



OST
Ostschweizer
Fachhochschule

The Climate Crisis: between hope and despair

Nature cannot be fooled

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2026-09-28

Erneuerbare Energien und Umwelttechnik – Ostschweizer Fachhochschule

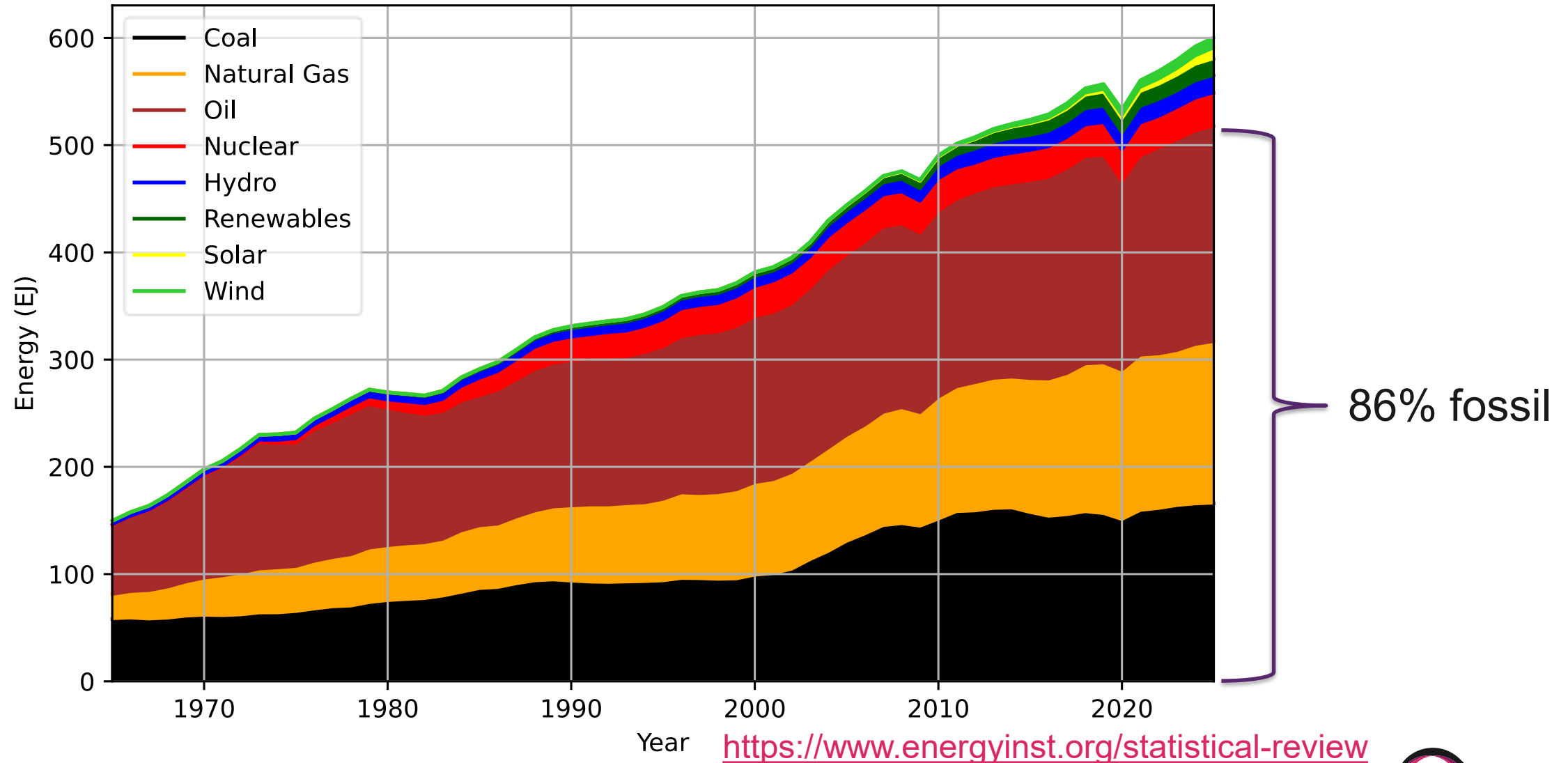
What is the state of our planet?

- 1. Very good:** Humanity is continuously getting wealthier and happier.
- 2. Good:** New technology will allow us to create a sustainable society with roughly the living standard of today.
- 3. Poor:** Resource scarcity, damage to the environment, and climate change will make humanity poorer.
- 4. Very poor:** A collapse of human civilization can be expected this century.

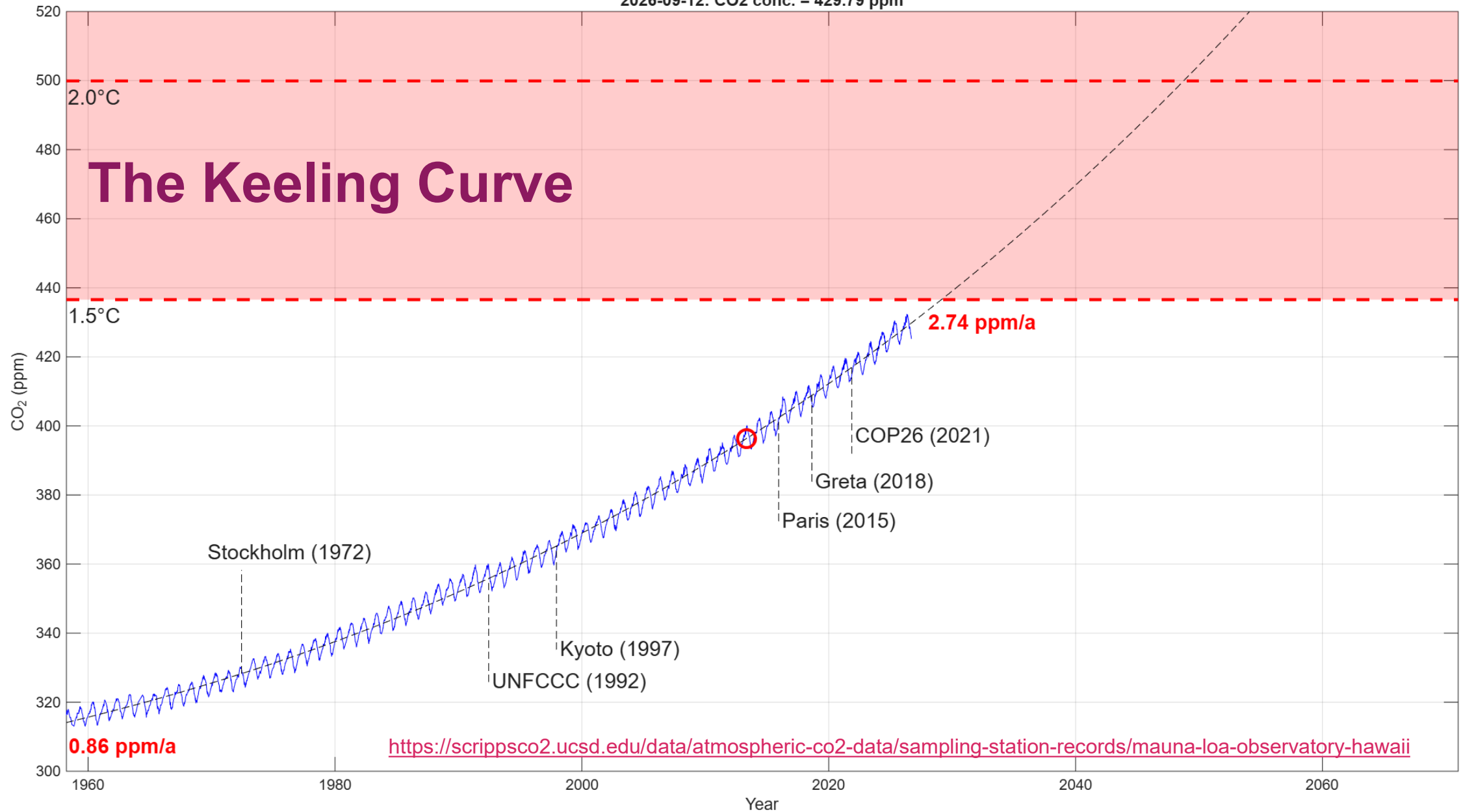


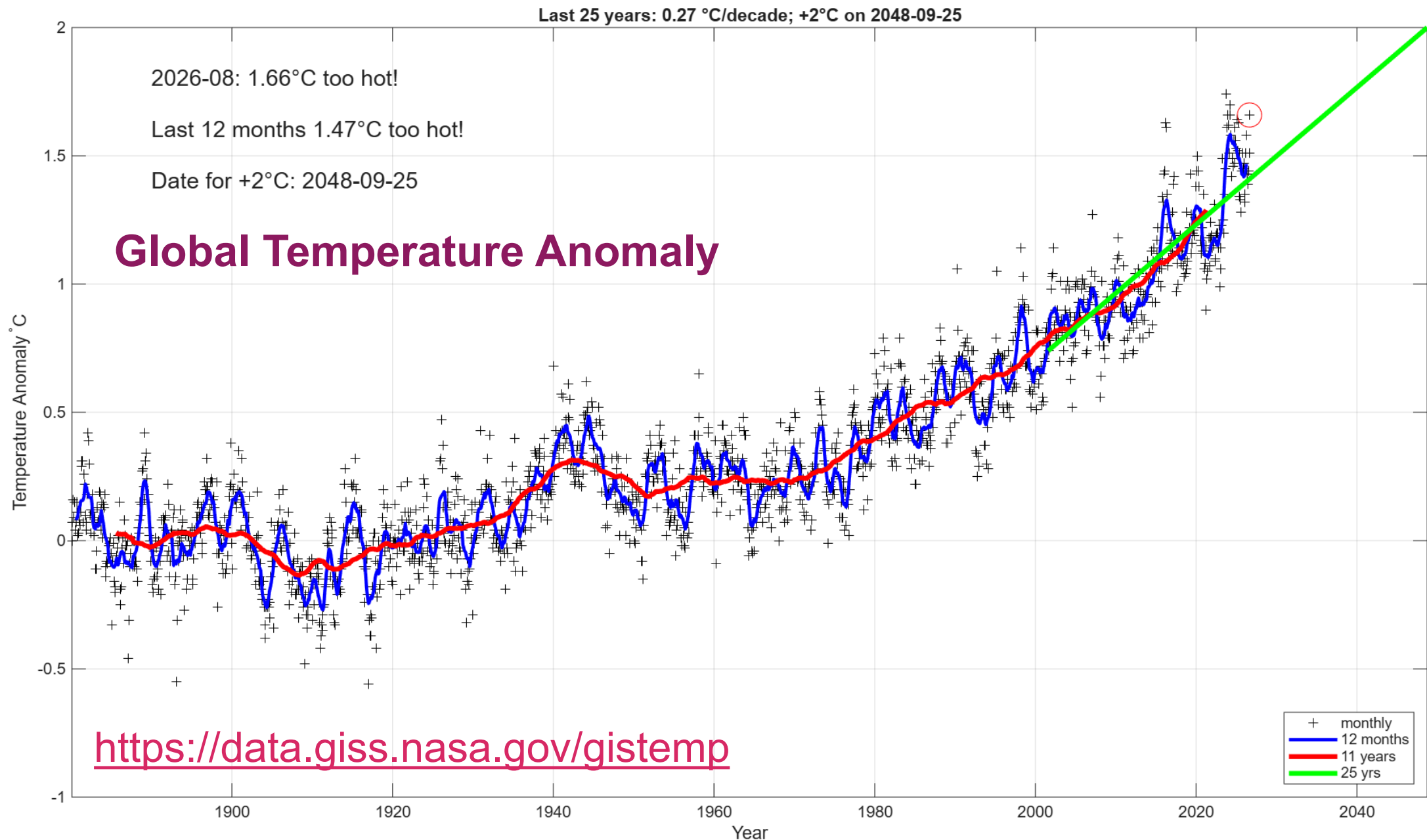
Part 1: The Problem

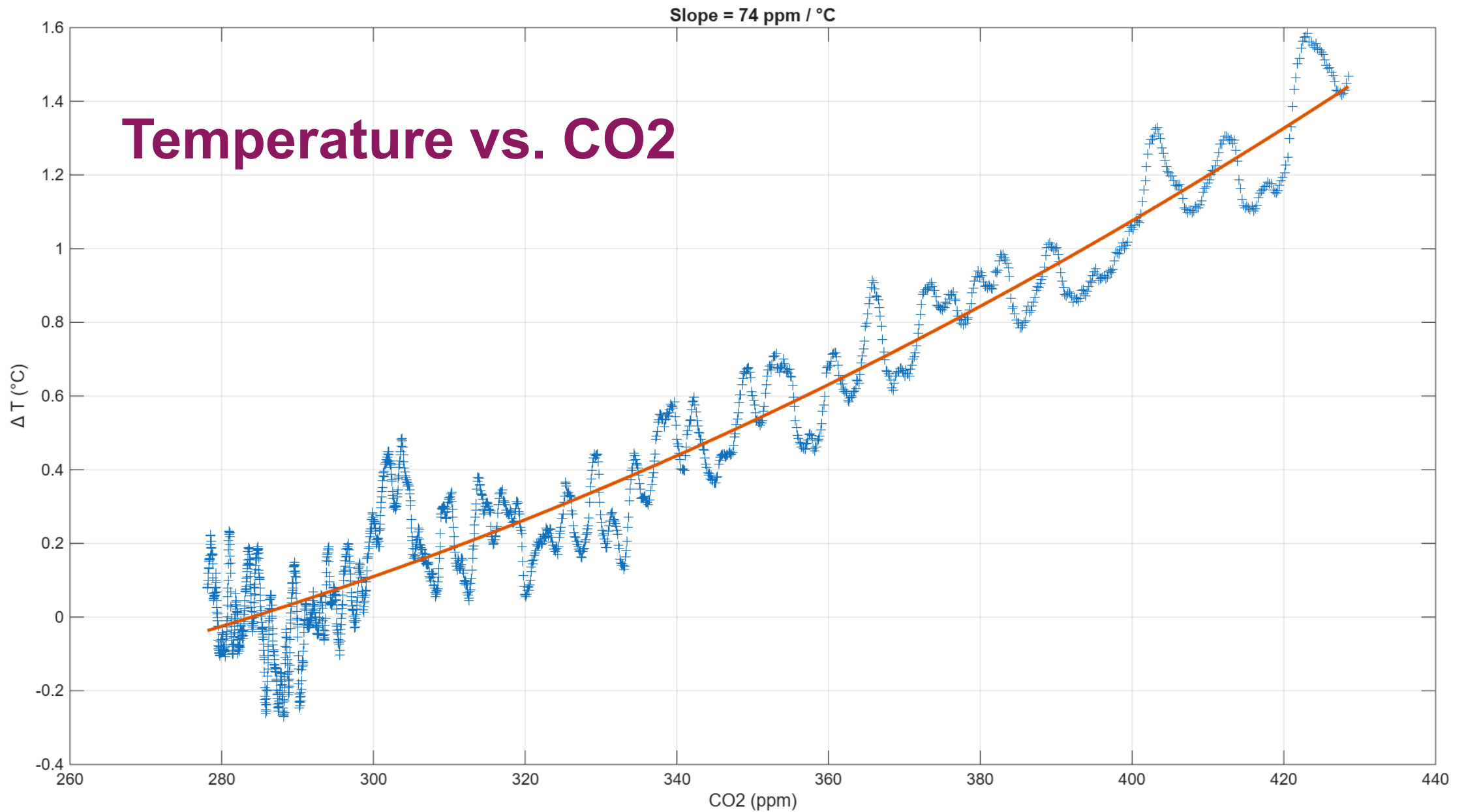
Global Energy Demand (energyinst.org)



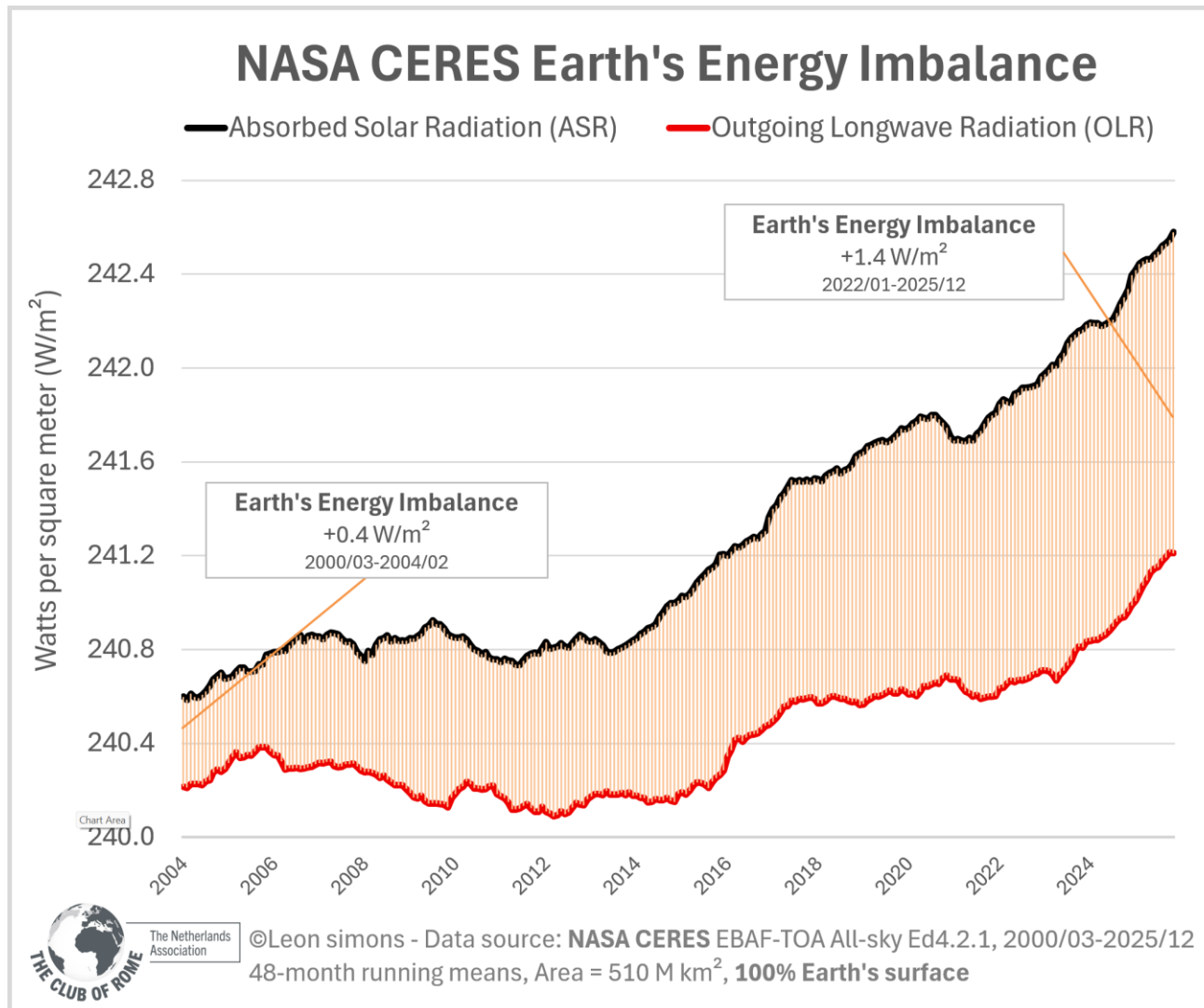
2026-09-12: CO2 conc. = 429.79 ppm







The EEI: Very Far From Equilibrium

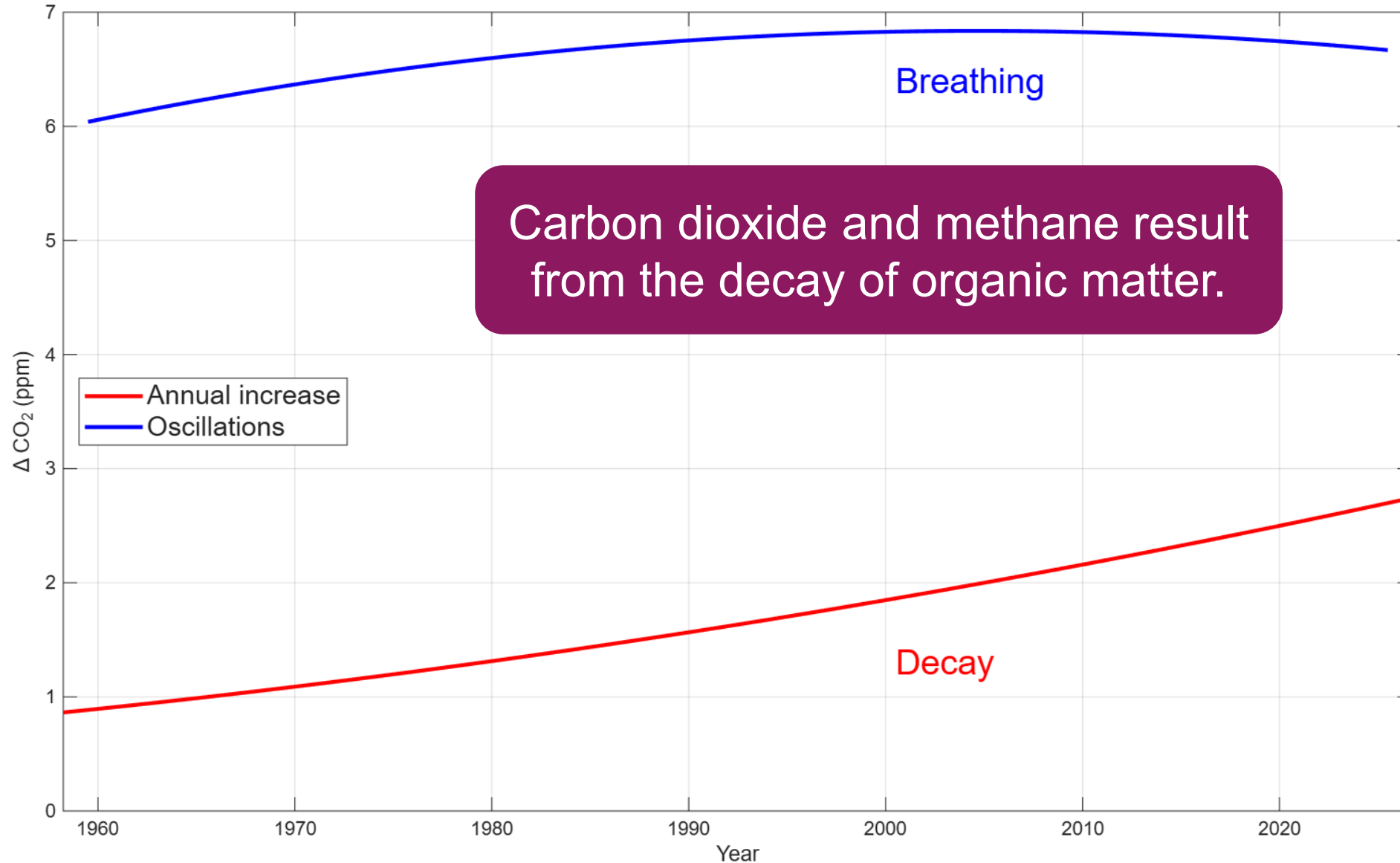


1.4 W/m² → 714 TW

Enough energy to melt
7.7 km³ of ice per hour.

Human civilization: 19 TW

The Earth is Dying ...



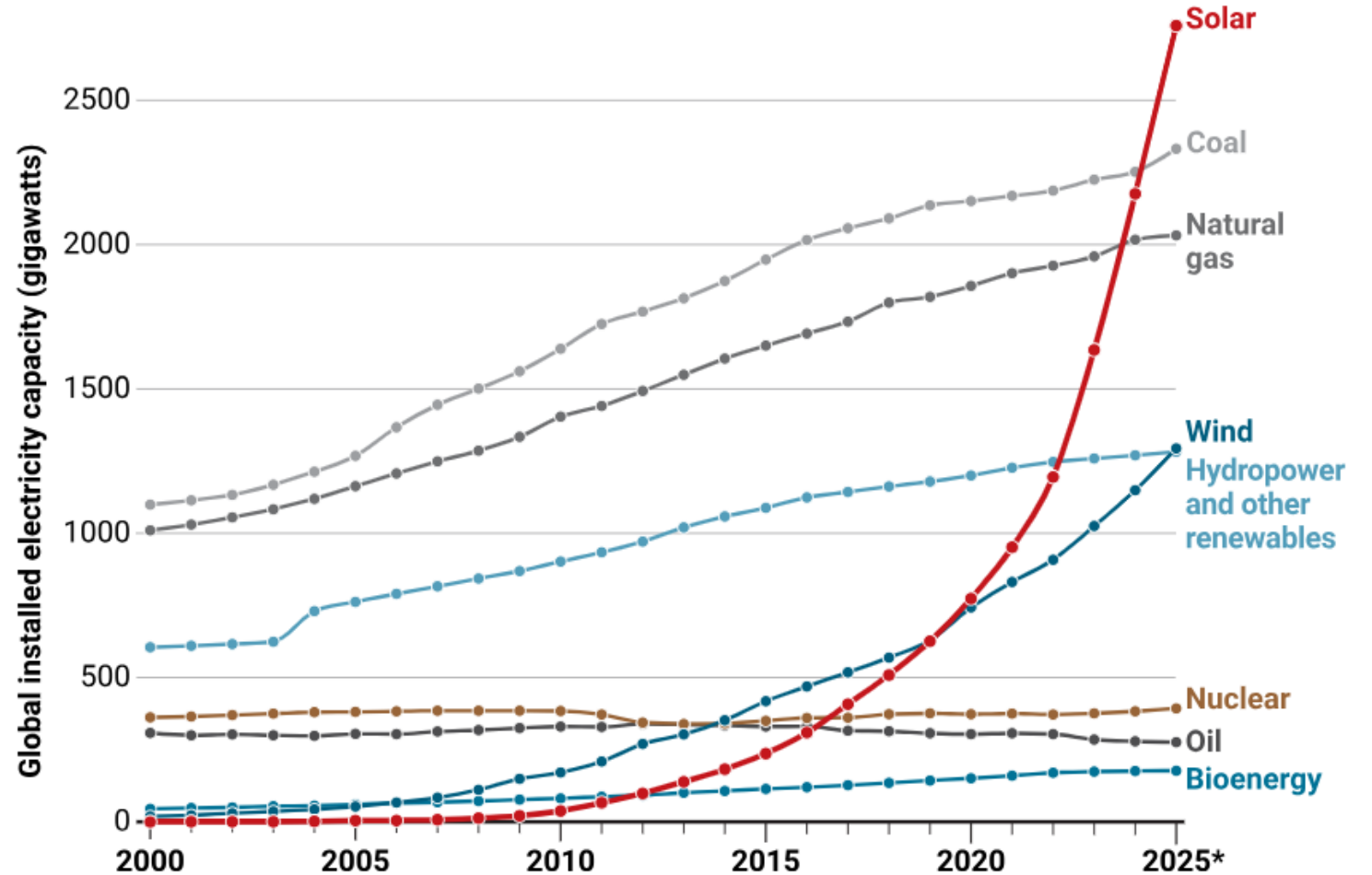
Part 2: The Solutions



Scientific Breakthrough of the Year 2025?



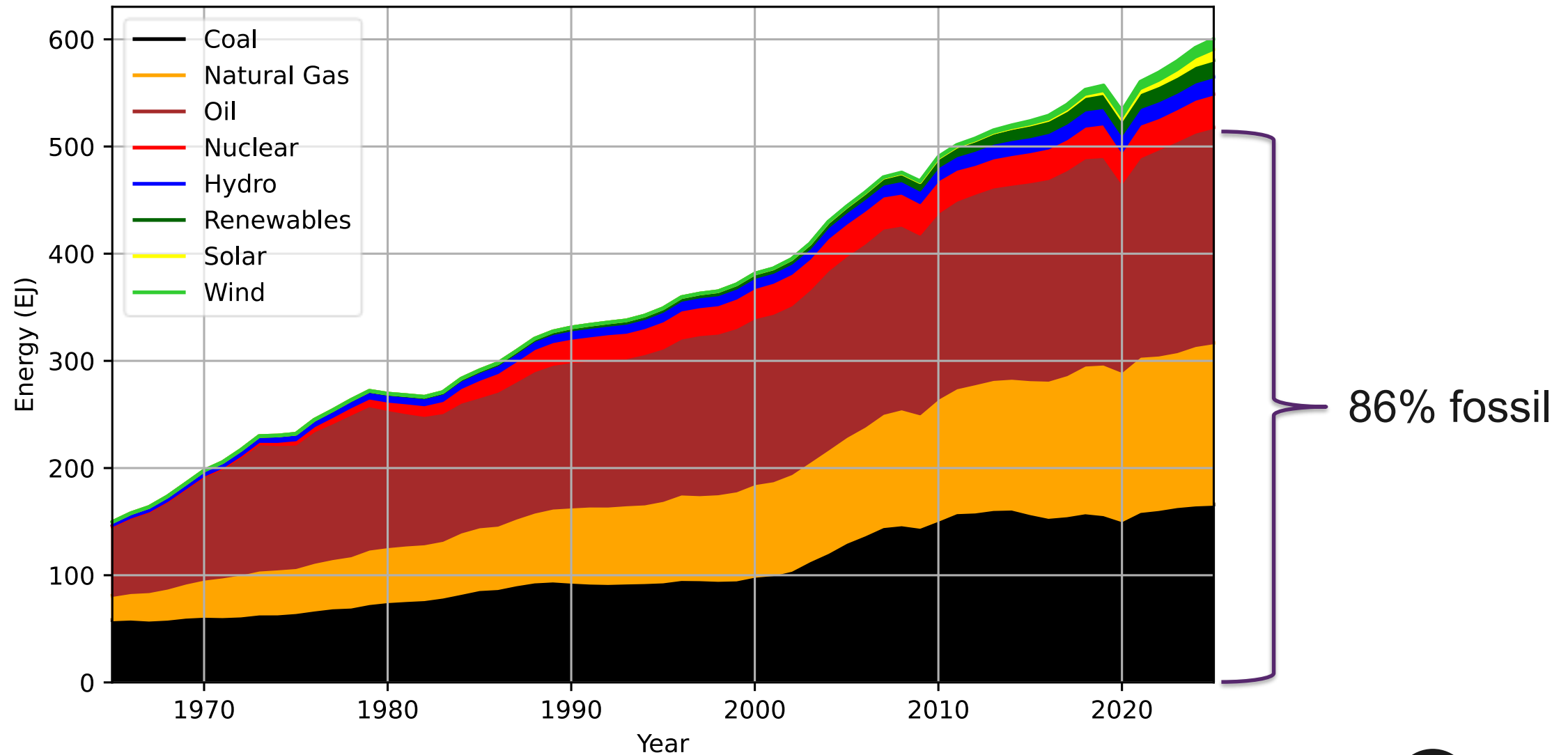
Science's 2025 Breakthrough of the Year: The unstoppable rise of renewable energy | Science | AAAS



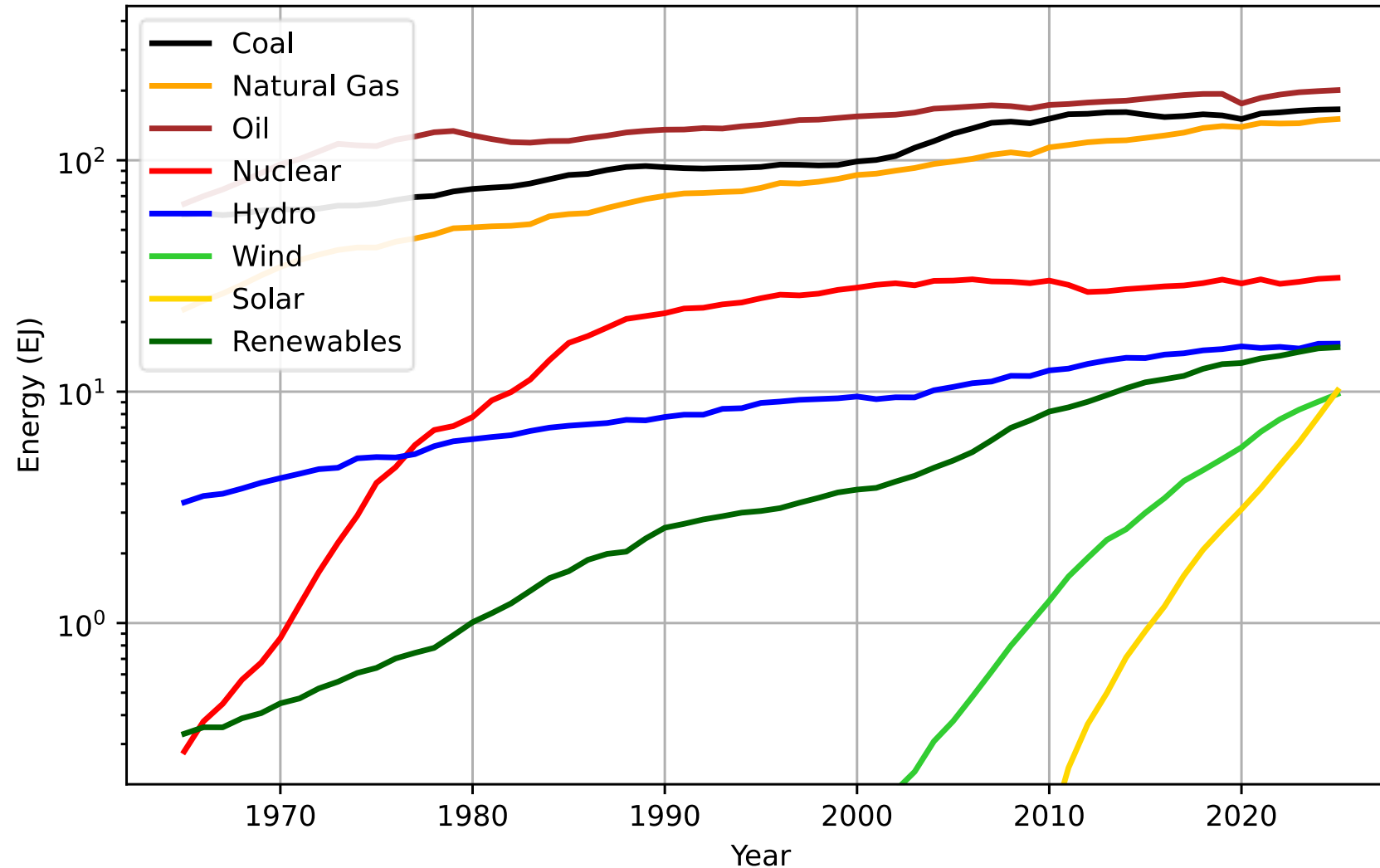
*2025 data are full-year estimates. Installed capacity includes grid-connected assets and some off-grid systems.

(GRAPHIC) V. PENNEY/SCIENCE; (DATA) EMBER; BNEF

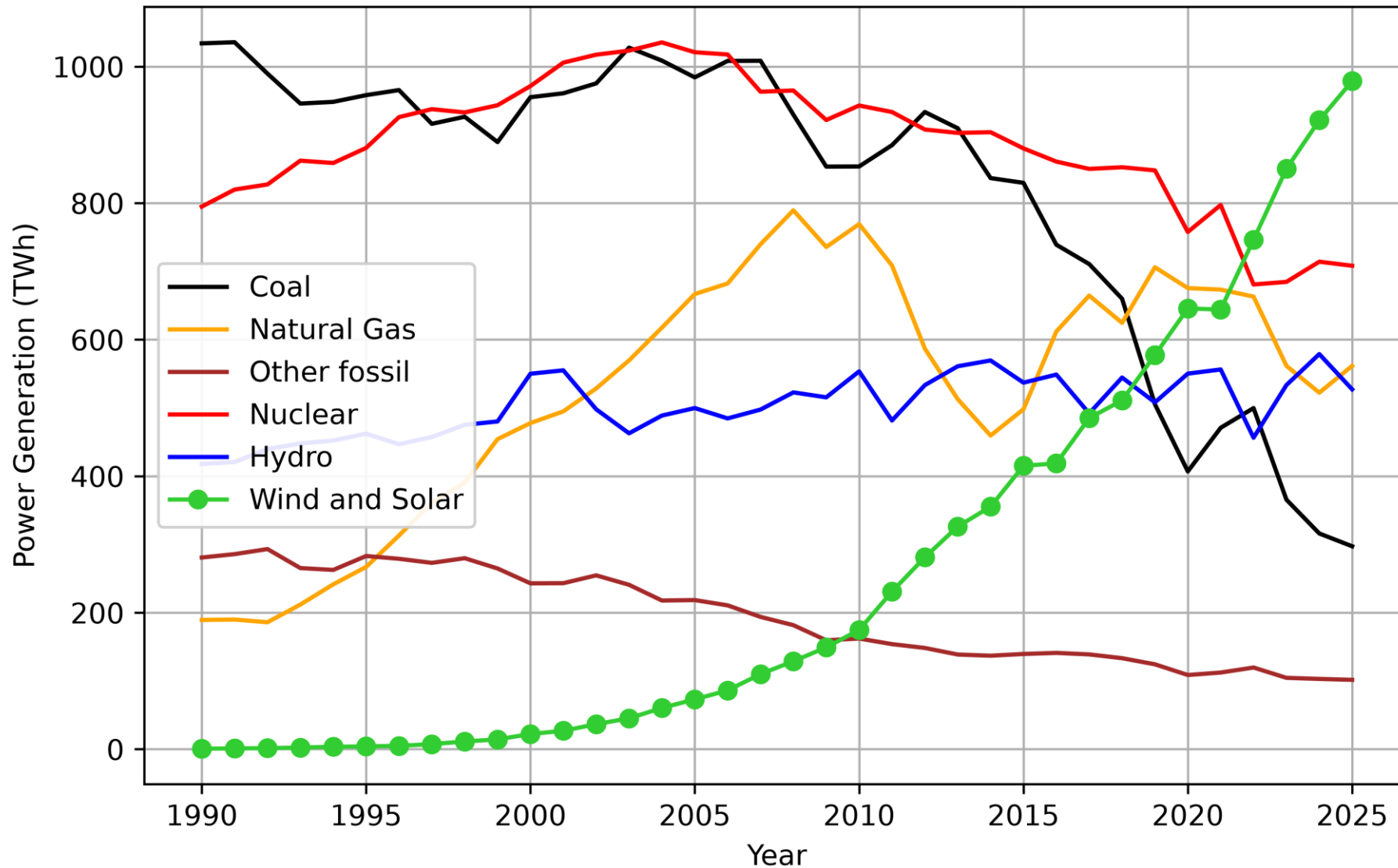
Global Energy Demand (energyinst.org)



Global Energy Demand (logarithmic)

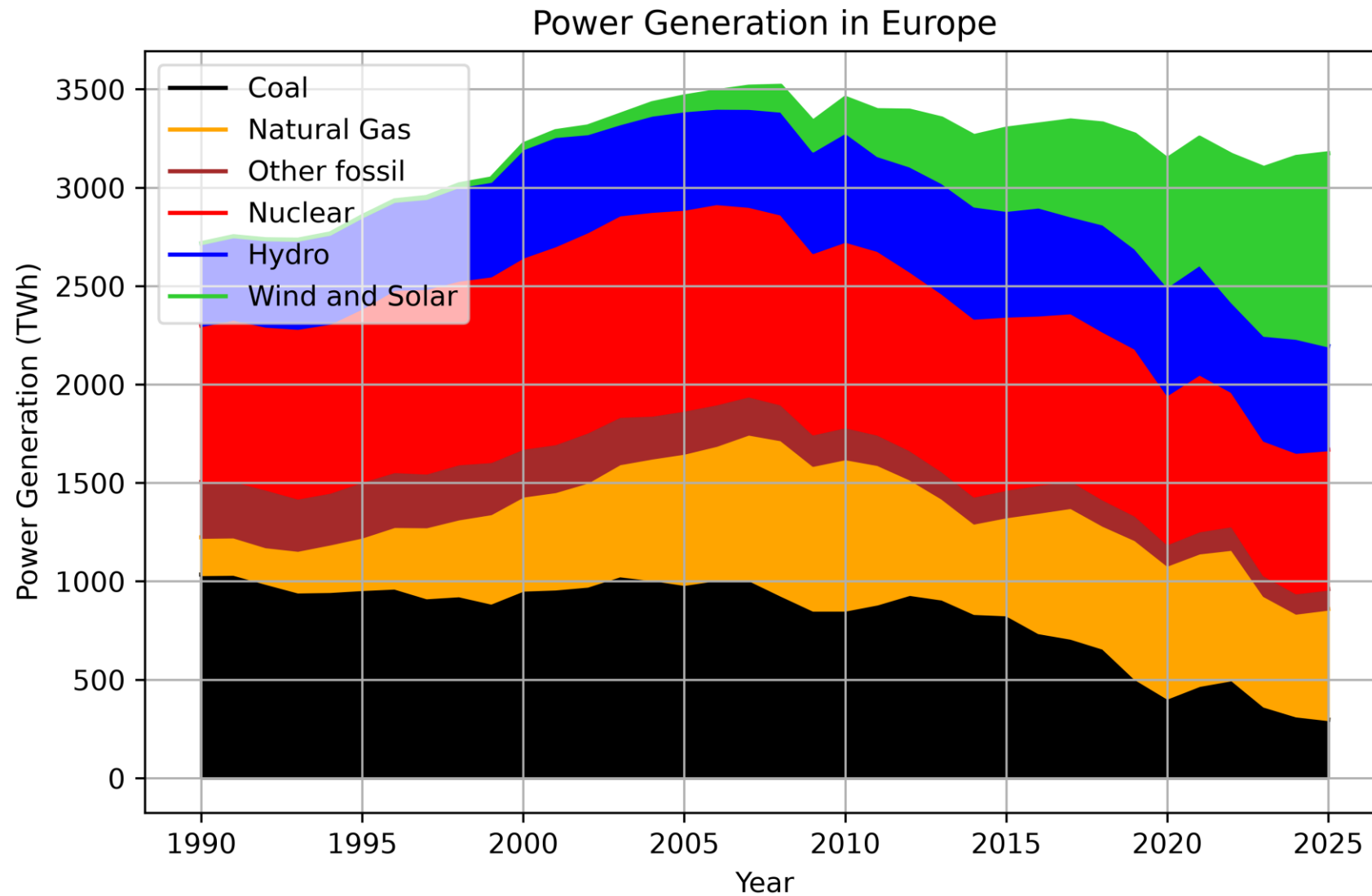


Decarbonization of electricity in Europe

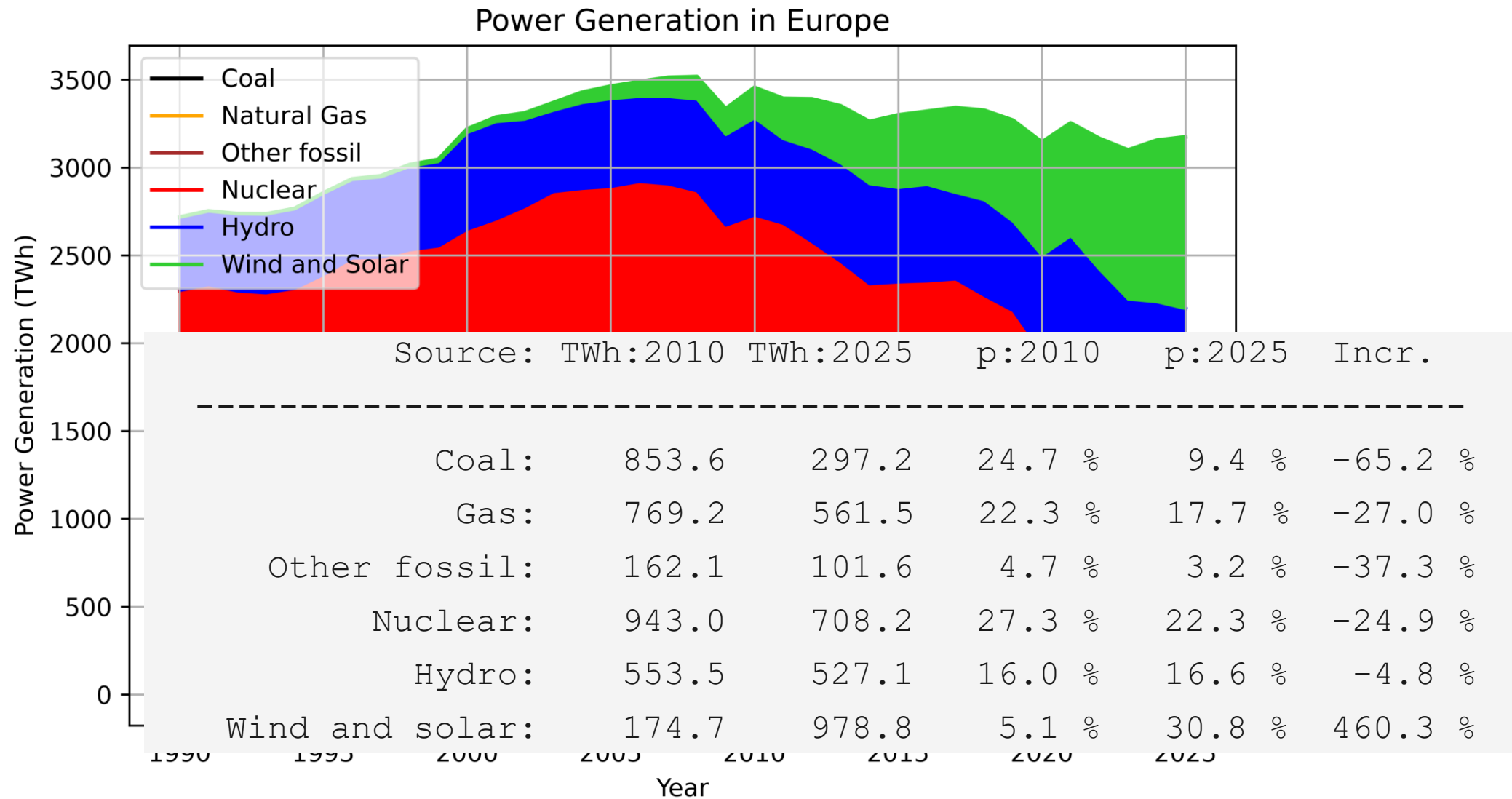


Chernobyl: 1986
Fukushima: 2011

Dekarbonization of electricity in Europe



Dekarbonization of electricity in Europe

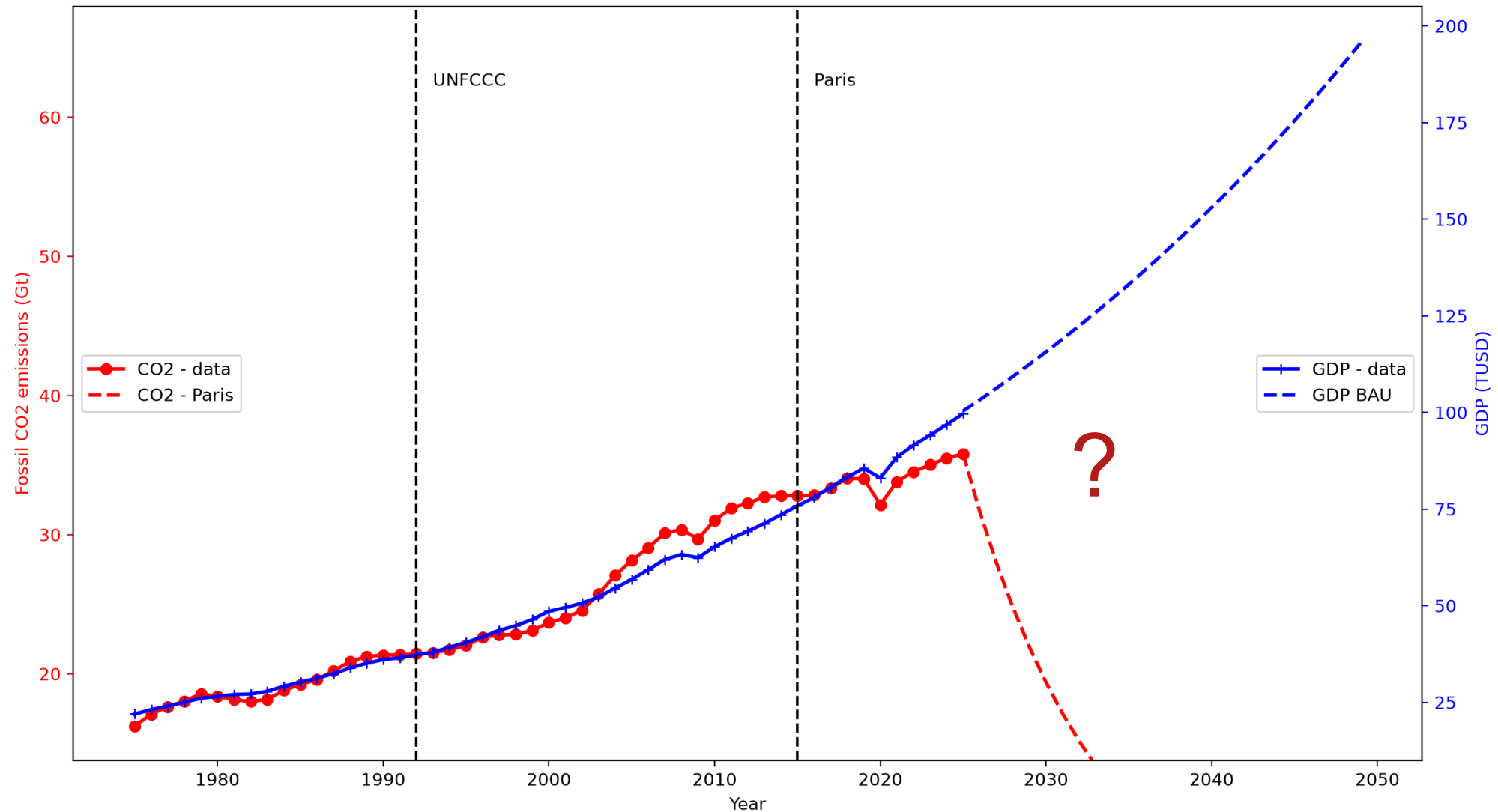


The future we desire!

**The future we are
planning for!**

Part 3:
The Road Ahead

The Paris Agreement: This is not a policy...



The Kaya Equation – confusion by design

$$\text{CO}_2 = \frac{\text{CO}_2}{\text{Energy}} \times \frac{\text{Energy}}{\text{GDP}} \times \frac{\text{GDP}}{\text{POP}} \times \text{POP}$$



Energy
POP



Energy
GDP



GDP
POP

=

×



“We use too much energy”
becomes “We are getting
richer and more efficient!”

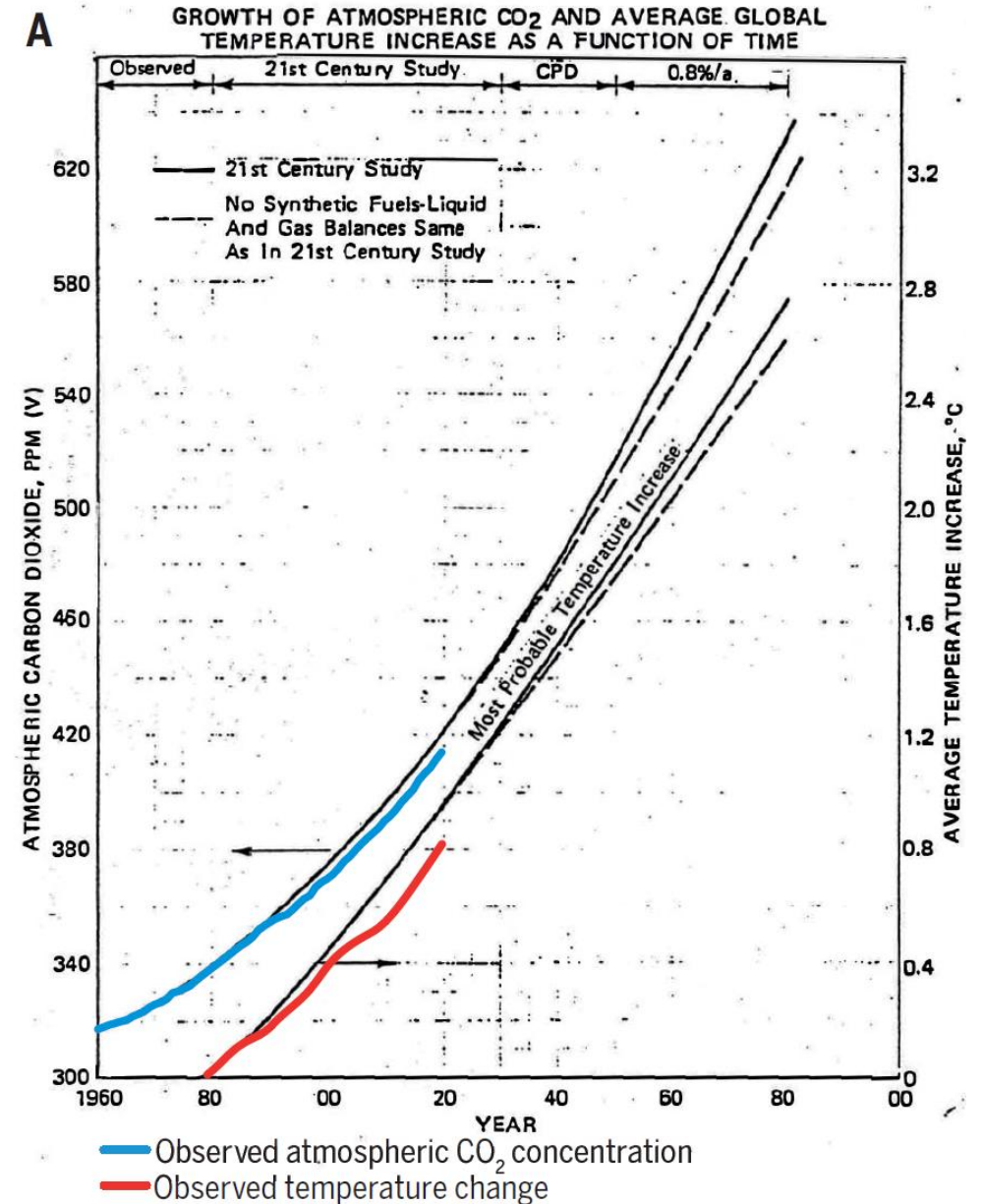
$$\text{CO}_2 = \frac{\text{CO}_2}{\text{Energy}} \times \frac{\text{Energy}}{\text{POP}} \times \text{POP}$$

Money is a distraction!

The Earth's biosphere does
not care about GDP.

Big Oil Always Knew

- G. Supran*, S. Rahmstorf, N. Oreskes, Assessing ExxonMobil's global warming projections, DOI: 10.1126/science.abk0063
- 1982 Memo to Exxon Management about CO2 Greenhouse Effect, <https://www.climatefiles.com/exxonmobil/1982-memo-to-exxon-management-about-co2-greenhouse-effect>
- *It is difficult to get a man to understand something, when his salary depends on his not understanding it.*
– Upton Sinclair



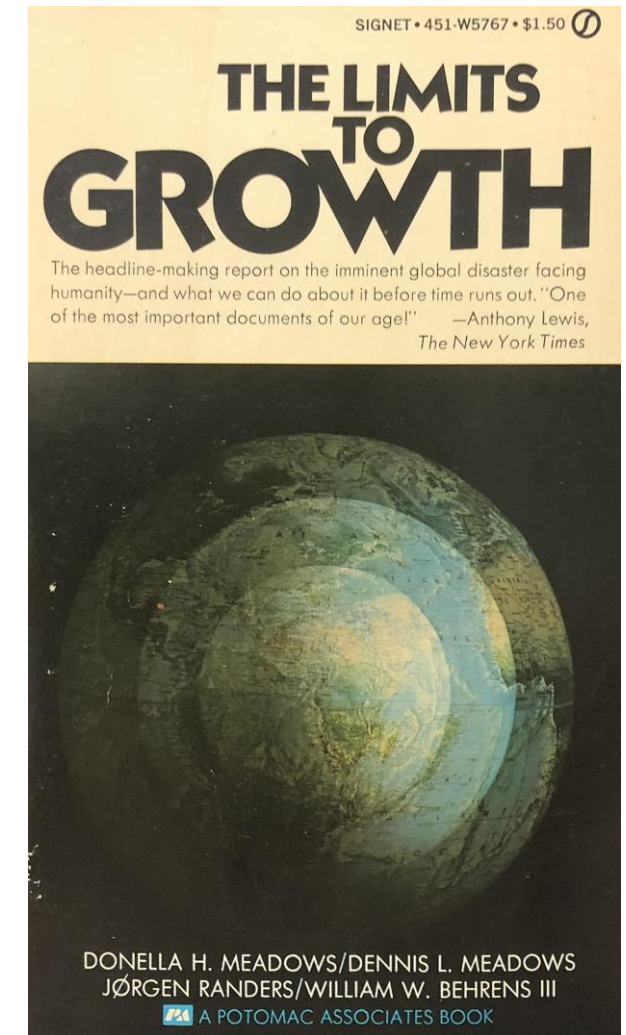
Galileo Galilei and the Scientific Revolution

- Galileo was sentenced to house arrest in 1633 – and threatened with torture – for teaching the heliocentric worldview.
- The authority of the Church was threatened – it was a power struggle disguised as a scientific dispute.
- Apparently, Galileo never understood this.



The Missed Scientific Revolution of 1972

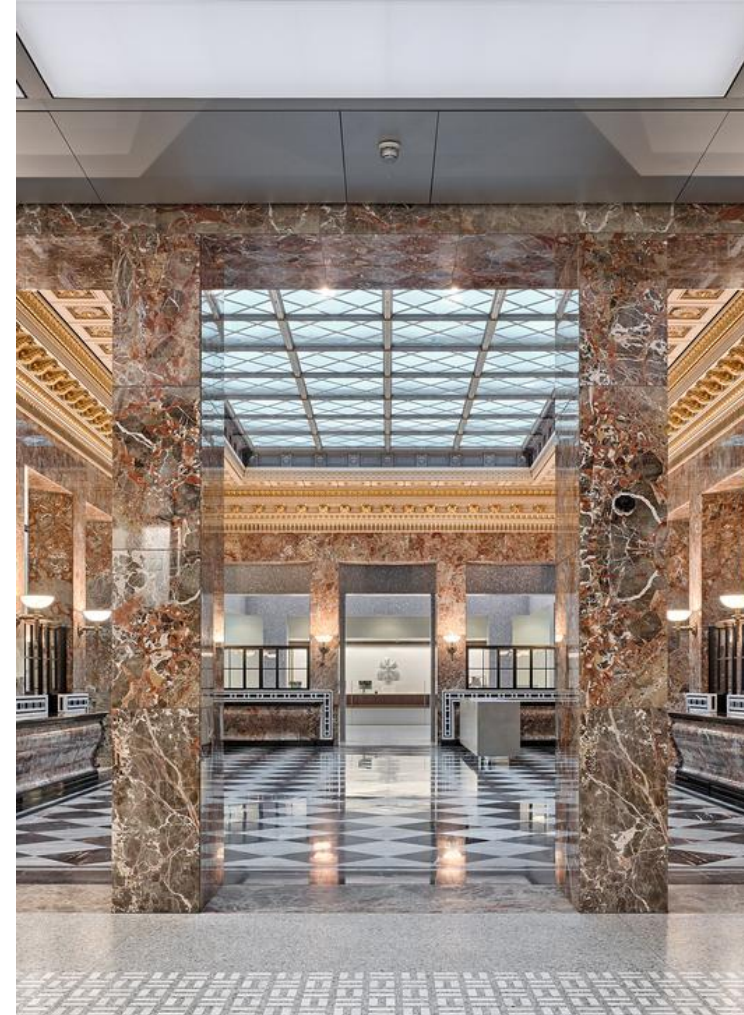
- Questioning the system was still not allowed in 1972.
- The usual suspects:
 - Economists realized that accepting the study meant the end of capitalism.
 - The fossil fuel industry wanted to continue with business as usual.
 - Engineers did not like the thought that technology could not solve all problems.
 - Politicians did not want to make unpopular decisions.
- Check the excellent podcast Tipping Point (<https://tippingpoint-podcast.com>)



Capitalism as religion: neoliberalism



St Peter, the Vactican



UBS, Zurich

Capitalism as religion: neoliberalism



Religion keeps the rich from being massacred
by the poor.

- Napoleon Bonaparte.



St Peter, the Vactican



UBS, Zurich

When Science and Power Collide, Science Loses

The reason why it may be wise to distrust the political judgment of scientists qua scientists is not primarily their lack of “character”—that they did not refuse to develop atomic weapons—or their naïveté—that they did not understand that once these weapons were developed they would be the last to be consulted about their use—but precisely the fact that they move in a world where speech has lost its power.

– Hannah Arendt

- Lack of character.
- Naïveté – politically not very clever.
- Bad communicators.

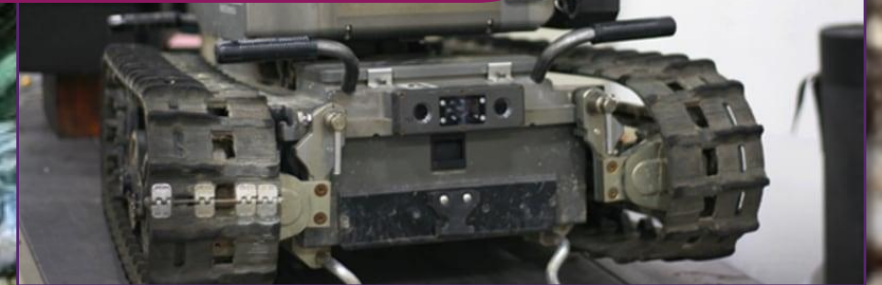
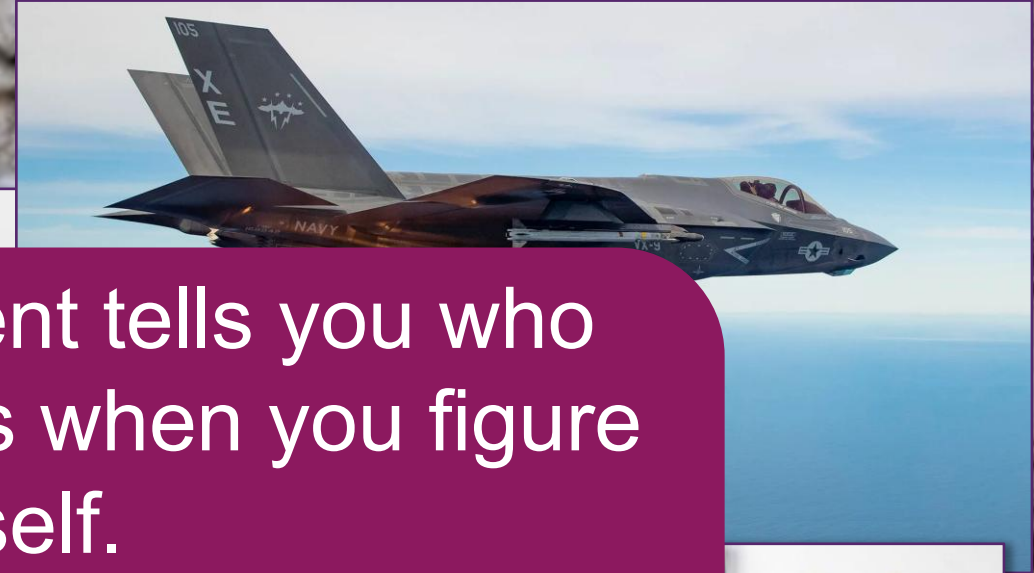
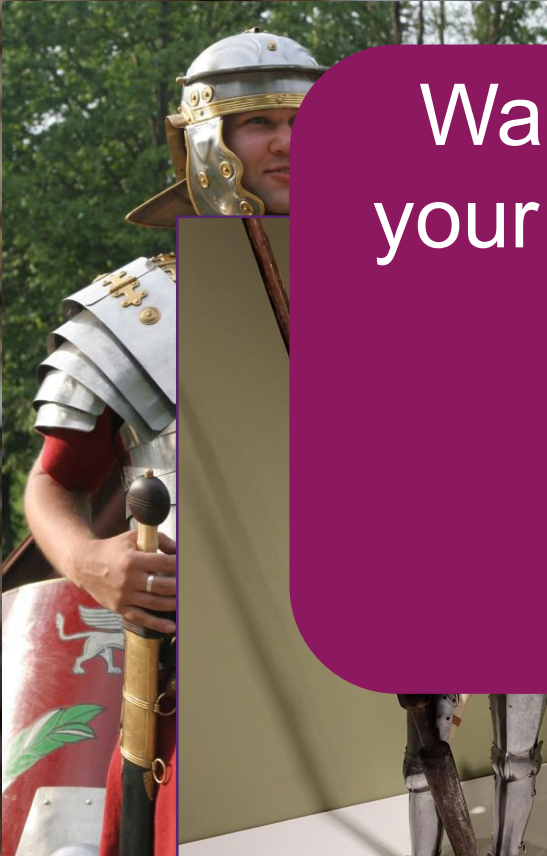
The Technology of Power



The Technology of Power

War is when the government tells you who your enemy is. Revolution is when you figure it out for yourself.

– Susan Sarandon
(inspired by Napoleon Bonaparte)



Can we get serious now?

- We did not fail to solve the climate crisis – we never tried!
- The ruling class consists of the people who profited from the existing system. They have absolutely no interest in changing it.
 - “The ruling ideology is the ideology of the ruling class.” (Marx & Engels)
 - Transforming a company requires changing the management team.
- This is why collapse happens (Tainter, Diamond, Turchin, ...)
- The term “Sustainable Growth” was invented because it was necessary to maintain a corrupt system – not because it was feasible.
- Growth cannot go on forever on a finite planet (just ask ChatGPT). Without growth, capitalism is dead.
- “For a successful technology, reality must take precedence over public relations, for nature cannot be fooled.” – Richard Feynman

It is a race against time and we are currently losing!

Once we cut through the lies, the greenwashing, and propaganda, what remains is the simple choice to do the right thing.

We should start tomorrow!

www.nordborg.ch

www.global-climate-compensation.org

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