

Statement on human-caused climate change and its impacts

1. Since the beginning of the Industrial Revolution the combustion of fossil fuels such as coal, crude oil (and its derivatives) and fossil gas has been the principal driver of increasing atmospheric carbon dioxide (CO₂) concentrations. These are now higher than they have been in at least two million years. Since 1850, humanity has emitted over 2,300 billion tonnes of CO₂ into the atmosphere. This has increased average global surface temperature by 1.2°C.
2. Signatories to the 2015 Paris Agreement have committed to limiting global warming to well below 2°C with 1.5°C being considered as the threshold of dangerous warming. The 2021 Glasgow Climate Pact confirmed the importance of 1.5°C. Research published in 2023 updated the 1.5°C carbon budget and concluded that future emissions must be limited to no more 250 billion tons of carbon dioxide. This represents less than seven years of emissions at current levels.
3. Current warming of 1.2°C is already causing destruction and death. Extreme weather-related events such as floods, droughts and hurricanes have been increasing over the last two decades, particularly in the Global South and especially in South Asia: overall, in the two decades from 2000-2020, over 7000 “major disaster events” were recorded, between them claiming 1.23 million lives, affecting 4.2 billion people, and causing £2.3 trillion in economic losses. Over recent years such disasters have increasingly also affected countries in the Global North.
4. Some ecosystems around the world are already in a state of collapse. Warm water coral reefs are particularly vulnerable to increasing temperatures. Beyond 1.5°C of warming, the vast majority of warm water coral reefs will be lost. This would threaten the food supply and livelihoods of approximately one billion people. Continued increases in CO₂ emissions risks producing climate change that would threaten up to one-in-six species with extinction by the end of this century with the resultant collapse of ecosystems across the globe. This would profoundly undermine the generation of ecosystem services (such as the provision of food, medicine, and materials, crop pollination, flood regulation, and so on) that humanity depends on for wellbeing, economic production, and, ultimately, survival.
5. At current rates of increasing emissions, significant regions of South America, North Africa, the Middle East, India and Southeast Asia (places which are currently home to billions of

people) will experience temperatures and humidity beyond human's adaptive capacity. There will be an increase in extreme weather events in which a human being will be unable to survive for any prolonged period outside of an air conditioned environment. Climate change driven sea level rise risks the displacement of hundreds of millions of people. In October 2021, the chair of the Climate Crisis Advisory Group, Sir David King, warned that London will have to be replaced as the UK capital if climate change is not rapidly addressed, because it will not be possible to defend it from sea level rise and flooding.

6. Predictions of future temperature increases are typically based on the assumption that future temperature increases will remain largely within our control. However it has become recognised that there are a number of tipping points within the climate system. Tipping points include the loss of ice sheets, destabilisation of ocean circulation, dieback of tropical rainforests, and melting of permafrost with associated release of large amounts of greenhouse gasses. Once initiated, tipping points may be effectively impossible to reverse or even halt. Recent scientific assessments indicate that risks of initiating tipping points increases beyond 1.5°C. It is possible that the tipping points of the loss of the Greenland Ice Sheet and Western Antarctic Ice Sheet may be immanent. This has the potential to increase global sea levels by tens of metres.
7. Analysis by the International Energy Agency in 2021 concluded that in order to limit temperatures to no more than 1.5°C, there must be an immediate end to the financing of new oil and gas developments and that there must be no new oil and gas fields developed. In 2022, analysis of IPCC 1.5°C scenarios conducted by the International Institute for Sustainable Development demonstrated that new oil and gas fields are incompatible with efforts to limit warming to no more than 1.5°C.
8. Such is the seriousness of the climate crisis that over 13,000 scientists have declared 'clearly and unequivocally' that the Earth faces a climate emergency. The word 'emergency' denotes a serious and urgent situation that requires our immediate attention. While we are already suffering significant and dangerous climate change, the extent of future impacts is not pre-determined but will be decided largely by decisions taken by human societies now and in the next few years. The severity of future impacts depends on how quickly we stop emitting

greenhouse gasses. This will be largely determined by how quickly we fully decarbonise the global economy.

A handwritten signature in black ink, appearing to read 'JGD', with a stylized flourish at the end.

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