

A call to reason

To the Editor — Recent sketches of pessimistic climate futures^{1,2} confirm that appeals to scientific uncertainty can no longer be used as a reason to delay climate mitigation and that to do so would involve taking a huge gamble with civilisation as we know it. To amplify this point, it is worth noting that, despite continued research, identifying tipping points robustly for the Earth system is deeply problematic³.

Furthermore, two recent articles^{4,5} both suggest that identifying climate targets cannot be relied on to produce desired changes in human action. Arguably the best attempt in the natural sciences thus far to address this difficulty is the proposal by Myles Allen and co-authors to limit our cumulative carbon emissions to one trillion tonnes⁶. However, even this proposition is framed within the usual predictive and economic policy paradigm with its glaring limitations.

Against this background, crucial questions are how society and policy should respond to current indications of rapid climate change, and what the human

responses should be if the evidence on rapid climate change becomes clearer.

While many of those advocating a predictive approach to climate policy admit the possibility of abrupt climate change, they have consistently failed to consider what the policy options should be if rapid climate might or should start to happen. The prevailing assumption appears to be that the climate system will not change abruptly within the timeframe needed for humans to hone their climate predictions. Hence, prediction remains the dominant approach even when it is clear that standard policy tools, particularly economic cost–benefit analysis, have difficulty responding to the uncertainties and unpredictability of the climate system. Some philosophical traditions suggest that under this level of uncertainty an intellectual virtue of prudence and specifically caution should guide action.

Perhaps it is high time that the precautionary principle was applied in a way that trumps cost–benefit analysis in climate policy making⁷. At the minimum, the ethical basis upon which climate

policy is made should be subject to serious global public debate. It is clear that the economic paradigm used for the past 20 years has failed to promote significant reductions in greenhouse gas emissions.

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