



Climate



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» Like when fever strikes, global warming is a symptom of a deeper malaise. Climate change is telling us loud and clear that our growth-based economy is unsustainable.

Margarita Mediavilla in: Khaled Diab. 2021. [How Europe can grow without growing](#). European Environmental Bureau META.

» Even today, we are presumably much better at understanding the social consequences of climate change than the *social conditions* for limiting it.

Christian Berg. Book: *Sustainable Action. Overcoming the Barriers*. 2020

» The rights of future generations are just as weak in today's political decisions as the rights of people in the Global South or the rights of nature.

No signatory state to the Paris Climate Agreement has yet fulfilled its commitments.

Externalising the costs of our lifestyle is still too easy for politicians, preventing them from facing up to their responsibility for change and sacrifice.

Translated from: Josef Mackert. Newsletter WBGU Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen. 22.10.2024

» For more than 6,000 years, the human race has learned to live within a relatively narrow band of environmental and climatic fluctuations. The mean annual temperature over that period has been around 13°C.

Currently, around 1% of the Earth's land surface - mainly in the hottest parts of the Sahara - has an average annual temperature of 29°C,



By 2070, almost a fifth of the Earth's land surface could reach these temperatures, and this could affect around 30% of the forecasted world population.

Chi Xu et al. 2020. [Future of the human climate niche](#). *Proceedings of the National Academy of Sciences (PNAS)* Vol. 117 | No. 21.

Global Warming

Meanwhile, average global warming has reached the 1.5 °C mark compared to the pre-industrial era.

It should be noted that land areas tend to warm more intensely than oceans - which make up 70% of the Earth's surface - because land can store less heat and heats up faster than water.

» The warming of the atmosphere accounts for just 1% of the excess energy, whilst around 5% is stored in the land masses and more than 91% in the oceans. 3% is warming the ice and causing it to melt.

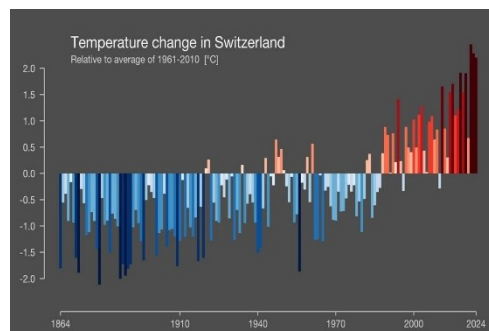
Source: World Meteorological Organisation. Earth's climate swings increasingly out of balance. 23 march 2026

» Europe is the fastest-warming continent, growing hot about twice as fast as the global average for all of Earth's land and oceans.

Chen E. *Europe's record heatwave: does the continent have a new climate? Nature News explainer* 26. June 2026

The average near-surface air temperature e.g. in Switzerland has already increased by about 2.9°C.

Source: MeteoSwiss. 2025



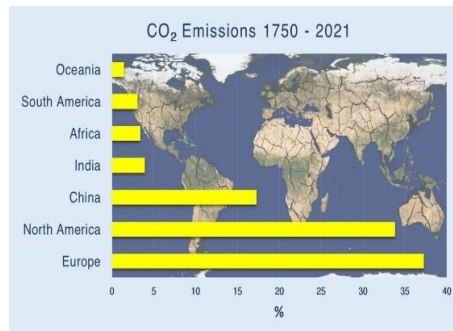
[Website ShowYourStripes.](#)

Institute for Environmental Analytics. University of Reading

The Global North's share of Global Warming to date is over 60 %, China's share is around 15 % and the share of all other countries together is around 24 %.

Source: Global Carbon Project 2023

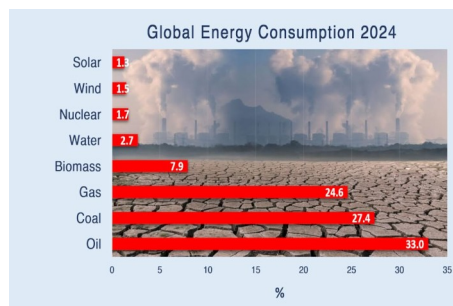




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Fossil fuels currently generate around 80% of the primary energy consumed worldwide.

Data Source: Energy Institute. Statistical Review of World Energy 2025



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» In stark contrast to the trickle of climate finance, fossil fuel subsidies have surged in recent years. In 2022, total spending on subsidies for oil, natural gas and coal reached a record \$7 trillion [according to IMF]. That's \$2 trillion more than in 2020.

Chelsea Harvey and Zia Weise. The state of the planet in 10 numbers. Politico.eu. November 20, 2023

Resilient Ecosystems



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If we want to achieve our climate goals, we must protect ecosystems. Reducing greenhouse gas emissions alone is not enough.

Major efforts are needed to protect the natural carbon reservoirs such as forests, soils, wetlands and oceans, in order to *simultaneously* mitigate the rapidly advancing loss of biodiversity.

Some 50 percent of man-made greenhouse gas emissions are absorbed by natural ecosystems on land and in the sea. Soils are, after the oceans, the second largest natural carbon sink.

» Wetlands cover just 3-4% of Earth's surface but store twice as much carbon as forests. Yet are among the least understood and monitored ecosystems.

Source: Global Peatland Hotspot Atlas. 2024.

» Since the pre-industrial era, it is estimated that more than 80 % of the world's wetlands have been lost due to changes in land use and drainage, and most of the remaining wetlands have been degraded.

WBGU. German Advisory Council on Global Change. [Water in heated world](#). Summary. 2024. PDF

» Agriculture is the second largest sector in society emitting greenhouse gases after the energy sector (approximately 25% of total emissions globally).

Overall, agriculture thereby not only constitutes a major driver of climate warming, but is also the largest cause behind the degradation of the resilience of the Earth system, and the capacity of natural ecosystems, such as soils, wetlands, and forests, to sequester carbon and to withstand extreme climate events.

*Rockström J, Kassam A, Friedrich T, et al. [Conservation agriculture: helping to return to within planetary boundaries](#). 2025. *Global Sustainability*, 9, e11, 1–27. <https://doi.org/10.1017/sus.2025.10045>*



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Climate change is also taking place in the oceans in particular. They cover more than 70 per cent of the planet's surface, are getting warmer and sea levels are rising. To date, they have absorbed around a quarter of global CO₂ emissions.

» The lack of appropriate wastewater treatment and the release of pollutants from the manufacturing industry, agriculture, tourism, fisheries and shipping continue to put pressure on the ocean, with a negative impact on food security, food safety and marine biodiversity.

The ocean plays a crucial role in the achievement of the Sustainable Development Goals and the livelihoods of billions of people. We urgently need to change how we interact with it.

The Second World Ocean Assessment. United Nations. 2021.

The «Climate Decade»



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We are in the «climate decade». A period where our collective actions will determine the kind of world our children and grandchildren will inherit.

» We think of climate change as slow, but it is unnervingly fast. We think of the technological change necessary to avert it as fast-arriving, but unfortunately it is deceptively slow, especially judged by just how soon we need it.

David Wallace-Wells. Book: The uninhabitable earth. Life after warming. 2019

A continuation of current policies would result in a 100% chance of exceeding 1.5°C, a 97% chance of exceeding 2°C and a 37% chance of exceeding 3°C by 2100.

CarbonBrief. UNEP: [New climate pledges need 'quantum leap' in ambition to deliver Paris goals](#). 24. 10.2024





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» The primary challenge is to stop the flow of money to oil, coal and gas and to establish a clear path towards de-carbonization.

The «sustainability» of finance can be gauged by how far and how fast it shifts us away from the fossil fuel economy, rather than simply allowing the financial sector to develop new «green» markets alongside a core business that continues to bankroll climate change.

Oscar Reyes. Change Finance - Not the Climate. 2020.

» The climate crisis is not interested in the promise to be climate-neutral in 2050: It doesn't matter *when* humanity stops burning coal, oil and gas, and thus blowing greenhouse gases like CO₂ into the atmosphere. It depends on how much we burn in the meantime.

Translated from: Maria Stich. 18 Fakten über die Klimakrise, die jede:r wissen sollte. Perspective Daily. 27. März 2023

