## Behaviour as leverage

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Behaviour change is essential for effective solutions to climate threats. Thus, policy-relevant behavioural science studies are needed for a shift towards human-centred climate actions.

t is widely accepted in the climate community that human behaviour change is an irreplaceable component of systematic climate actions<sup>1</sup>. Insights from general behavioural science are critical to help us to better understand the role of human behaviour in enhancing or impeding these efforts. Previous literature has discussed related issues such as the psychological barriers to climate action<sup>2</sup>, drivers of climate perceptions<sup>3</sup> and potential interventions leading to household mitigation<sup>4</sup>.

There is a long history of policymakers and researchers trying to incorporate behavioural science insights into climate policy discussions<sup>5</sup>. Despite its well-known importance, it is rarely part of real-world policy practices, including design and implementation<sup>6</sup>. Thus, more climate-policy-relevant behavioural science studies are needed to promote their application. People do not live in a vacuum. Climate behaviour research needs to move beyond only focusing on choices of individuals and should consider how people interact with the broader environment as well as with the various climate policies.

In this issue of *Nature Climate Change*, we feature three Comments, albeit on different topics, that focus on how to better incorporate insights from behavioural science into actual climate policy improvements. The results from behavioural science studies should be translated in a way that can be integrated with current policy frameworks. This approach will



shift policies, including on mitigation and adaptation, to become more human-centred. In one Comment, Gravert and Shreedhar discuss the ways green nudges can boost the effectiveness of carbon taxes by increasing the salience of the tax, harnessing climate concerns, targeting certain behaviours and increasing general public acceptance. In another Comment, Wagner summarizes the current challenges of the natural disaster insurance markets, including the behavioural biases of homeowners that prevent them from acknowledging the potential benefits of natural disaster insurance. Wagner further highlights what improvements could help to solve these issues.

When it comes to climate action, there seems to be a tendency to focus either on the consumerism perspective, such as on climate-friendly purchases, or on grand national-level policies. But there are many different levels in between that can also make a substantial difference. Insights from behavioural science, in particular on collective behaviours, could help the development of these policies. In another

Comment, Gopalakrishnan discusses the incentive-compatible allocation rules of mitigation responsibility along the supply chain, in particular scope 3 emissions, as well as the potential challenges to guarantee the reliable assignment of emissions reductions.

These Comments are a small contribution to a joint online focus developed together with Nature Human Behaviour (https://www.nature.com/collections/icdbhbbibg). The focus aims to provide a comprehensive picture of the state-of-the-art studies on the relationship between climate change and human behaviour. There are also pieces that discuss what academic researchers can do to develop the field and practices.

We are at the beginning of a new era of behavioural climate research. Interventions that target behaviour changes will be important leverage to address the climate crisis. More behavioural studies that closely engage with the policy process are needed. We hope that these pieces and the focus will encourage more research in this area, and eventually lead to more human-centred policies. This may be a gradual process, but we have no doubt that such human-centred policies will become more common in the future.

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## References

- Howlett, M. & Rawat, S. Behavioral Science and Climate Policy (Oxford Research Encyclopedia of Climate Science) (Oxford Univ. Press, 2019).
- Gifford, R., Kormos, C. & McIntyre, A. WIREs Clim. Change 2, 801–827 (2011).
- Hornsey, M. J., Harris, E. A., Bain, P. G. & Fielding, K. S. Nat. Clim. Change 6, 622–626 (2016).
- Nisa, C. F., Bélanger, J. J., Schumpe, B. M. & Faller, D. G. Nat. Commun. 10, 4545 (2019).
- 5. Fischhoff, B. Behav. Public Policy 5, 439-453 (2021).
- 6. van der Linden, S. & Weber, E. U. Curr. Opin. Behav. Sci. 42, iii-viii (2021).

ITS: SERGEY PYKHONIN / ALAMY STOCK VECTOR