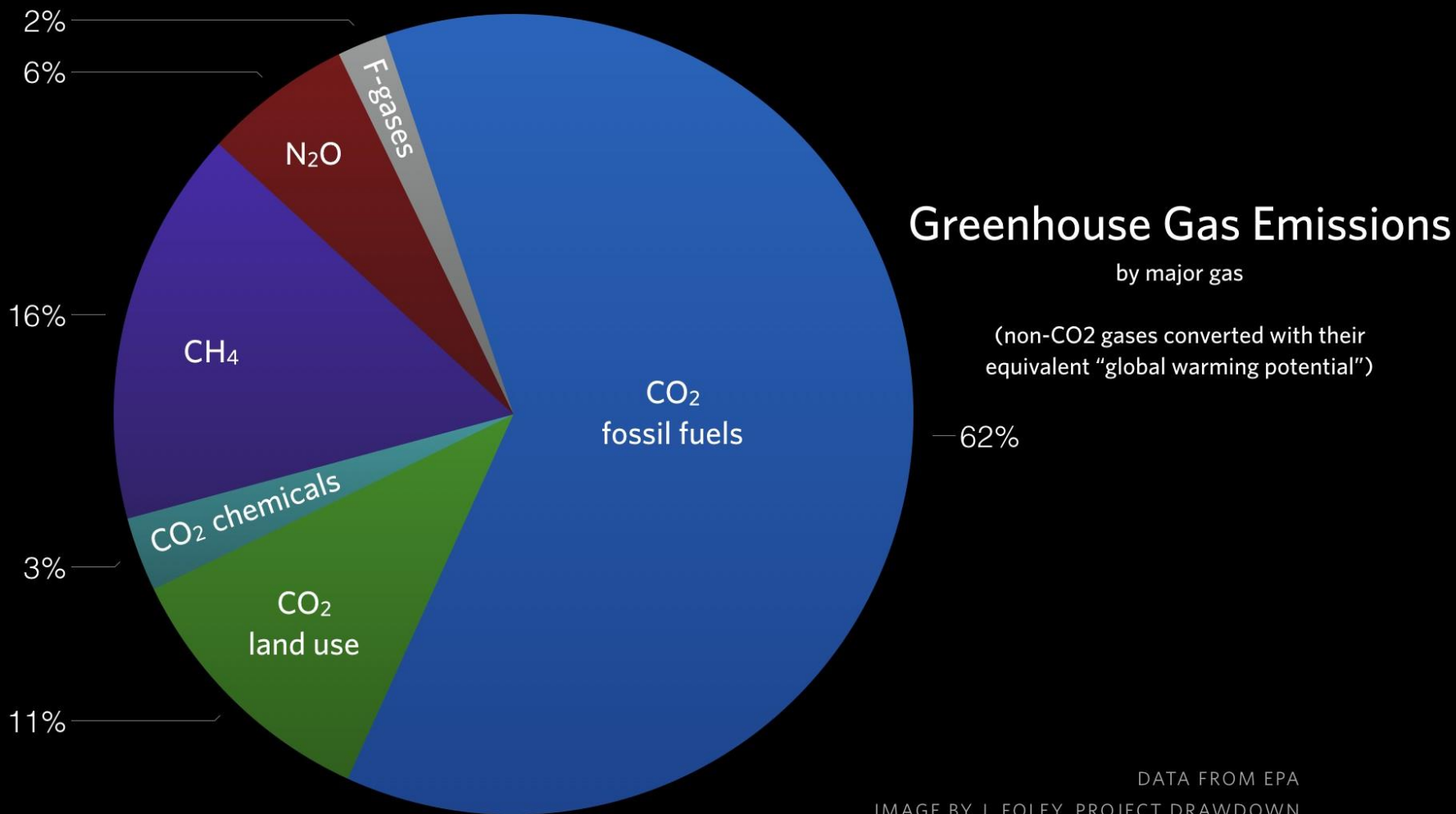


Hope and Challenge



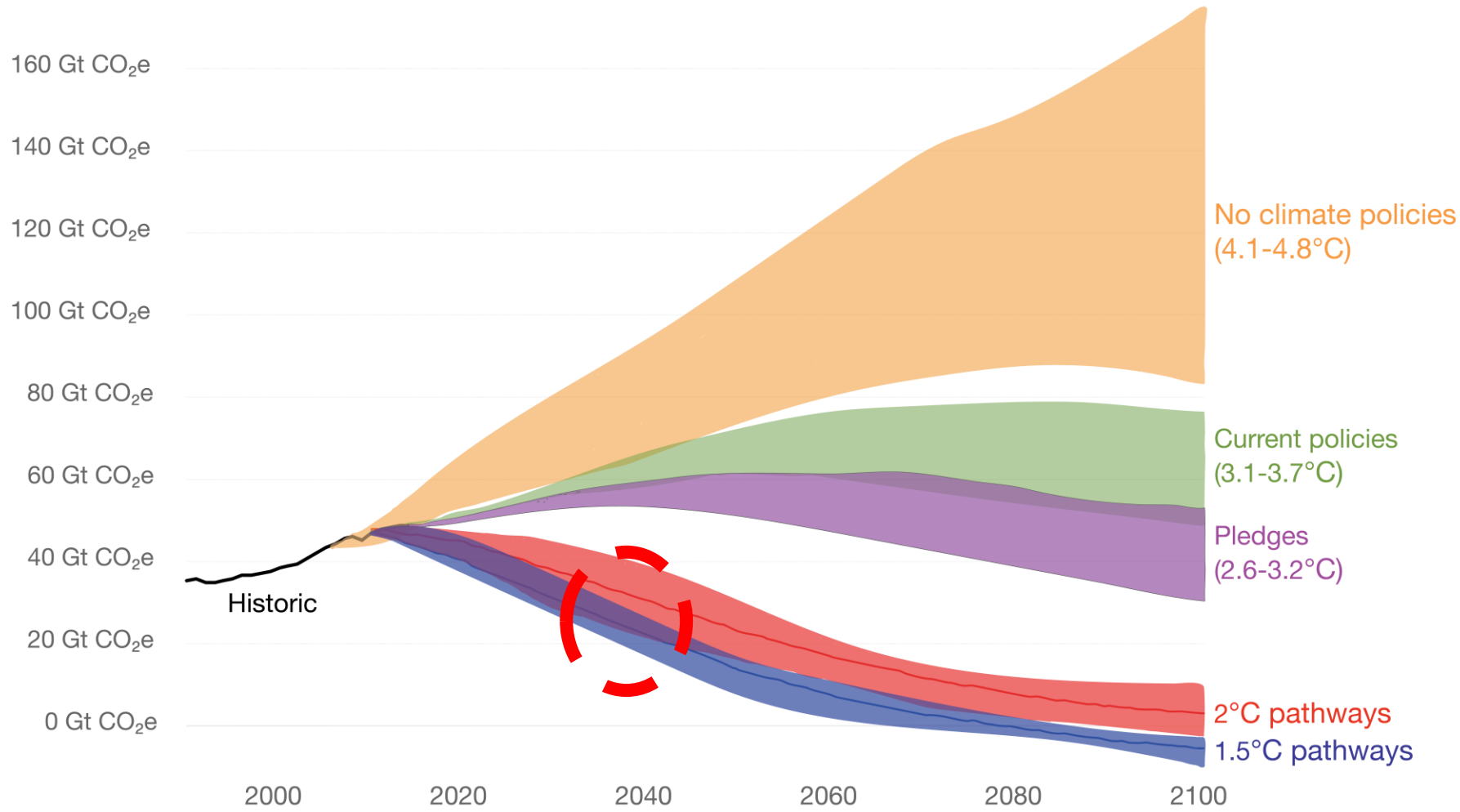
Change in Earth's mean annual air temperature as compared to what it was in ~1750-1900

Climate crisis isn't caused by CO₂ alone



Global greenhouse gas emissions scenarios

Potential future emissions pathways of global greenhouse gas emissions (measured in gigatonnes of carbon dioxide equivalents) in the case of no climate policies, current implemented policies, national pledges within the Paris Agreement, and 2°C and 1.5°C consistent pathways. High, median and low pathways represent ranges for a given scenario. Temperature figures represent the estimated average global temperature increase from pre-industrial, by 2100.



Based on data from the Climate Action Tracker (CAT). The data visualization is available at [OurWorldinData.org](https://www.ourworldindata.org). There you find research and more visualizations on this topic. Licensed under CC-BY-SA by the authors Hannah Ritchie and Max Roser.

Keep it in the ground. Add it to the ground

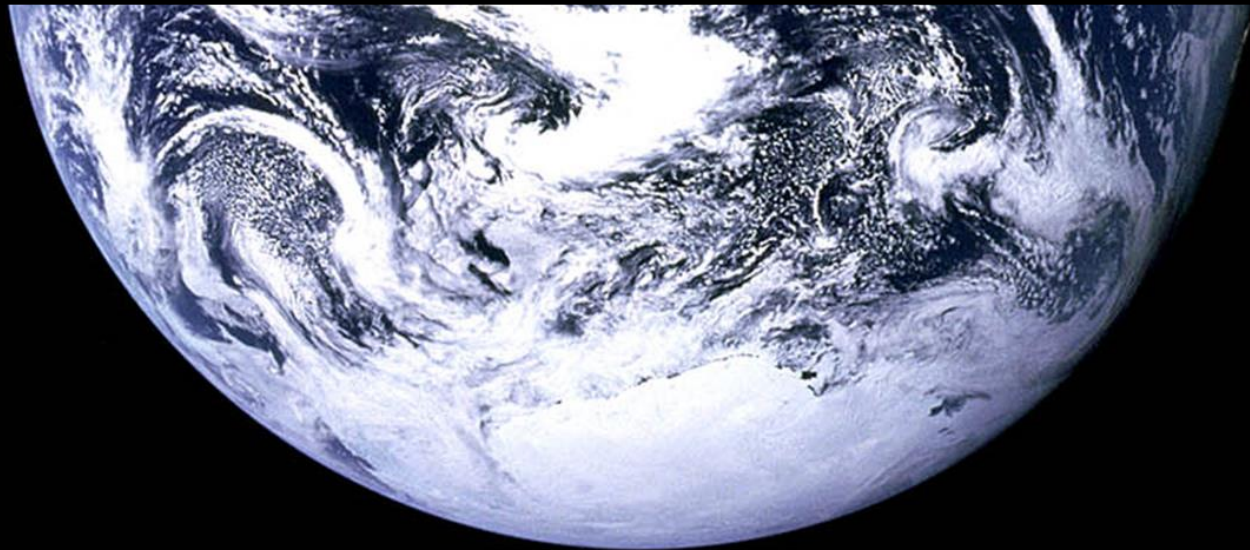
We can not allow any more fossil fuels to be dug out, any new coal, oil and gas infrastructure.

And we need to

- ration transport
- let go of meat industry
- invest in local soils & plant-based food
- adopt communal village life.



Impacts



WOMEN WALK FOR HOURS TO REACH A WELL



Food Grows Where Water Flows



**Dalit Man Digs Well In 40 Days
After His Wife Was Caste Shamed
*And his well is “open to all”***





Climate change in the Fertile Crescent and implications of the recent Syrian drought

Colin P. Kelley^{a,1}, Shahrzad Mohtadi^b, Mark A. Cane^c, Richard Seager^c, and Yochanan Kushnir^c

Author Affiliations

Syria's Climate-Fueled Conflict, In One Stunning Comic Strip

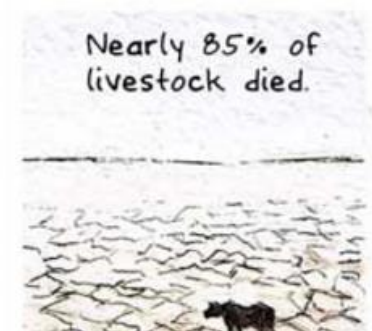
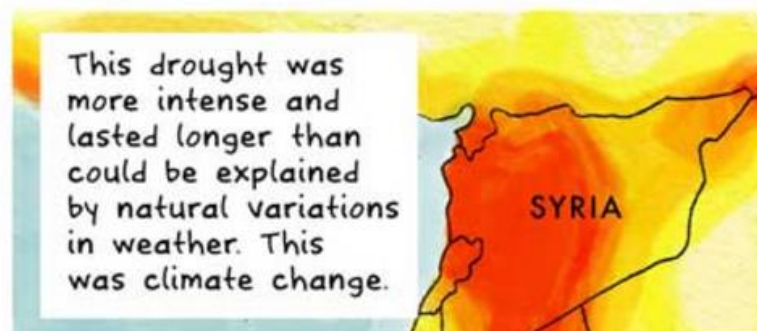


Edited by Brian John Hoskins, Imperial College London (received review November 16, 2014)

Abstract Full Text Authors

Significance

There is evidence that the drought in the instrumental families to urban centers. Climate pressure, supported by climate increased the probability of a 3-year drought as severe alone. We conclude that human conflict.





BP oil spill



MATTER

Birds Are Vanishing From North America

The number of birds in the United States and Canada has declined by 3 billion, or 29 percent, over the past half-century, scientists find.

🏠 theguardian.com/environment/2019/feb/10/plummeting-insect-numbers-threaten-collapse-of-nature

Insects

🕒 This article is more than 7 months old

Plummeting insect numbers 'threaten collapse of nature'

Damian Carrington
Environment editor

🐦 @dpcarrington

Sun 10 Feb 2019 18.00 GMT





IMPLICATIONS FOR BIODIVERSITY OF GLOBAL WARMING: 2°C

18% **8%** **16%**
insects vertebrates plants
with further impacts
on ecosystem function

One ice-free
Arctic summer
per
10 YEARS

Limiting warming to
1.5°C rather than 2°C

**OCEAN
ACIDIFICATION**
will further impact the
growth, development,

ALPINE SPECIES
adaptation to warmer
temperatures limited
by mountain height
and habitability

**One million plant and animal species on the verge
of extinction because of us**

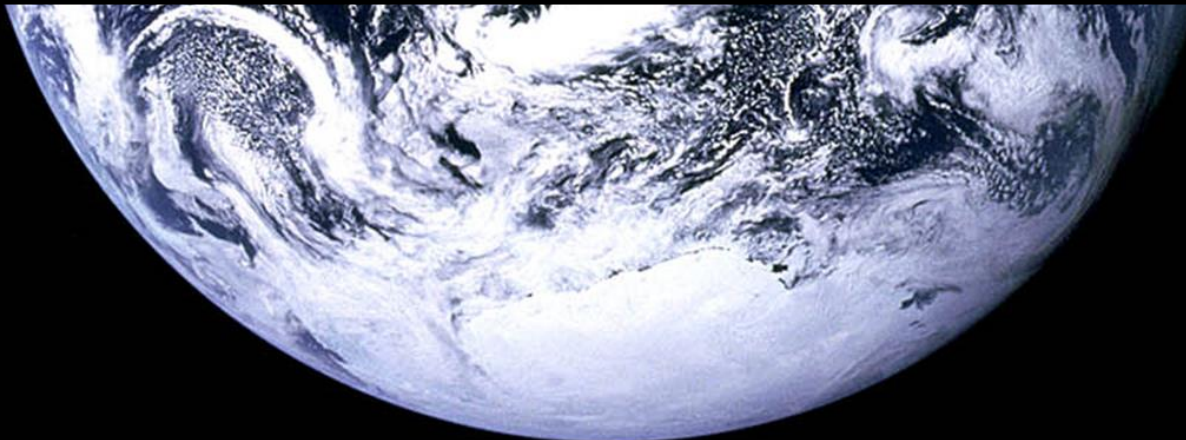
100%
decline of
CORAL REEFS

Timing of
phenological events
could change more
for primary
consumers than
higher trophic levels



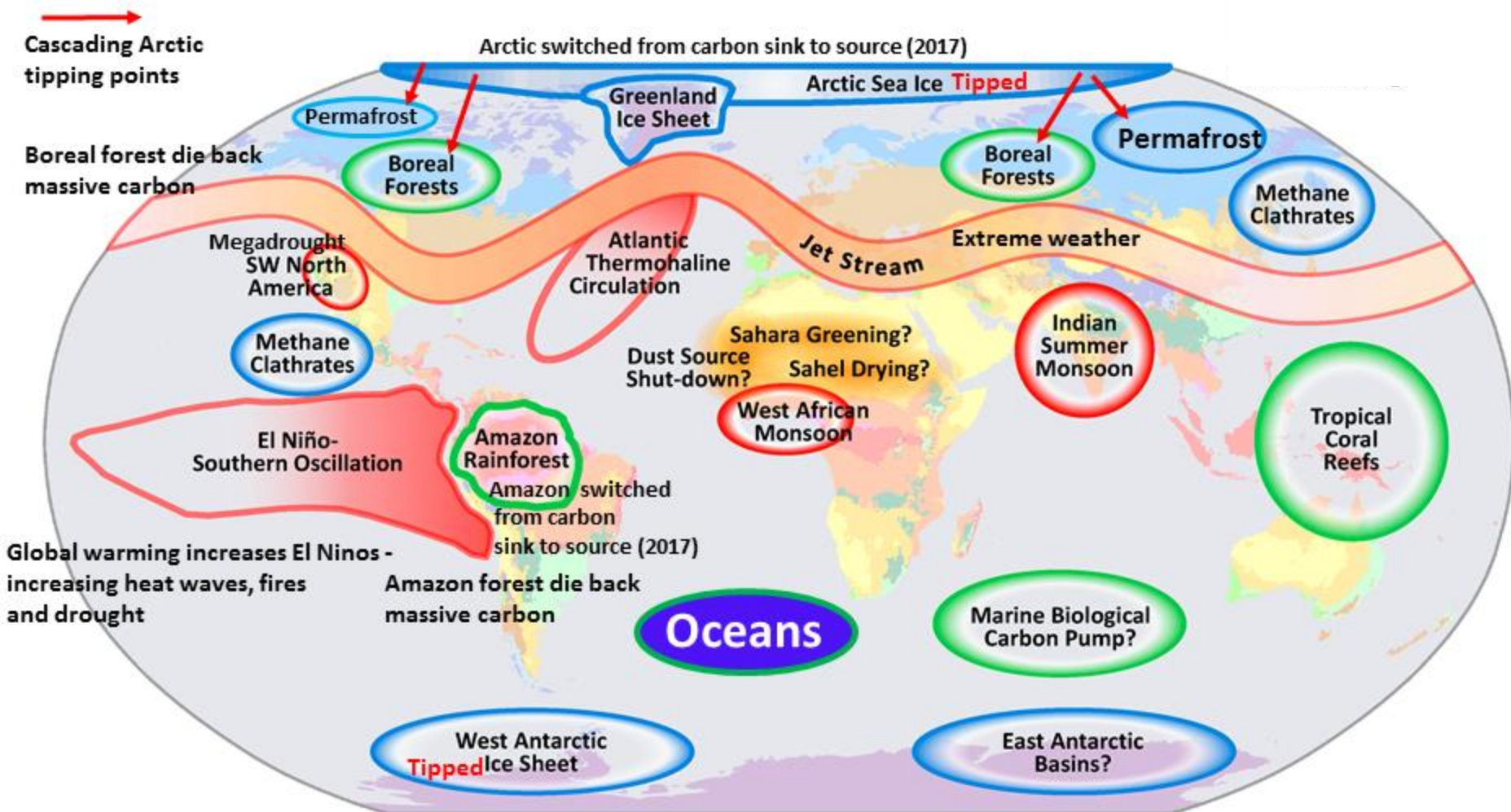
Is it too late?

Are we doomed?



Climate crisis: Tipping points

- Cryosphere Entities
- Circulation Patterns
- Biosphere Components



Adapted from Potsdam Climate Institute
Tipping Elements the Achilles Heels
of the Earth System

Is it too late?

NO.

We have crossed some tipping points.

Gaia's lungs and heart are hurting.

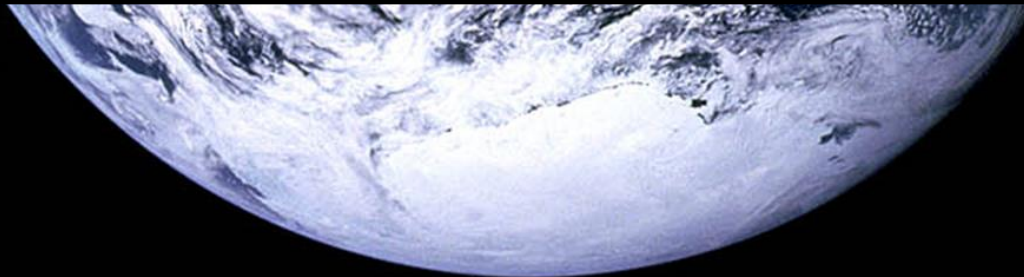
But there are many other tipping points.

We must create islands of sanity no matter what.



Who should pay for implementing solutions?

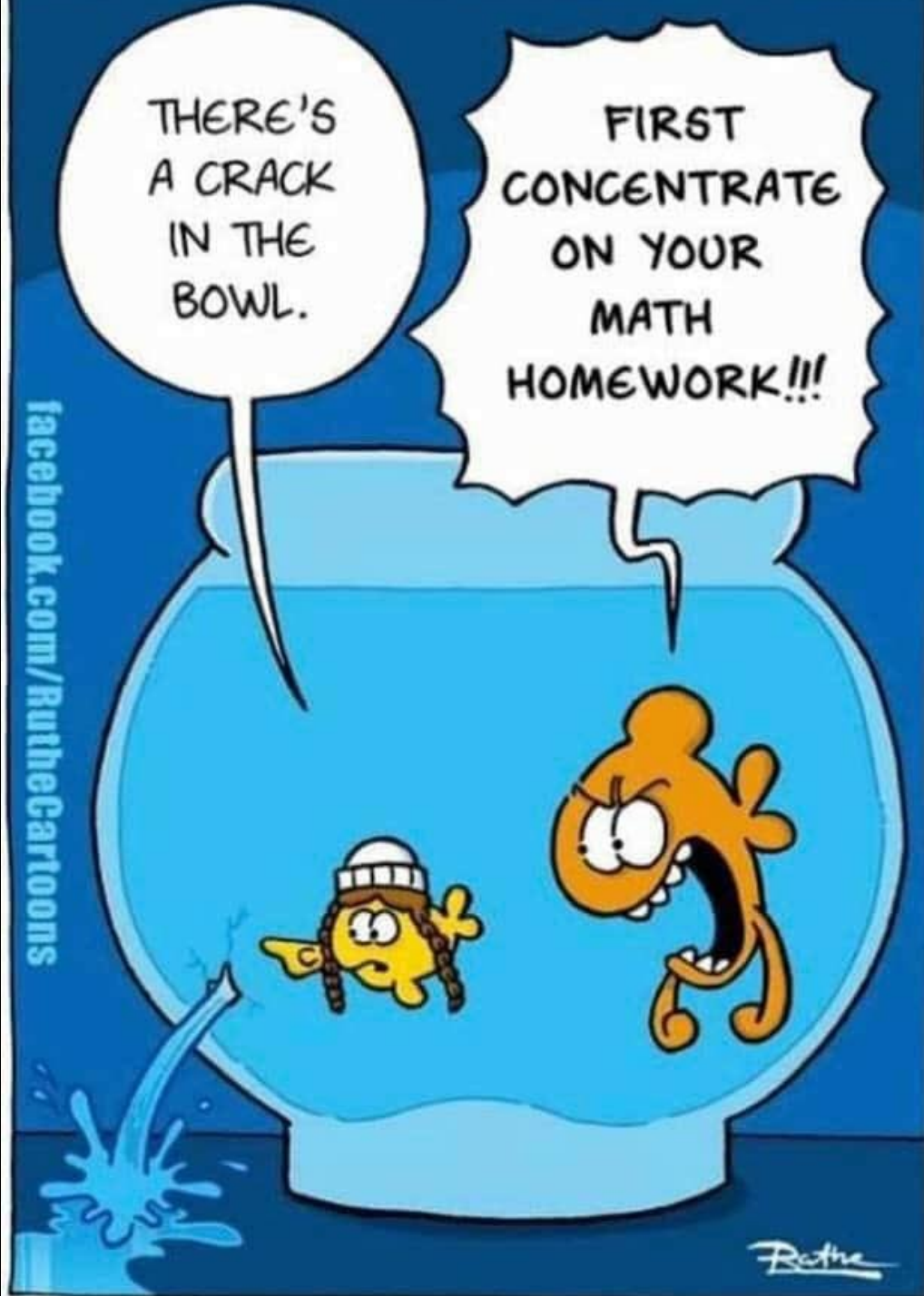
Race, caste/class, age



THERE'S
A CRACK
IN THE
BOWL.

FIRST
CONCENTRATE
ON YOUR
MATH
HOMEWORK!!!

facebook.com/RuthCartoons

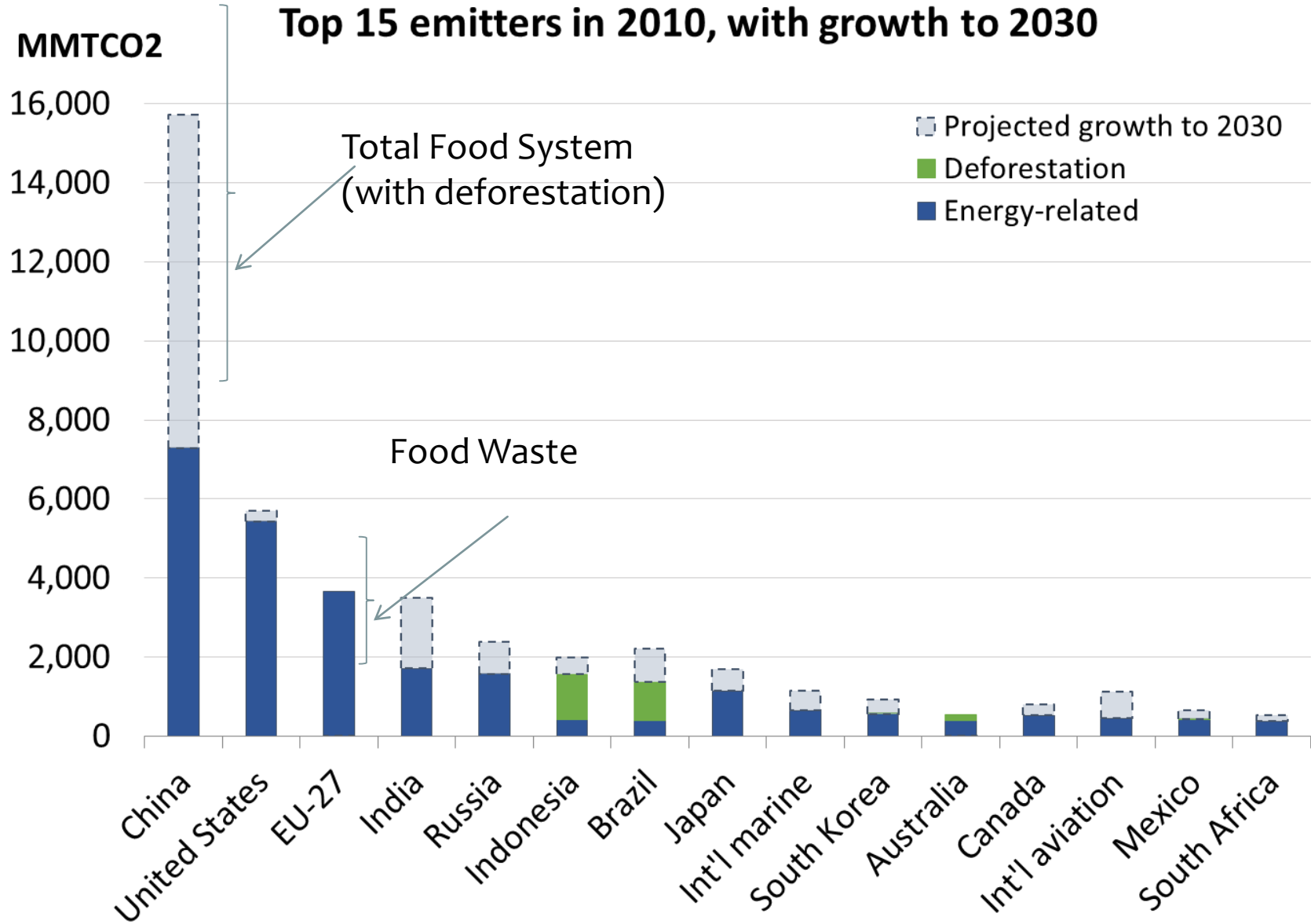


Ruth

Why millennials are facing the scariest financial future of any generation since the Great Depression.

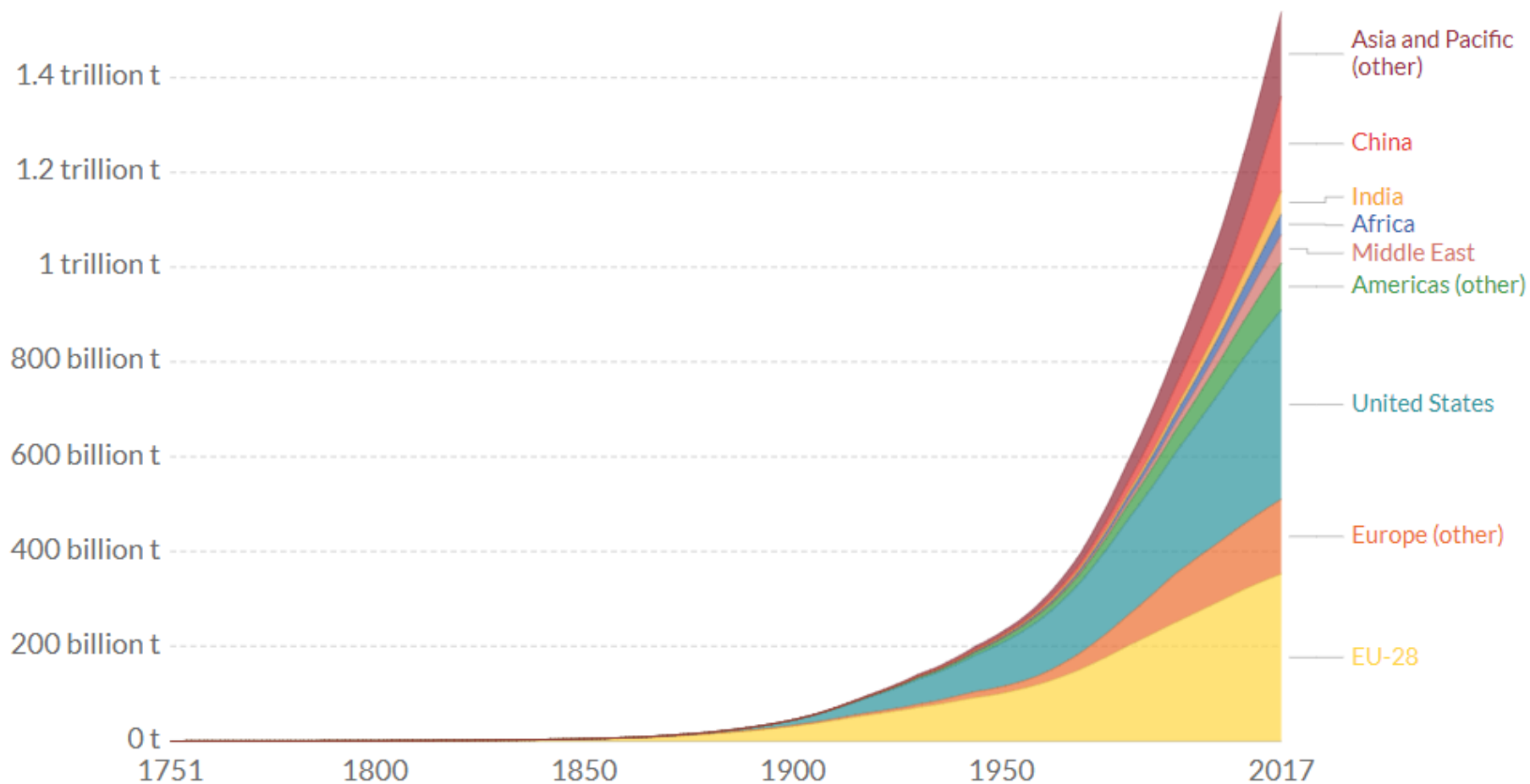
BY MICHAEL HOBBS

What countries produce most GHGs



Cumulative CO₂ emissions by world region

Cumulative carbon dioxide (CO₂) emissions by region from the year 1751 onwards. Emissions are based on territorial emissions (production-based) and do not account for emissions embedded in trade.



Source: OWID based on CDIAC & the Global Carbon Project (2018)

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

Relative

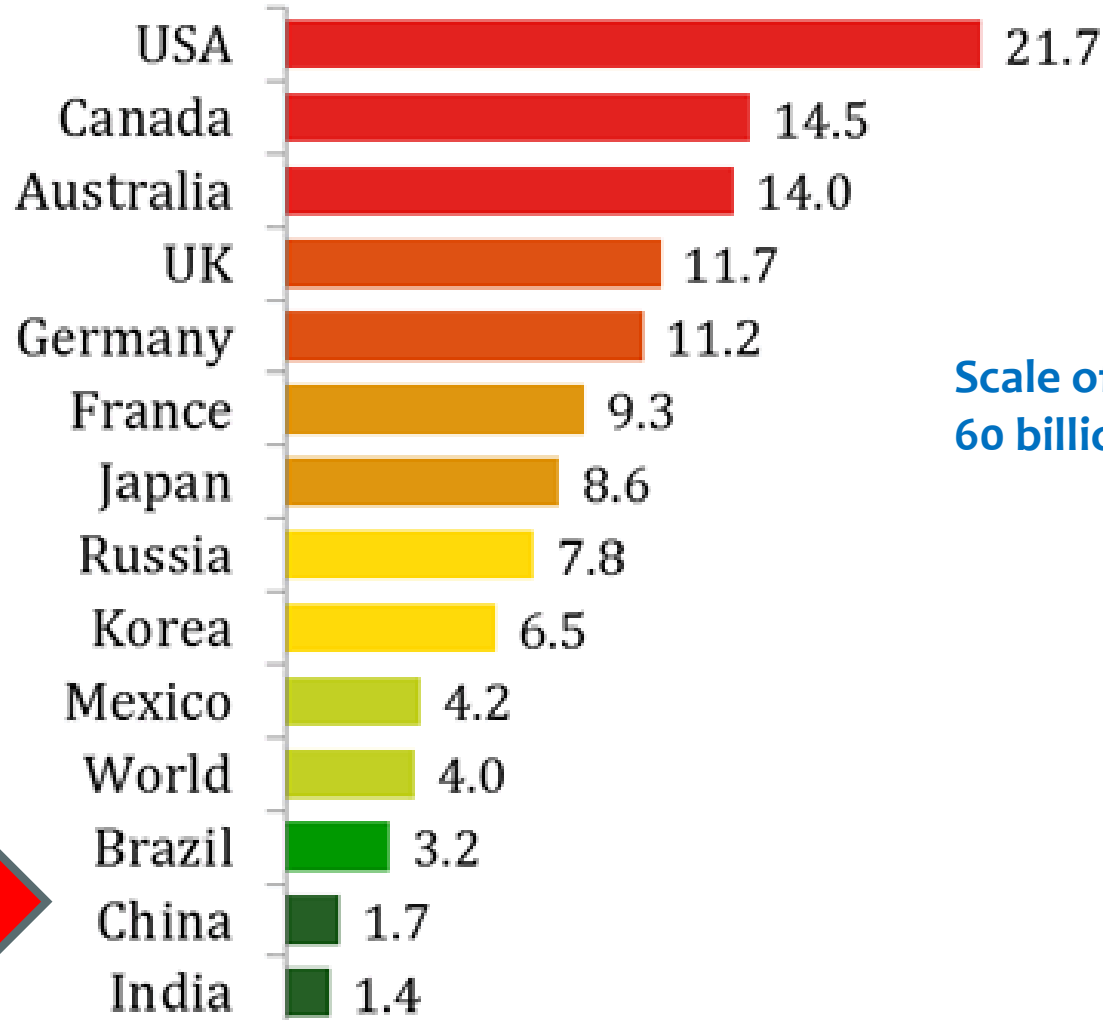
CHART

DATA

SOURCES



Personal Carbon Footprints: t CO₂e

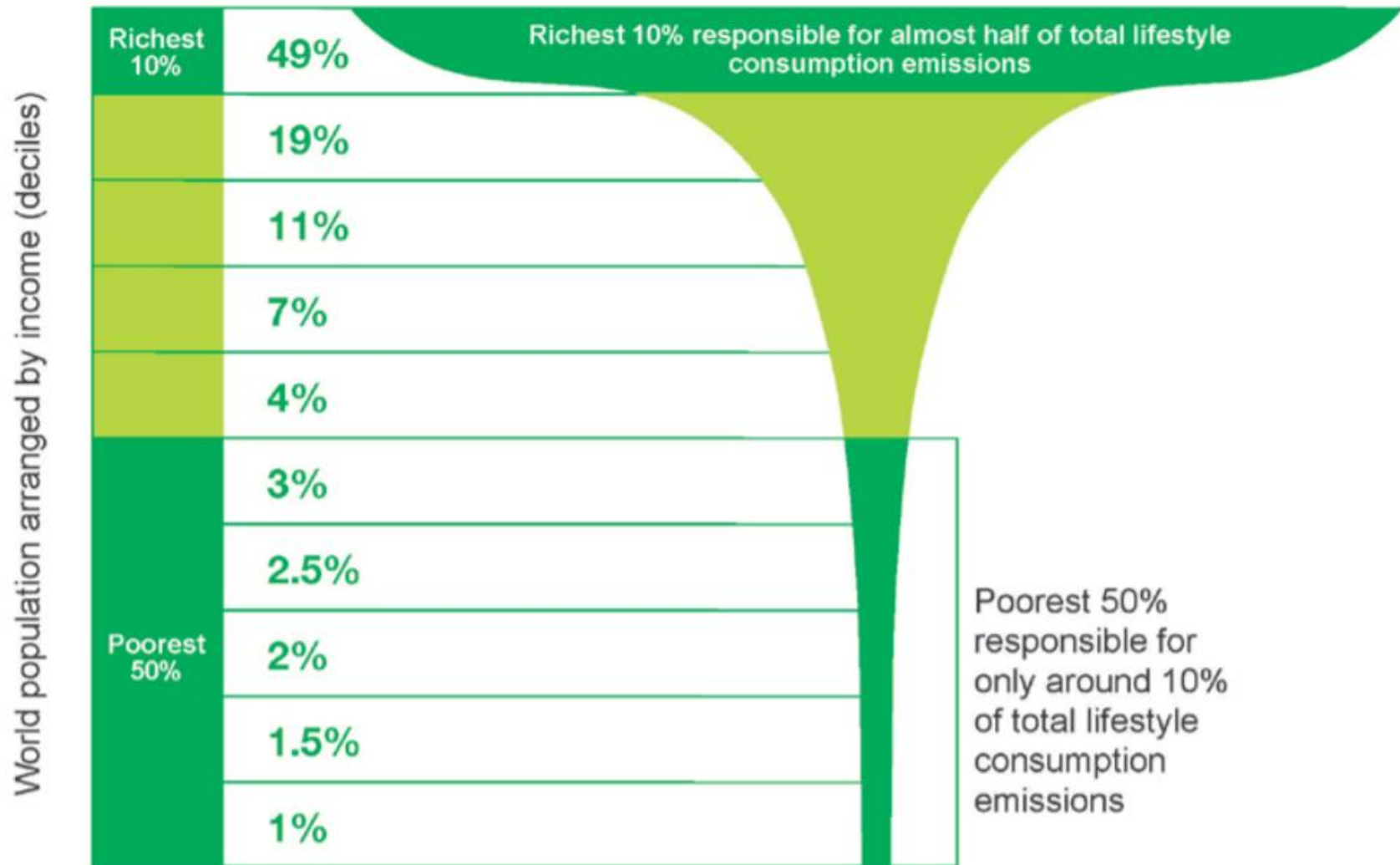


Scale of problems:
60 billion tons.

Note: The personal carbon footprint represents the combined emissions from personal consumption, including housing, travel, food, product and service emissions. It excludes capital, government and land use emissions.

Sources: Hertwich & Peters 2009

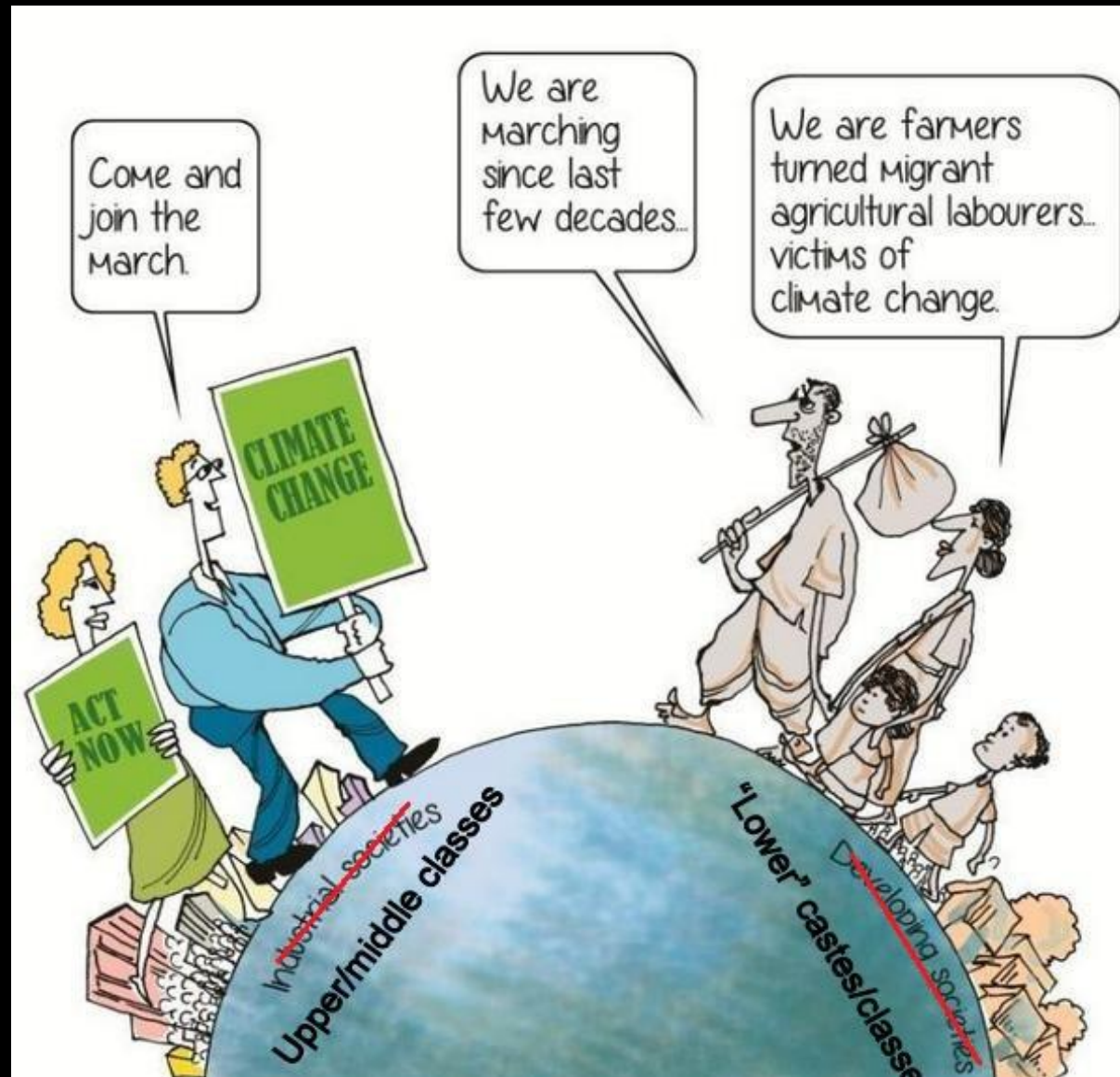
Percentage of CO₂ emissions by world population



Racial reparations + Solidarity + Humility

People of global majority

- Cause least harm
- (will) suffer the most
- Have teachings that we need to face chaos
- Bodies, religion, culture & resources subjugated to create financial wealth in the West.
- “Side dish”
- Have called for reparations



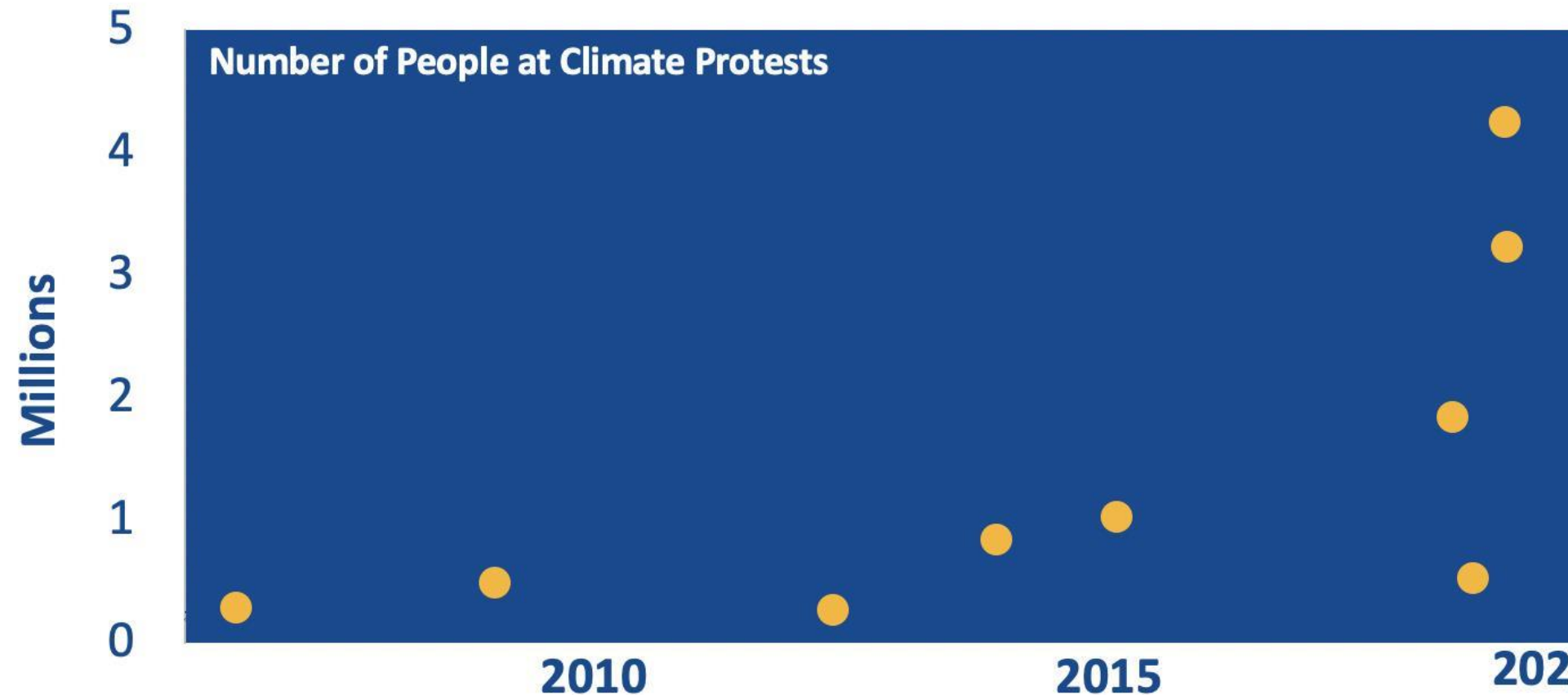
The image consists of two satellite photographs of Earth, one above the other, separated by a horizontal black bar. The top photograph shows the Eastern Hemisphere, with Africa, Europe, and Asia visible. The bottom photograph shows the Western Hemisphere, with North and South America visible. The text "Where can and will we go from here?" is overlaid on the black bar in a white, italicized font.

Where can and will we go from here?

Youth + Extinction rebellion + Sunrise



Climate movement since 2005



@bethsawin
@climateinteract

There are encouraging signs but...

We are not just being asked to do something hard.

“We all need to the seemingly impossible”

-Greta

We are in climate emergency.

But what is a wholesome response?

"When you're dealing with a ...population that's trying to save today's world ...urgently.. , they are not recognizing that there's a problem with the world they are trying to save. They are actually trying to save... dystopia."

-- Dr. Kyle Powys Whyte

Three pillars of climate action

Let our belonging, inner transformation & resistance empower each other!



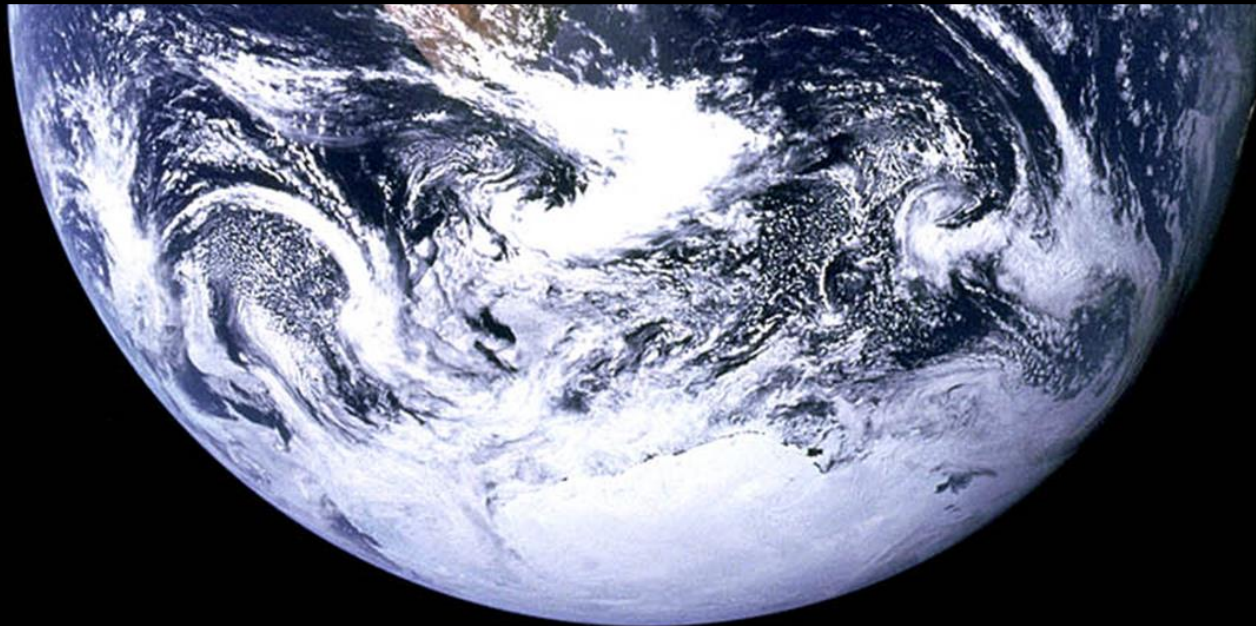
Resistance
(Strategic NO)

Communal “village” living
(Strategic YES)

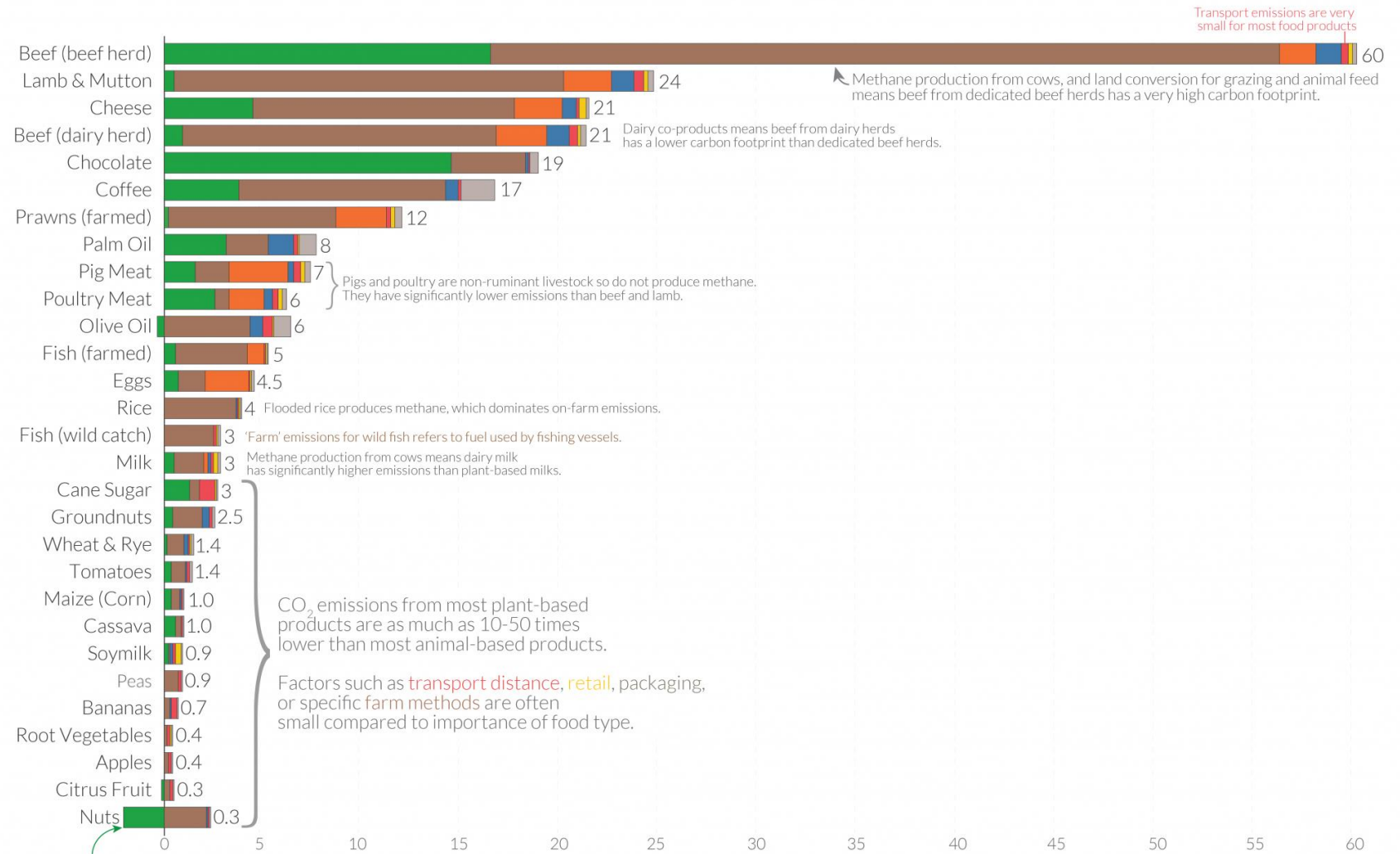
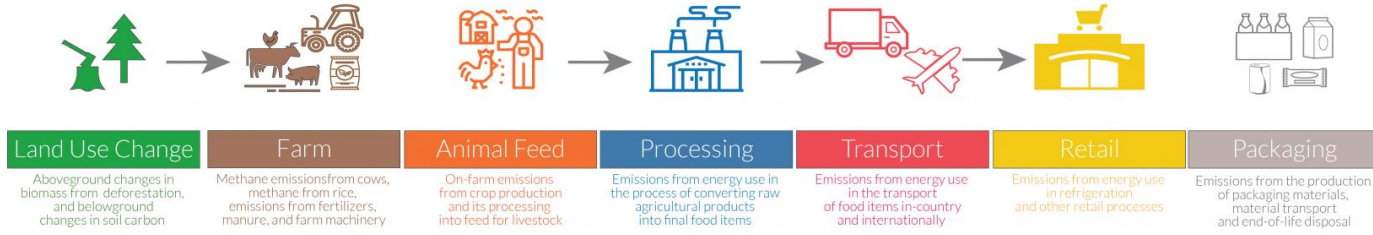
Trauma resilience



Example: Our Food



Food: greenhouse gas emissions across the supply chain



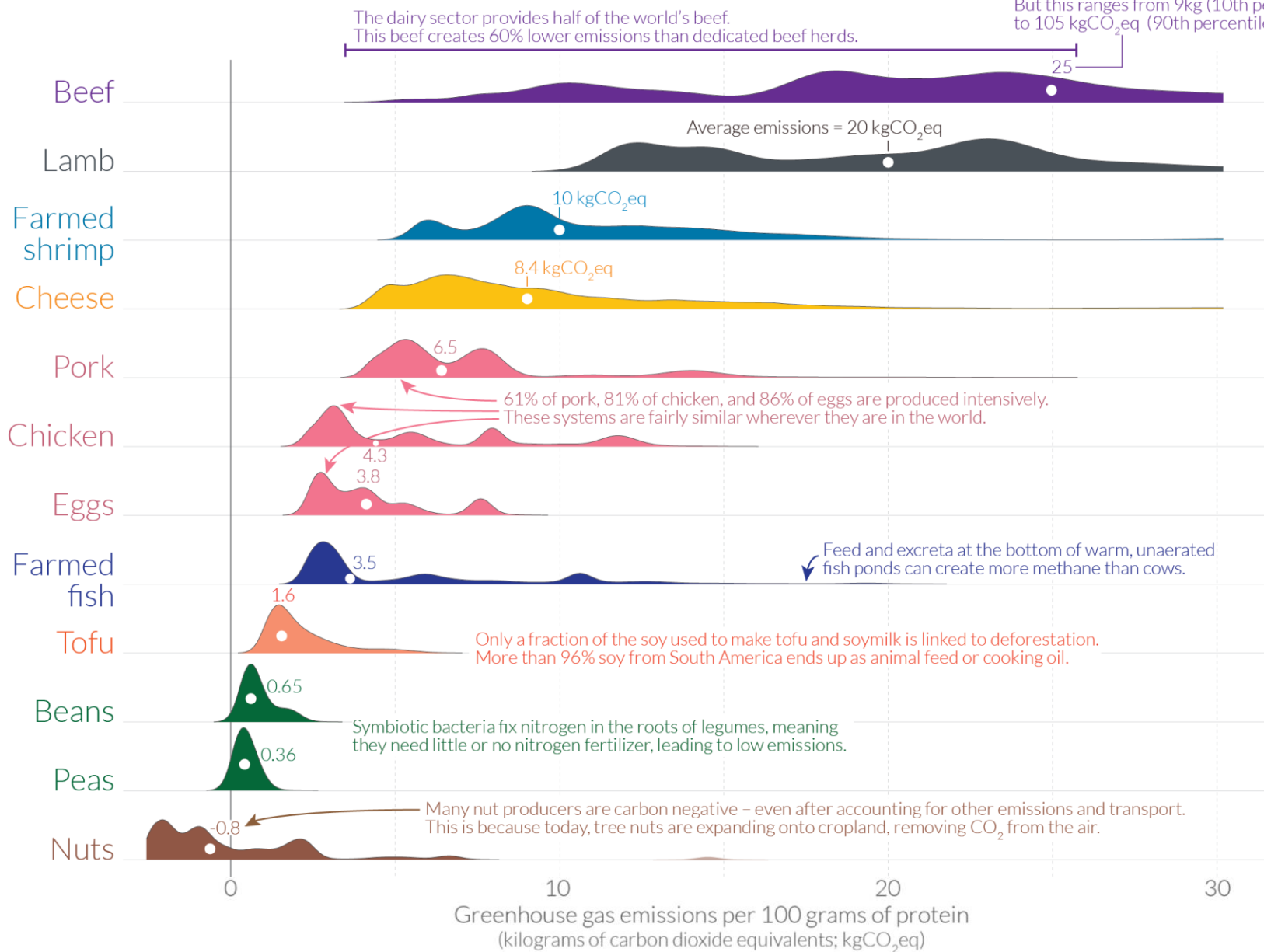
Greenhouse gas emissions per kilogram of food product (kg CO₂-equivalents per kg product)

How does the carbon footprint of protein-rich foods compare?

Greenhouse gas emissions from protein-rich foods are shown per 100 grams of protein across a global sample of 38,700 commercially viable farms in 119 countries.

The height of the curve represents the amount of production globally with that specific footprint. The white dot marks the median greenhouse gas emissions for each food product.

Producing 100 grams of protein from beef emits 25 kilograms of CO₂eq, on average. But this ranges from 9kg (10th percentile) to 105 kgCO₂eq (90th percentile).



Yes, some forms of animal agriculture has lesser climate impact but..

- Even if we were getting our animal protein from a source which has climate impact of 10 kg CO₂e per 100 gram of protein, given our protein requirements, our annual C footprint would be 1.4 tons/ year which is 75% of our annual allowance.
- I feel that our relationship with animal kingdom is cruel and exploitative even when the meat is organic and pasture-raised. How can we live in a way that honors their intelligence, their emotions and way of being?

Gratitude: Strands of my life

Justice

Grandpa: Gandhian freedom fighter in India
Yet-to-be-named direct action network

Science

IIT Delhi (India)
Rutgers & Princeton Universities
Imtiaz : My husband

Zen + Ecodharma

Cold Mountain (Han Shan) lineage
Heart Circle Sangha
Rocky Mountain Ecodharma Retreat Center



Please check website for residential and
online ecodharma retreats
boundlessinmotion.org