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Grantham Institute

State of the climate

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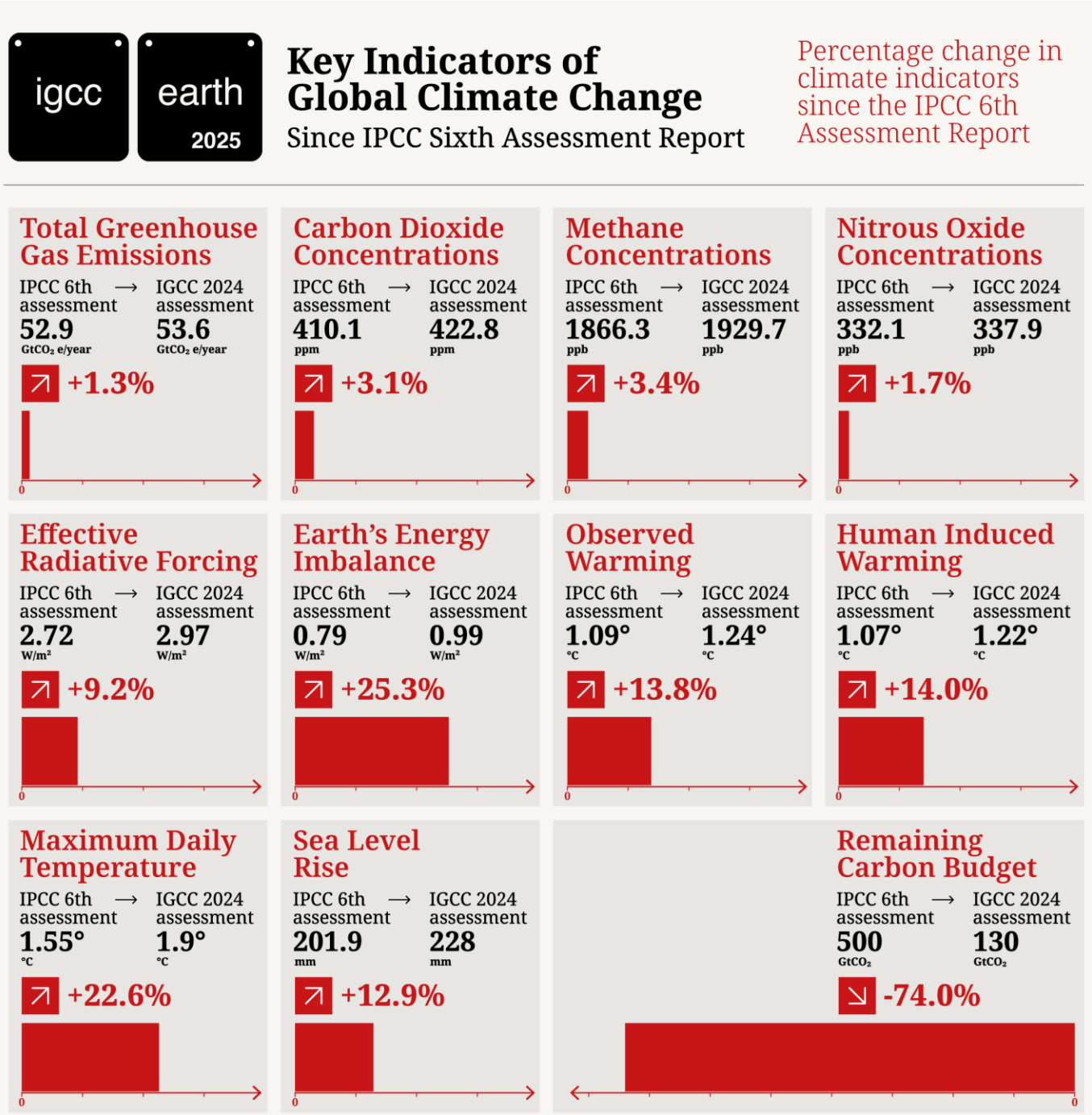
January 2026
Imperial College London

Annual update of indicators of global climate change shows *worrying, yet unsurprising,* trends in the wrong direction.



Source: Forster P.M. et al (2025). Indicators of Global Climate Change 2024: annual update of key indicators of the state of the climate system and human influence https://doi.org/10.5194/essd-17-2641-2025

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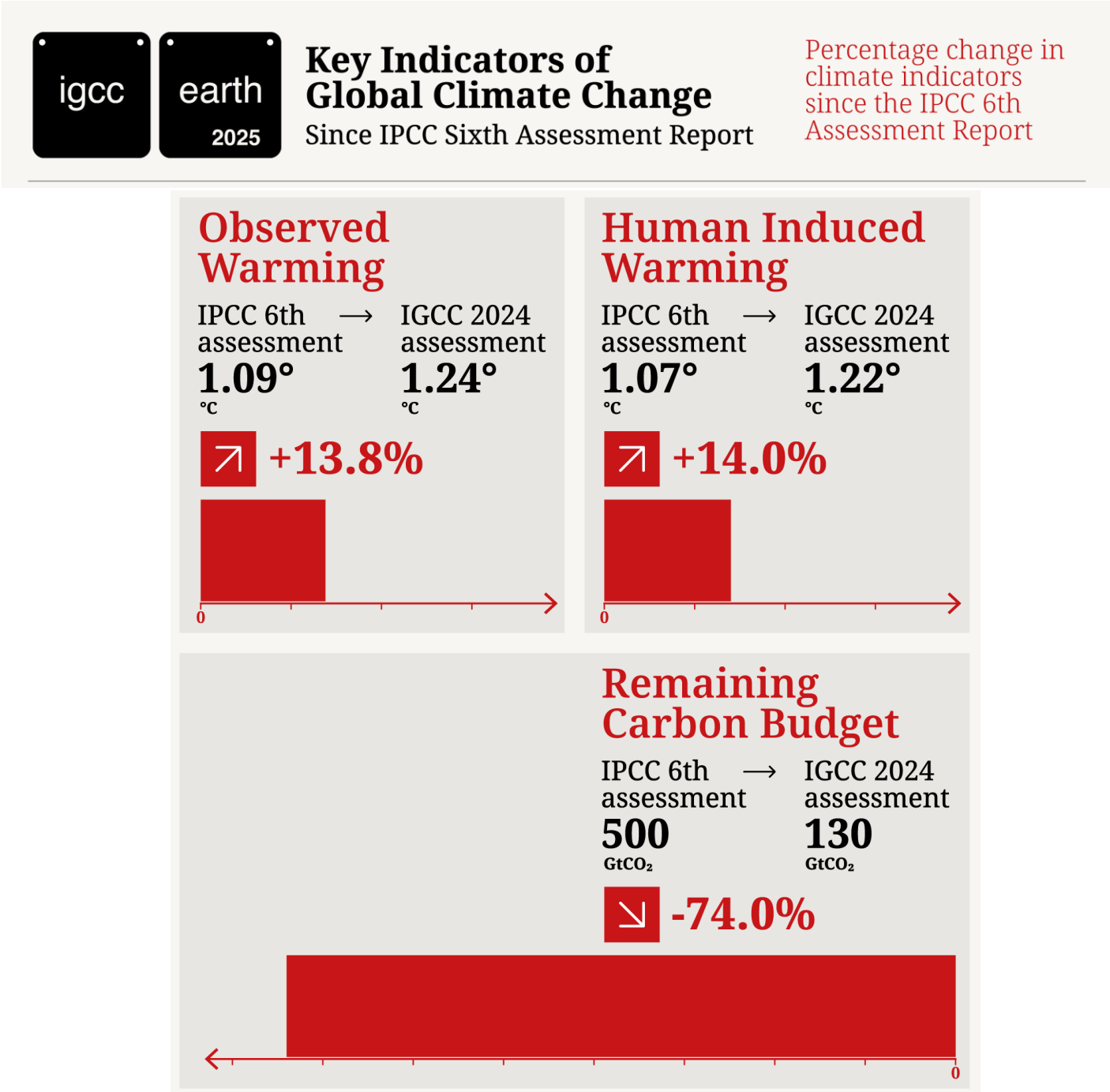
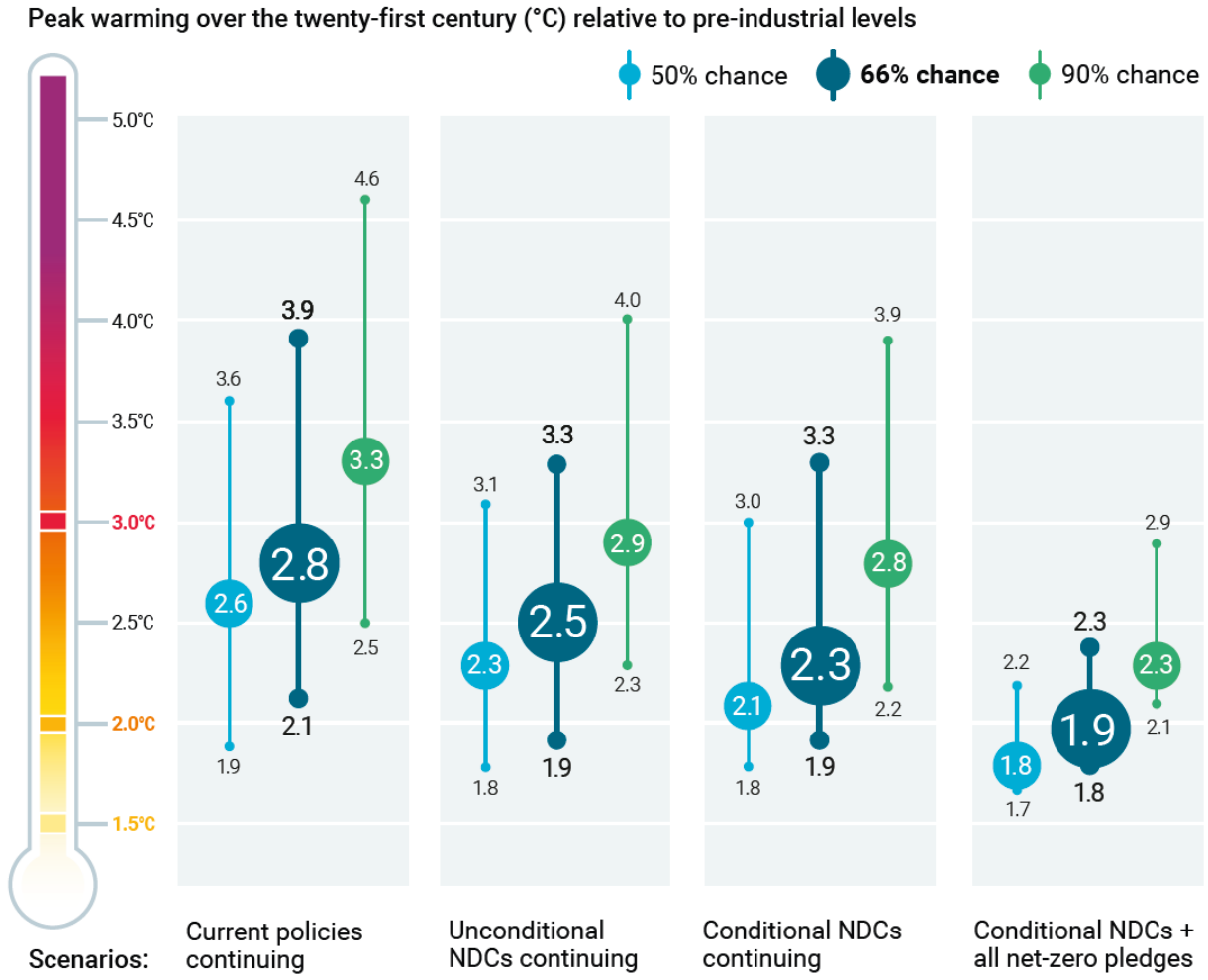
Annual update of indicators of global climate change shows *worrying, yet unsurprising,* trends in the wrong direction.

We are approaching 1.5°C of global warming



Source: Forster P.M. et al (2025). Indicators of Global Climate Change 2024: annual update of key indicators of the state of the climate system and human influence https://doi.org/10.5194/essd-17-2641-2025

Current policies put global warming well beyond 1.5°C and 2°C



Source: Rogelj, de Elzen & Tong (2025), UNEP Emissions Gap Report 2025

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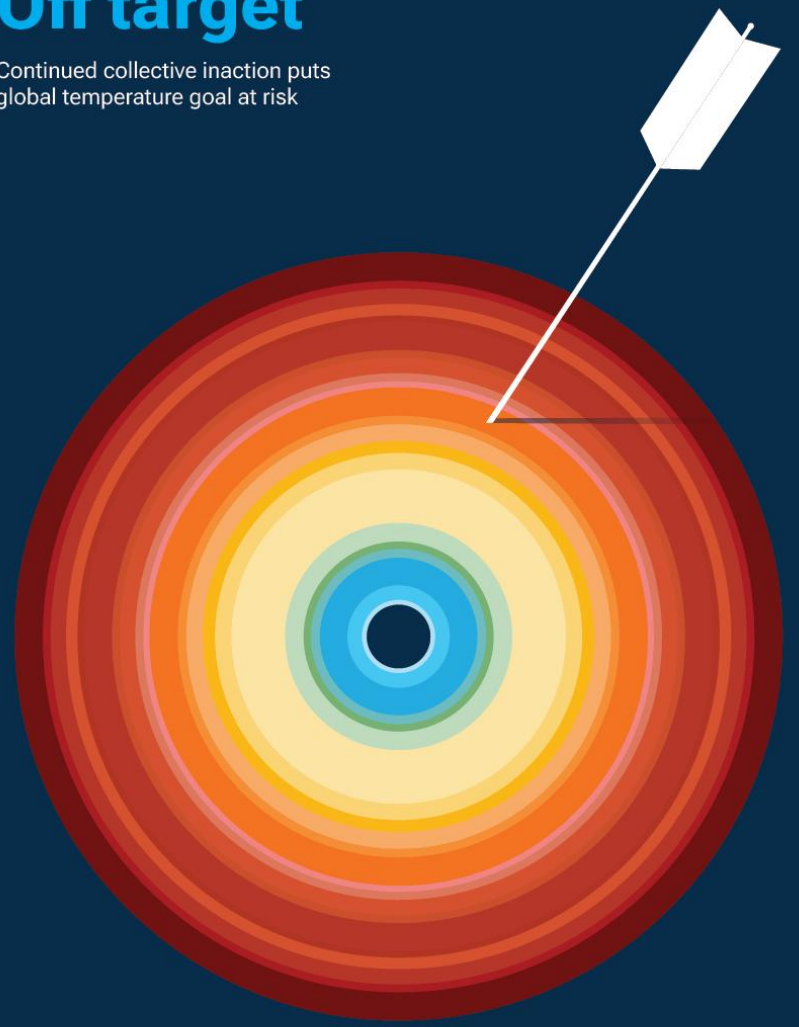
UN environment programme

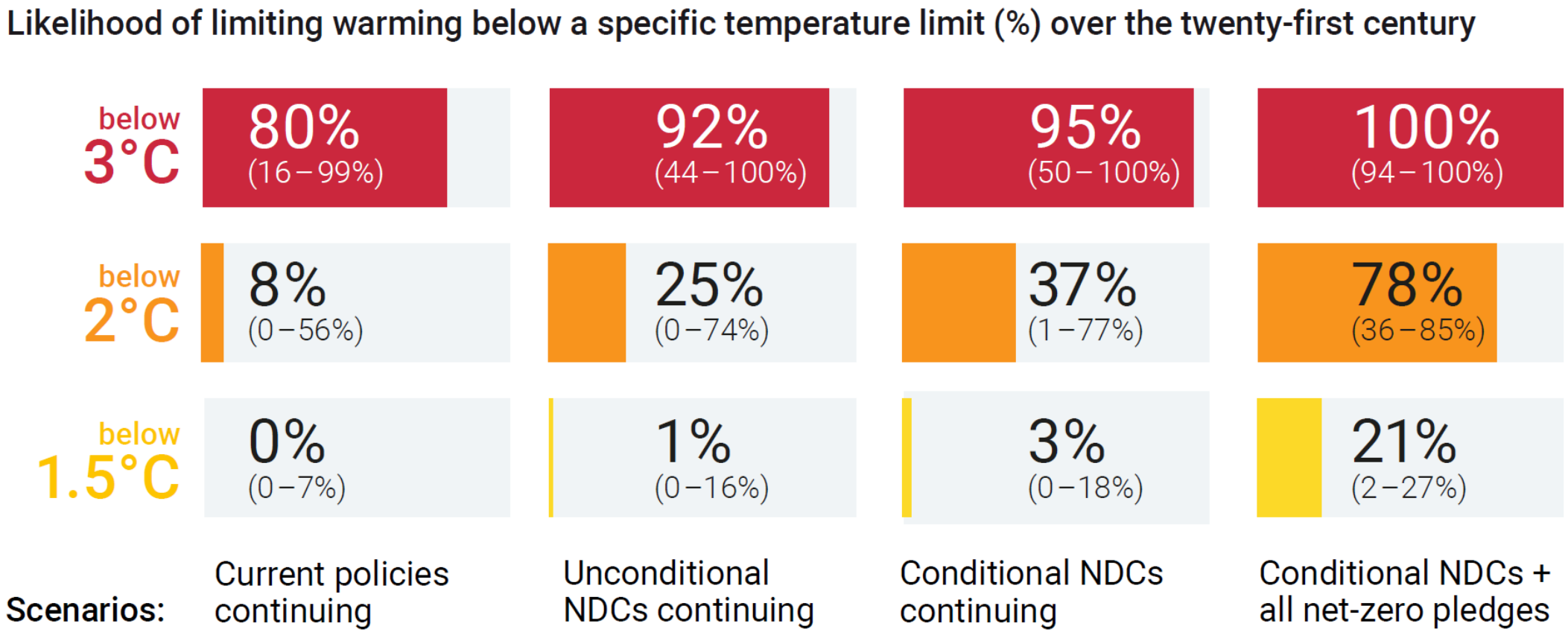
Off target

Continued collective inaction puts global temperature goal at risk



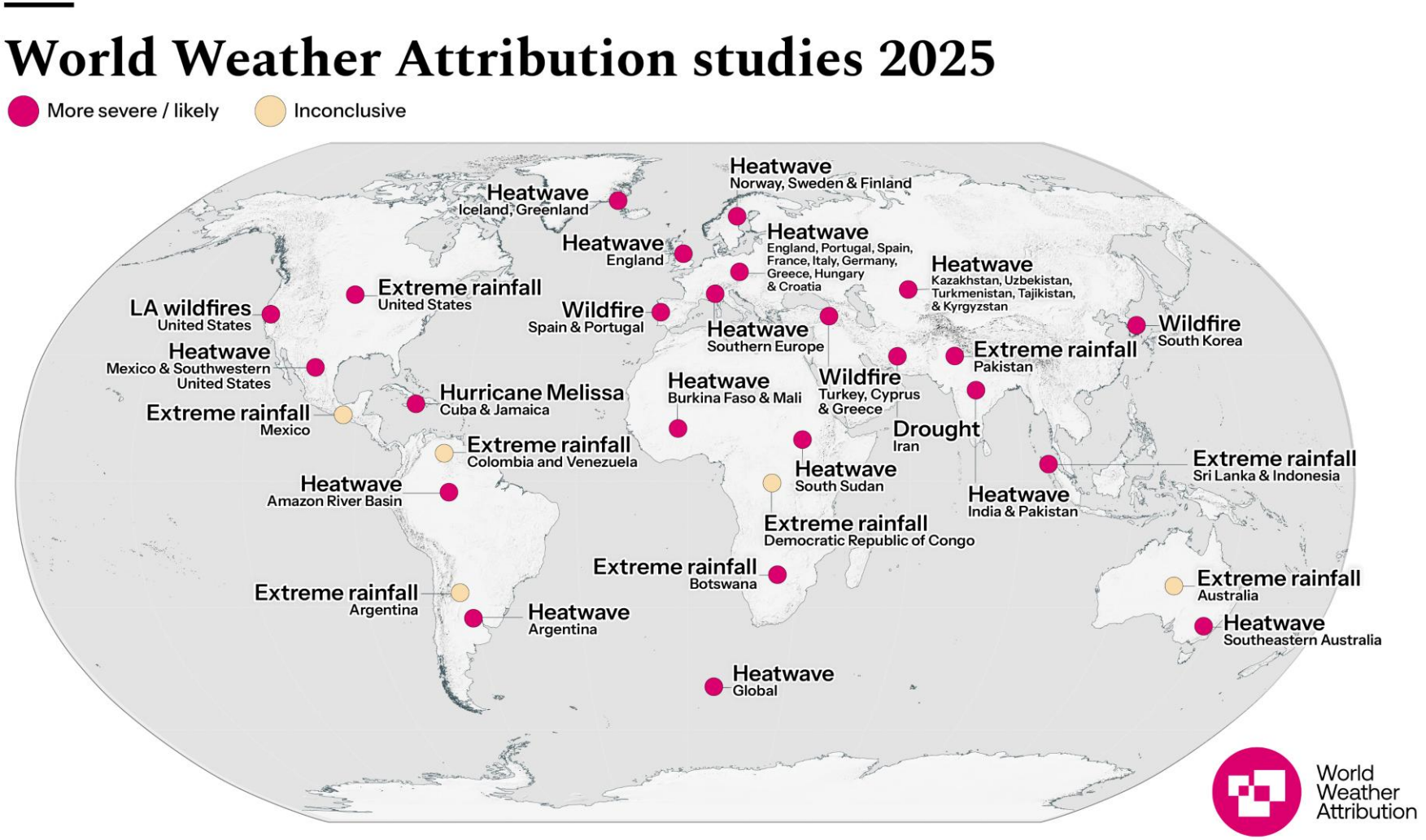
Emissions Gap Report 2025

All Paris Agreement limits crossed if action is not strengthened



Source: Rogelj, de Elzen & Tong (2025), UNEP Emissions Gap Report 2025

Climate change significantly exacerbated extreme weather in 2025



Source: Otto, F. et al., (2025): Unequal evidence and impacts, limits to adaptation: Extreme Weather in 2025 (WWA scientific report No. 79) World Weather Attribution DOI: https://doi.org/10.25560/126543

And led to significant health and economic impacts

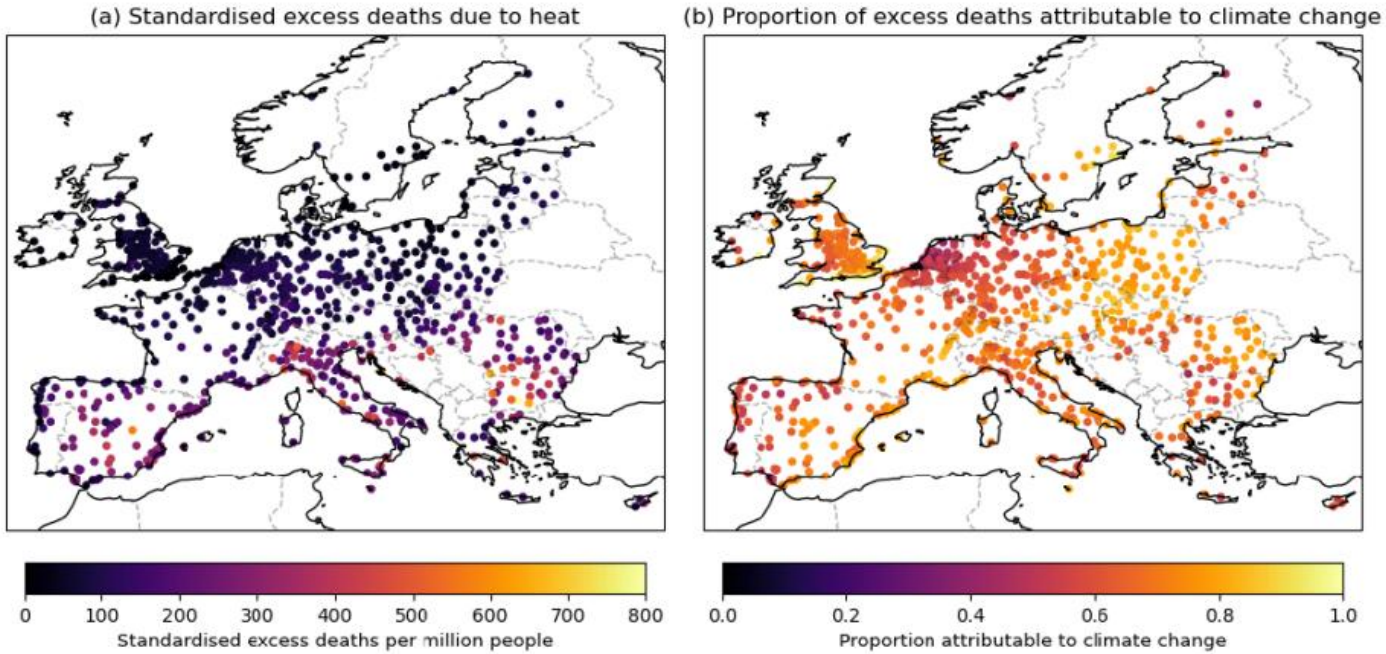
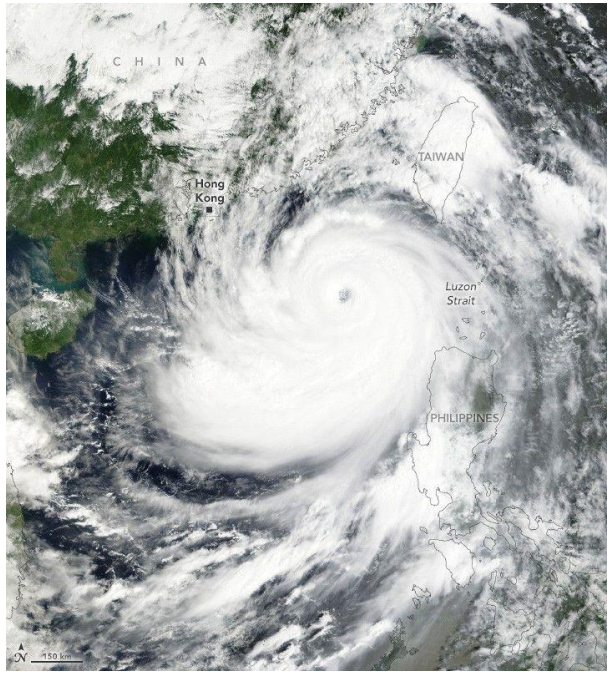


***Figure 6**: Maps of median standardised excess mortality per million people and median proportion of mortality attributed to climate change by city.*

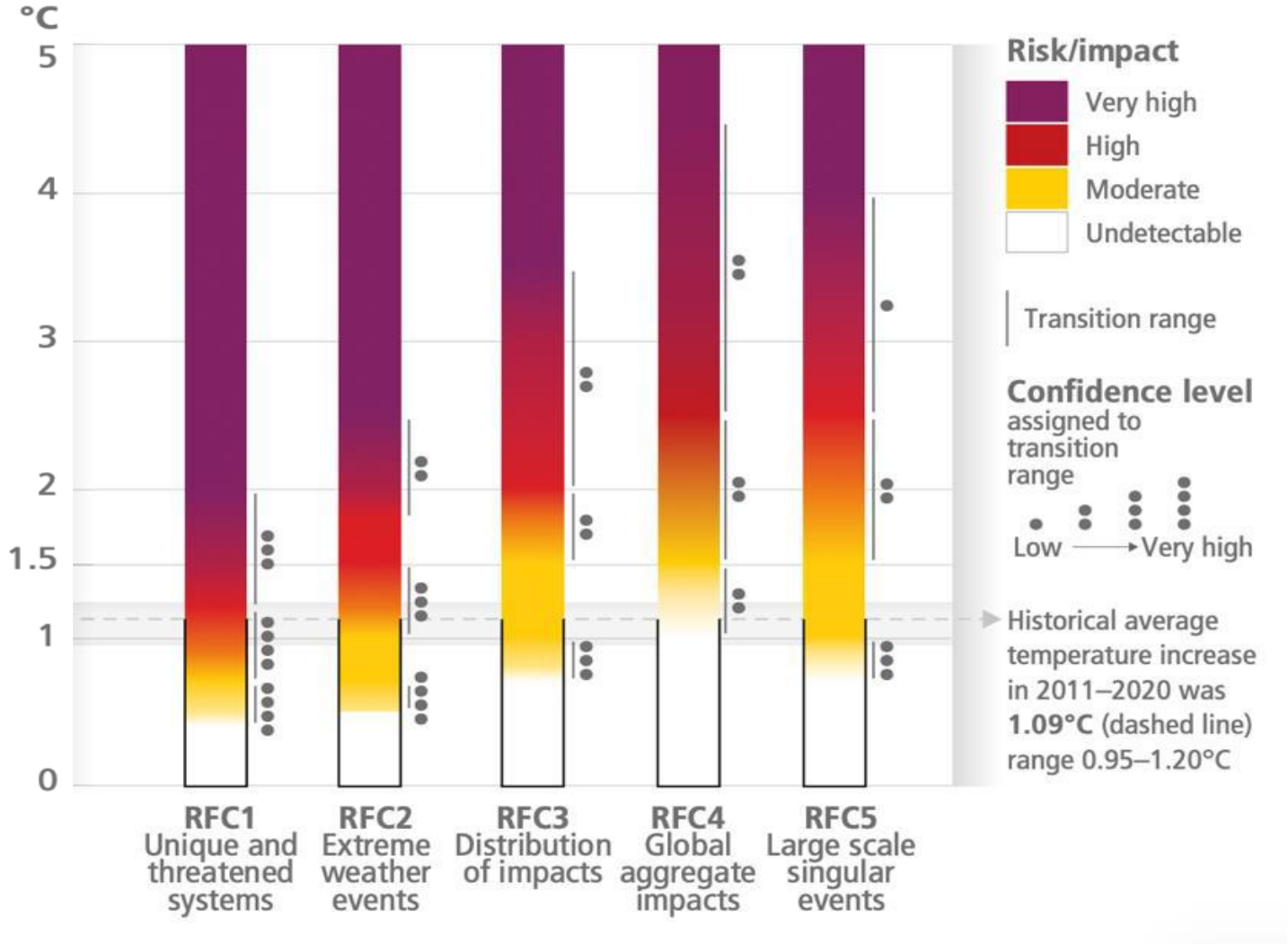
Source: Barnes, C., et al. (2025). Summer heat deaths in 854 European cities more than tripled due to climate change. Grantham Institute report. DOI: https://doi.org/10.25560/123873



Typhoon Ragasa

Source: NASA Earth Observatory image by Wanmei Liang

Impacts are only expected to worsen as temperatures go beyond 1.5°C



Source: IPCC Sixth Assessment Synthesis Report (2023)

The case for accelerating climate action is stronger than ever

- Double down on mitigation efforts to limit temperature rise to as close as possible to 1.5°C, as every fraction of a degree matters
- Adaptation and resilience building efforts need scaling up and embedding across all parts of the economy
- Extreme events today already point to potential limits to preparedness and adaptation, strengthening the case for mitigation action and highlighting the need to address losses and damages from unavoidable climate impacts.
- Crucially, there are already a wide range of proven, cost-effective solutions that can be rapidly scaled to help close the gap and put us on track for a less dangerous future.

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Thank you