

PLAN **B**

Breaching 1.5°C

New fossil fuel projects will breach 1.5°C

In 2021 the International Energy Agency concluded that there could be [no new oil or gas fields](#) or coal mines if the world was to reach net zero by 2050. The UN Secretary General stated in April 2022 that [“investing in new fossil fuel infrastructure is moral and economic madness”](#).

The [most recent report of the IPCC](#), published in March 2023, makes clear that new fossil fuel projects would be inconsistent with the 1.5°C limit:

“Projected CO2 emissions from existing fossil fuel infrastructure without additional abatement would exceed the remaining carbon budget for 1.5°C”

What would that mean for us?

Hundreds of millions more at risk by 2050

The difference between 1.5°C and 2°C warming (compared to pre-industrial temperatures) may sound small, but in 2018, the Intergovernmental Panel on Climate Change (“IPCC”) published a [special report on the 1.5°C goal](#), which stated:

“limiting global warming to 1.5°C, compared with 2°C, could reduce the number of people both exposed to climate-related risks and susceptible to poverty by up to several hundred million by 2050 ...”.

1. Threat to global food security

Peer-reviewed research, [Increasing risks of multiple breadbasket failure under 1.5 and 2 °C global warming](#), concludes:

“Risks of simultaneous crop failure ... increase disproportionately between 1.5 and 2 °C, so surpassing the 1.5 °C threshold will represent a threat to global food security.”

2. Whole regions of the world will be rendered uninhabitable

[According to peer-reviewed research](#), beyond 1.5°C warming, tropical regions of the world risk wet bulb temperatures in excess of 35°C, which is beyond the capacity of the human body to

cool itself down and therefore beyond the limit of human endurance. Around 40% of the world's population currently live in the tropics. Billions of people will face a choice: live where it is no longer safe to live, or leave.

3. Critical tipping points could be passed, leading to a “hothouse earth”

In 2018, leading academics, including Johan Rockstrom and Hans Schellnhuber, considered the temperature threshold for crossing critical tipping points in the climate system in [Trajectories of the Earth System in the Anthropocene](#) and concluded:

“Our analysis suggests that the Earth System may be approaching a planetary threshold that could lock in a continuing rapid pathway toward much hotter conditions—Hothouse Earth ... Where such a threshold might be is uncertain, but it could be only decades ahead ...and ... it could be within the range of the Paris Accord temperature targets.”

Statements from British Government and medical profession

The Government's [Net Zero Strategy](#), published in October 2021, says:

“People are rightly concerned, with the latest IPCC report showing that if we fail to limit global warming to 1.5°C above pre-industrial levels, the floods and fires we have seen around the world this year will get more frequent and more fierce, crops will be more likely to fail, and sea levels will rise driving mass migration as millions are forced from their homes. Above 1.5°C we risk reaching climatic tipping points like the melting of arctic permafrost – releasing millennia of stored greenhouse gases – meaning we could lose control of our climate for good. But the good news is that there is, still, a path to avoid catastrophic climate change.” [Executive Summary, p.14]

In May 2022, the Office for Health Improvement and Disparities, published [“Climate and Health”](#), quoting from the medical journal, [The Lancet](#), as follows:

“The science is unequivocal; a global increase of 1.5°C above the pre-industrial average and the continued loss of biodiversity risk catastrophic harm to health that will be impossible to reverse.”