



## Tipping Points and Planetary Solvency

### Prof. Tim Lenton

Tipping points in climate science normally refer to small changes in the Earth system that unleash much broader, typically damaging impacts that accelerate climate change. Well-known examples are rising sea levels due to disintegration of the Greenland and West Antarctica ice sheets, or the release of methane from the thawing permafrost. They help to underline the urgency of climate action. Today most people understand we must reduce emissions – and very quickly.

In this webinar, Tim will summarise recent evidence regarding climate tipping points, which supports declarations that we are in a 'climate emergency'. Associated is the concept of Planetary Solvency, which defines catastrophic impacts as economic contraction with a GDP loss of over 25%, mass human mortality events resulting in over 2 billion deaths, warming of 2°C or greater, triggering high numbers of tipping points and more. Finally he will turn to identifying positive social tipping points that will need to be triggered to have any hope of limiting global warming to well below 2C.

### About the speaker

Professor Tim Lenton is the founding Director of the Global Systems Institute at the University of Exeter and Chair in Climate Change and Earth System Science. He has more than 25 years research experience, focused on modelling of the biosphere, climate, biogeochemical cycles, and associated tipping points. Tim is renowned for his work identifying climate tipping points, which informed the setting of the 1.5C climate target, associated net zero targets, and nationally determined contributions.

Tim works with policymakers and businesses helping them assess the risks of climate change and nature loss and highlighting the opportunities for 'positive tipping points' that can accelerate change towards net zero. In 2023, Professor Lenton led a team of more than 200 people from over 90 organisations in 26 countries to produce an authoritative assessment of the risks and opportunities of both negative and positive tipping points in the Earth system and society. The '[Global Tipping Points Report](#)' produced in partnership with Bezos Earth Fund was published at COP28.

**Zoom Link:** <https://aut.zoom.us/j/91023509243>

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