# Global temperatures likely to surpass 1.5°C threshold repeatedly over next five years, says WMO



Global temperatures are expected to remain alarmingly high, surpassing the critical threshold of 1.5°C above pre-industrial levels for a significant number of years ahead, an analysis by the World Meteorological Organisation (WMO) and the UK’s Met Office has revealed. After the record temperatures of 2024, which marked the first time global averages exceeded this threshold, the new predictions suggest an 86% probability that another year within the next five could also breach it.

This sobering assessment highlights that, on average, global temperatures could range from 1.1°C to 1.9°C above the baseline of 1850-1900 during the years from 2024 to 2028. The analysis posits a 70% chance that the average temperature over this timeframe will exceed 1.5°C. Furthermore, there exists an 80% likelihood that at least one year between 2025 and 2029 could establish a new record for global temperatures, potentially surpassing the warmest year of 2023.

The first occurrence of annual temperatures exceeding 1.5°C has prompted intensified scrutiny of climate patterns and policies. Influential climate events such as El Niño, which has significantly contributed to the recent spikes in temperature, are seamless with these projections. Additionally, environmental changes are poised to exacerbate weather extremes. Forecasts indicate wet winters for northern Europe, raising severe flooding risks, particularly for regions that are susceptible to such climate hazards.

Professor Adam Scaife from the Met Office addressed these unfolding scenarios, noting that the occurrence of 1.5°C years is becoming increasingly commonplace. He remarked, “These are shocking statistics… we are going to see more of these.” While the prospect of a year exceeding 2°C of warming remains extremely unlikely—at only a 1% chance—the very fact that it is now conceivable speaks volumes about the increasingly precarious state of the global climate.

The recent surge in temperatures aligns closely with international climate commitments under the Paris Agreement, which aims to limit global warming to well below 2°C while pursuing efforts to curb it to 1.5°C. The latest data from the Copernicus Climate Change Service corroborates findings that the last year was the warmest ever recorded, exceeding 1.6°C above pre-industrial averages. As stated by UN Secretary-General António Guterres, the intensifying climate phenomena call for urgent measures to curtail carbon emissions, with aspirations for a 30% reduction in fossil fuel output and usage by 2030.

Despite these urgent calls, political momentum around climate action appears to be waning in various regions, complicating efforts to navigate the escalating crisis. The interconnection between environmental degradation—evidenced by rising wildfires, aqueous extreme weather, and drought conditions in critical areas like the Amazon—emphasises that immediate and comprehensive action is essential to mitigate further temperature rises.

Ko Barrett, WMO’s deputy secretary-general, highlighted the distressing trend, stating, “We have just experienced the 10 warmest years on record.” This observation intimates not only a future marked by further climatic instability but also that the repercussions will increasingly challenge economies, everyday life, and ecosystems worldwide. With scientific research suggesting a rapid acceleration of climate change, the evidence points towards an urgent mandate for policymakers to elevate their commitment to environmental sustainability.

The climate crisis is rapidly intertwining with the fabric of the global landscape, necessitating a collective shift towards more substantial action to avert catastrophic consequences and secure a sustainable future.

## Reference Map:

* Paragraph 1 – [[1]](https://m.belfasttelegraph.co.uk/news/uk/global-temperatures-likely-to-be-above-15c-threshold-over-next-five-years-wmo/a1398667465.html), [[2]](https://public.wmo.int/news/media-centre/global-temperature-likely-exceed-15degc-above-pre-industrial-level-temporarily-next-5-years)
* Paragraph 2 – [[1]](https://m.belfasttelegraph.co.uk/news/uk/global-temperatures-likely-to-be-above-15c-threshold-over-next-five-years-wmo/a1398667465.html), [[3]](https://www.bbc.co.uk/news/articles/cd7575x8yq5o), [[4]](https://www.metoffice.gov.uk/about-us/news-and-media/media-centre/weather-and-climate-news/2024/2025-global-temperature-outlook)
* Paragraph 3 – [[5]](https://www.reuters.com/sustainability/world-hits-streak-record-temperatures-un-warns-climate-hell-2024-06-05/), [[6]](https://www.reuters.com/business/environment/2024-was-first-year-above-15c-global-warming-scientists-say-2025-01-10/)
* Paragraph 4 – [[2]](https://public.wmo.int/news/media-centre/global-temperature-likely-exceed-15degc-above-pre-industrial-level-temporarily-next-5-years), [[3]](https://www.bbc.co.uk/news/articles/cd7575x8yq5o)
* Paragraph 5 – [[4]](https://www.metoffice.gov.uk/about-us/news-and-media/media-centre/weather-and-climate-news/2024/2025-global-temperature-outlook), [[7]](https://www.reuters.com/sustainability/climate-energy/what-is-latest-science-telling-us-about-climate-change-2025-01-06/)
* Paragraph 6 – [[2]](https://public.wmo.int/news/media-centre/global-temperature-likely-exceed-15degc-above-pre-industrial-level-temporarily-next-5-years), [[6]](https://www.reuters.com/business/environment/2024-was-first-year-above-15c-global-warming-scientists-say-2025-01-10/)
* Paragraph 7 – [[1]](https://m.belfasttelegraph.co.uk/news/uk/global-temperatures-likely-to-be-above-15c-threshold-over-next-five-years-wmo/a1398667465.html)

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## Bibliography

1. <https://m.belfasttelegraph.co.uk/news/uk/global-temperatures-likely-to-be-above-15c-threshold-over-next-five-years-wmo/a1398667465.html> - Please view link - unable to able to access data
2. <https://public.wmo.int/news/media-centre/global-temperature-likely-exceed-15degc-above-pre-industrial-level-temporarily-next-5-years> - The World Meteorological Organization (WMO) reports an 80% likelihood that the annual average global temperature will temporarily exceed 1.5°C above pre-industrial levels for at least one of the next five years. This indicates a significant approach towards the Paris Agreement's 1.5°C target, which pertains to long-term temperature increases over decades, not short-term fluctuations. The WMO's Global Annual to Decadal Update predicts that each year between 2024 and 2028 will be between 1.1°C and 1.9°C higher than the 1850-1900 baseline, with an 86% chance that at least one of these years will set a new temperature record, surpassing 2023, the current warmest year on record.
3. <https://www.bbc.co.uk/news/articles/cd7575x8yq5o> - The BBC reports that 2024 was the first calendar year to exceed the 1.5°C threshold above pre-industrial levels, marking it as the warmest year on record. The European Copernicus climate service confirmed this, noting that global average temperatures for 2024 were around 1.6°C above those of the pre-industrial period. This development brings the world closer to breaching the 1.5°C limit set by the Paris Agreement, highlighting the urgent need for enhanced climate action to mitigate further warming.
4. <https://www.metoffice.gov.uk/about-us/news-and-media/media-centre/weather-and-climate-news/2024/2025-global-temperature-outlook> - The UK's Met Office forecasts that 2025 is likely to be one of the three warmest years on record, following 2024 and 2023. This prediction aligns with the WMO's outlook, which anticipates that each year between 2024 and 2028 will be between 1.1°C and 1.9°C higher than the 1850-1900 baseline. The Met Office attributes the warming trend to increasing greenhouse gas concentrations and natural climate variations, such as El Niño, which have contributed to elevated global temperatures in recent years.
5. <https://www.reuters.com/sustainability/world-hits-streak-record-temperatures-un-warns-climate-hell-2024-06-05/> - Reuters reports that over the past year, global temperatures have consistently broken records, with the last 12 months being the warmest period since record-keeping began in 1940. The EU's Copernicus Climate Change Service noted that this period was 1.63°C above the pre-industrial average. UN Secretary-General António Guterres highlighted the urgent need for action to avoid catastrophic climate impacts, calling for a 30% reduction in fossil fuel production and consumption by 2030. Despite international efforts, carbon dioxide emissions from fossil fuels reached a record high last year, and fossil fuels still dominate global energy consumption.
6. <https://www.reuters.com/business/environment/2024-was-first-year-above-15c-global-warming-scientists-say-2025-01-10/> - Reuters reports that in 2024, global temperatures exceeded 1.5°C above pre-industrial levels for the first time, nearing the threshold set by the Paris climate agreement. The World Meteorological Organization confirmed that 2024 was the hottest year on record, with a temperature rise of 1.6°C. This temperature increase led to severe weather events, including wildfires in Los Angeles, extreme heat waves, and torrential rains worldwide. Notable disasters included wildfires in Bolivia and Venezuela, floods in Nepal, Sudan, and Spain, and fatal heat waves in Mexico and Saudi Arabia. Despite the urgent need for climate action, political commitment has waned in some countries. U.S. President-elect Donald Trump, who will take office on January 20, has dismissed climate change and promises to increase fossil fuel production. Scientists emphasize that rapid cuts in emissions are crucial to prevent further temperature rises and catastrophic impacts. The landmark 1.5°C milestone serves as a call to action for policymakers to intensify efforts in combating climate change.
7. <https://www.reuters.com/sustainability/climate-energy/what-is-latest-science-telling-us-about-climate-change-2025-01-06/> - Reuters reports that the latest scientific research indicates that climate change is unfolding faster than previously expected. Evidence suggests the world may have already hit the critical threshold of 1.5 degrees Celsius of warming, posing a high risk of irreversible and extreme climate impacts. The warming of the Atlantic Ocean could hasten the collapse of the Atlantic Meridional Overturning Circulation, which has significant implications for European climates. Ocean warming is also linked to stronger and more rapidly intensifying storms. Forests worldwide are experiencing drying and increased wildfires, contributing to higher atmospheric CO2 levels. Additionally, the Amazon is facing severe drought and fires, raising concerns about its ability to sustain itself. Scientists also warn that climate change could increase volcanic activity due to glacier melt reducing pressure on the Earth's crust. Overall, the recent findings underscore the urgent need for policymakers to intensify efforts to combat climate change.