Key recommendations

1 PHASE OUT FOSSIL FUELS AND LAND USE EMISSIONS NOW

The scale of threat posed by Earth system tipping points underlines the critical importance of the 1.5°C temperature goal and means that global mitigation should now assume an emergency footing. Fossil fuel emissions should be phased out worldwide before 2050. A rapid end to land use change emissions and shift to worldwide ecological restoration are also needed. Countries should reassess their highest possible ambitions accordingly, particularly wealthy, high-emitting nations.

2 STRENGTHEN ADAPTATION AND LOSS-AND-DAMAGE GOVERNANCE

Some Earth system tipping points are now likely to be triggered, causing severe and spatially uneven impacts on societies and interconnected ecological, social and economic systems. Tipping point impacts will be felt worst by the most vulnerable communities within and between nations, with knock-on impacts for global inequality, the stability of the world economy, and geopolitics. This provides an urgent impetus to strengthen adaptation and loss-and -damage governance in the UNFCCC, adjusting existing frameworks and increasing resources to account for tipping point threats.

3 INCLUDE TIPPING POINTS IN NDCS AND THE GLOBAL STOCKTAKE

Considerations of Earth system tipping point risks, corresponding action, and positive tipping point opportunities should be included in the Global Stocktake (GST), future revisions of Nationally Determined Contributions (NDCs), and in associated national and sub-national policy measures. Future GSTs should assess collective progress towards preventing Earth system tipping points, addressing potential impacts and fostering positive tipping points. All future NDCs should include national-scale systemic assessments of exposure to tipping point risks, measures that contribute to the prevention of tipping points, plans for managing potential impacts and strategies for fostering positive tipping points

4 COORDINATE POLICY EFFORTS TO TRIGGER POSITIVE TIPPING POINTS

Coordinated action by coalitions of state and non-state actors across governance, business and civil society can bring forward positive tipping points in politics, economies, technology, culture, and behaviour. A focus on 'super-leverage points' – for example policy mandates in high-emitting sectors such as power, road transport, green hydrogen/ammonia and food – could create a cascade of positive changes.

5 CONVENE A GLOBAL SUMMIT ON TIPPING POINTS

The UN Secretary General should convene a global summit on the governance agenda for managing Earth system tipping point risks and maximising coordination on triggering positive tipping point opportunities to speed up mitigation and resilience. It should provide a forum for government, industry and civil society. As a matter of urgency, tipping point threats should also feature on the agenda of key international fora, including the 2024 meeting of the G20 in Brazil.

6 DEEPEN KNOWLEDGE OF TIPPING POINTS AND ITS TRANSLATION INTO ACTION

The above efforts should be supported by investment in improved scientific knowledge and monitoring of negative and positive tipping points, and a much improved science-policy engagement process to more effectively and rapidly convert knowledge into action. To help stimulate this process, we support calls for an IPCC Special Report on Tipping Points in the current assessment cycle.