

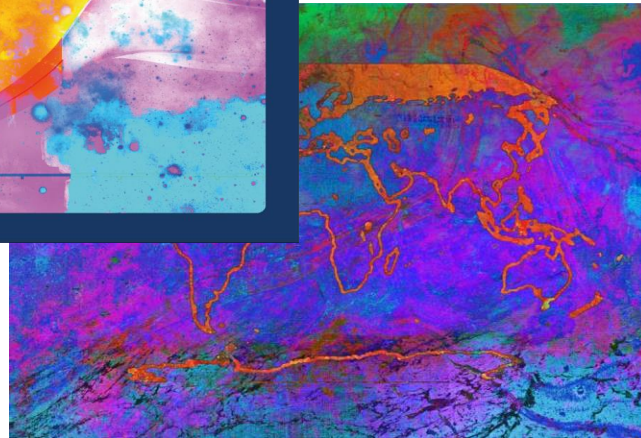
What is net zero?

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Basic scientific Earth system understanding of what needs to happen



“Reaching and sustaining **net zero** global anthropogenic CO₂ emissions and declining net non-CO₂ radiative forcing would halt anthropogenic global warming on multi-decadal time scales (*high confidence*).”

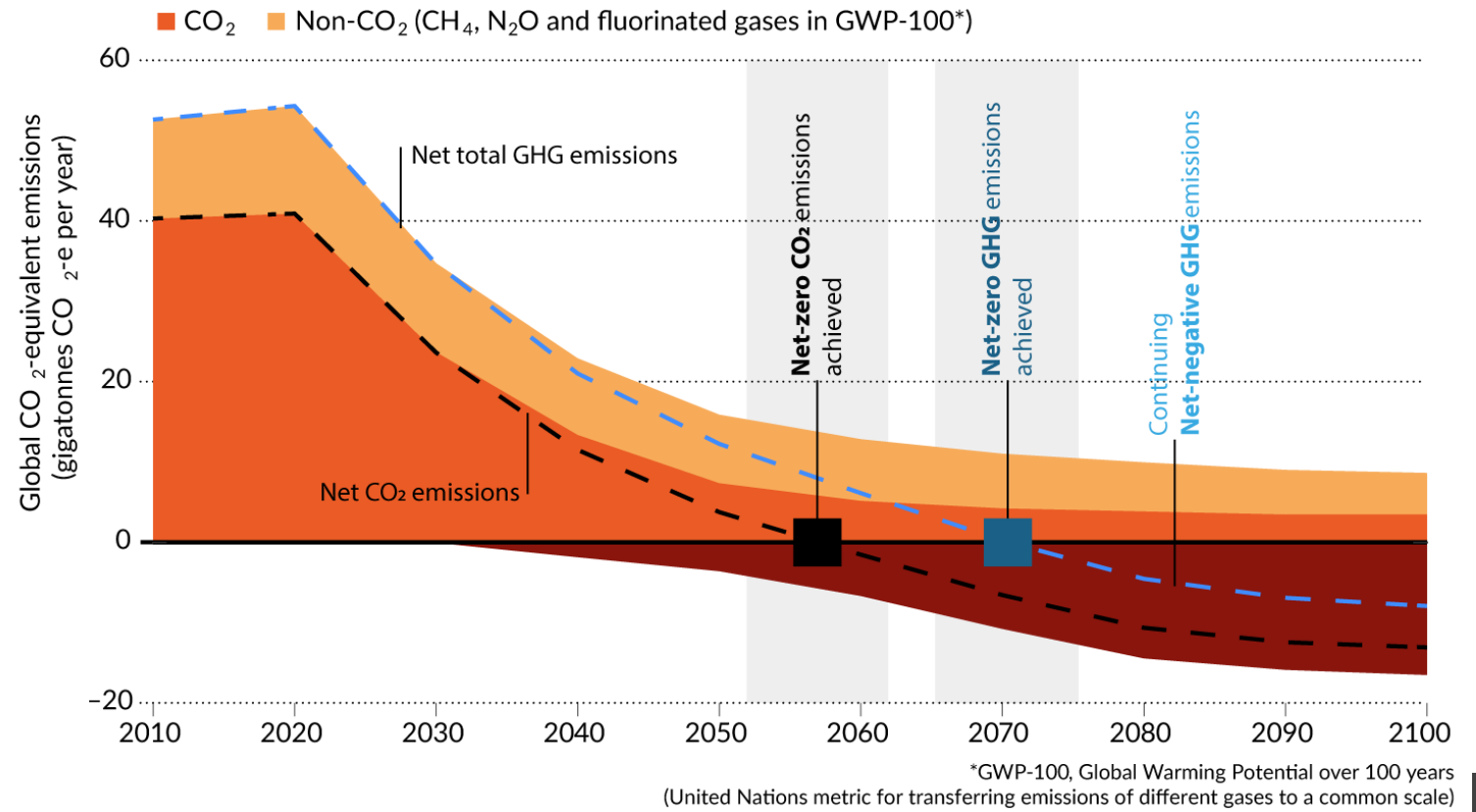
“In model pathways with no or limited overshoot of 1.5°C, global net anthropogenic CO₂ emissions decline by about 45% from 2010 levels by 2030 (40–60% interquartile range), reaching **net zero** around 2050 (2045–2055 interquartile range).”

“[...] reaching net zero anthropogenic CO₂ emissions is a requirement to stabilize human-induced global temperature increase at any level”

Net-zero basics: A key part of any Paris-aligned pathway

Global greenhouse-gas (GHG) emissions

Illustrative pathway for reaching net-zero carbon dioxide and net-zero GHG emissions.



Source: Rogelj et al (2021), Nature

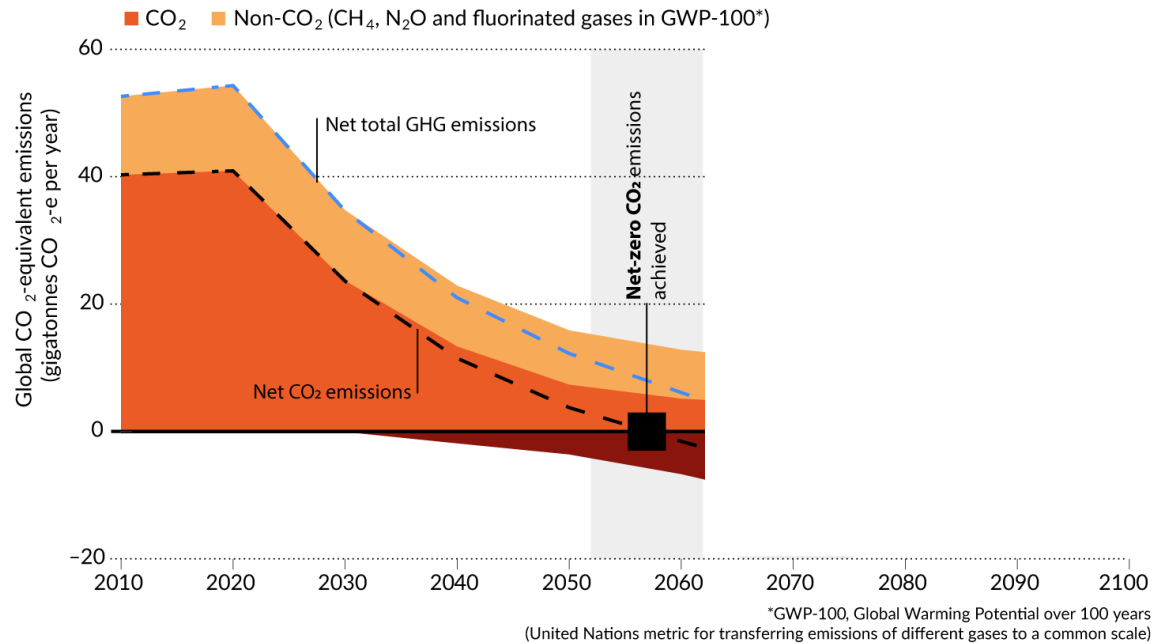
Link to paper: <https://www.nature.com/articles/d41586-021-00662-3>

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The Paris Agreement net-zero target achieves more than stabilisation: a peak and decline

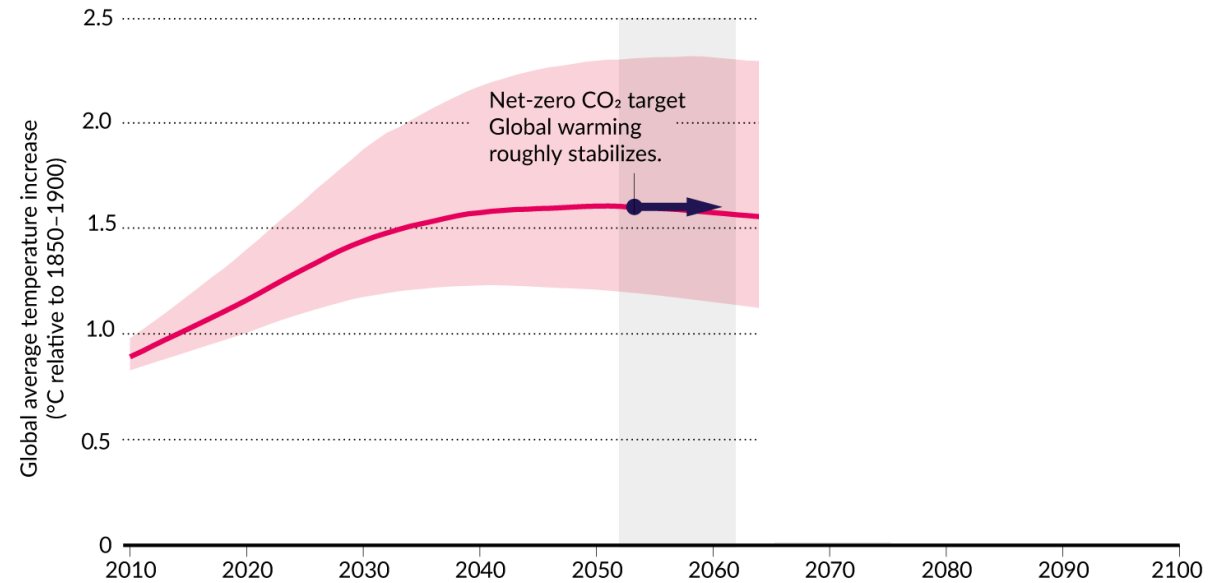
Global greenhouse-gas (GHG) emissions

Illustrative pathway for reaching net-zero carbon dioxide and net-zero GHG emissions.



Global-warming implications

Estimated global temperature peaks (in pink) and declines (arrows) under net-zero GHG emissions.

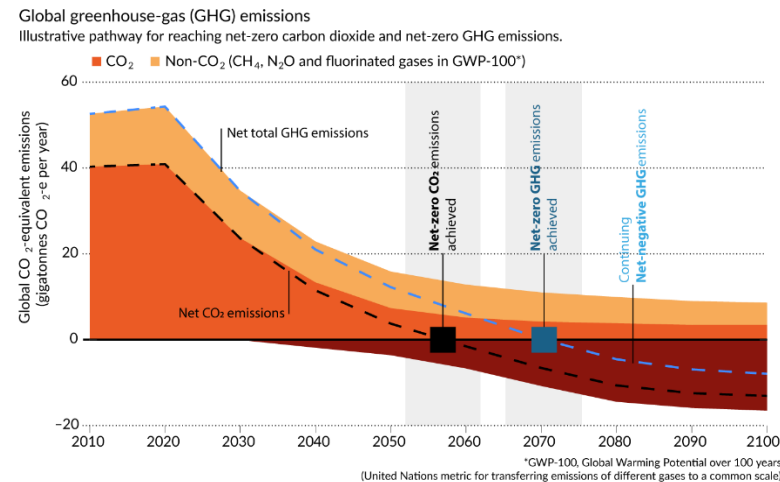


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Terms are confusing – be clear what you're talking about



Net zero CO₂
Net zero greenhouse gases
Carbon neutrality
Climate neutrality??

Thank you

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