Climate economists identify interventions that could rescue 1.5°C Paris Agreement goal

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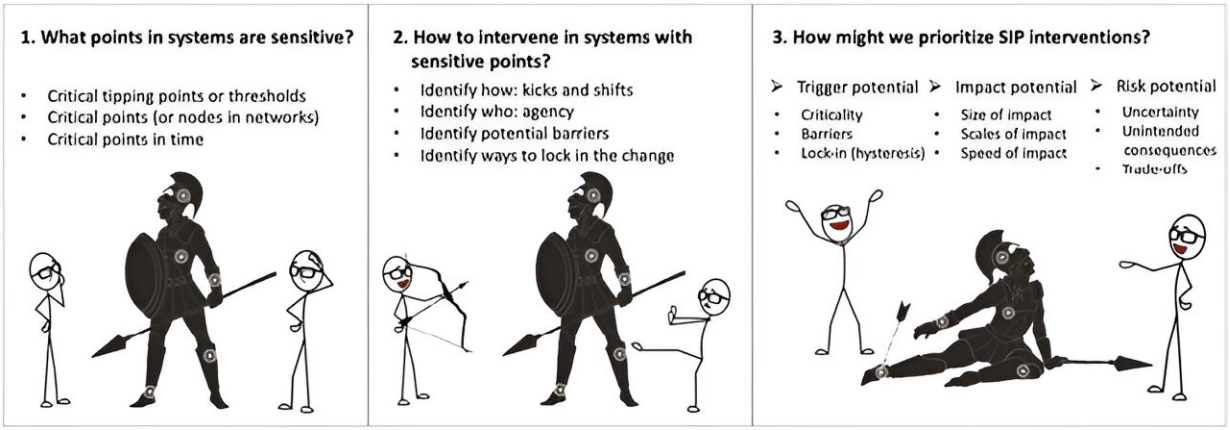

Diagram of the SIPs policy framework. Note: Elements of this figure were created with Storyboard That https://www.storyboardthat.com/. Credit: *Oxford Review of Economic Policy* (2023). DOI: 10.1093/oxrep/grad043

To meet the goals of the Paris Agreement and limit global heating to 1.5°C, global annual emissions will need to drop radically over the coming decades. A new paper from climate economists at the University of Oxford says that this goal could still be within our reach. They identify key "sensitive intervention points" that could unlock significant progress towards the Paris Agreement with the least risk and highest impact. These include:

- Investing in clean energy technologies with consistent cost

declines
- Enacting central bank policies to reduce the value of polluting assets
- Improving climate-related financial risk disclosure.

"This is not to suggest that reaching the Paris goals will be straightforward, or easy, but like Achilles' heel, our research points to the areas that could have an outsized impact," says lead author Dr. Penny Mealy, an associate at the Institute for New Economic Thinking, University of Oxford.

"We need climate policies which are pragmatic and practical, designed with an understanding of where the economy and technologies are capable of quickly transforming our economies for the better. These are those policy areas. This is how we design policy for 1.5°C," affirms co-author Dr. Pete Barbrook-Johnson of the Smith School of Enterprise and the Environment.

The research also highlights the areas where interventions will be more difficult and less impactful, including nuclear fission, which would be slow to roll out and could have unintended consequences, and carbon capture and storage, which presents both high barriers and risks.

To reach their conclusions, the authors devised a new framework for identifying sensitive intervention points, or SIPs, that have the characteristics necessary to radically decarbonize our global economy.

SIPs include critical tipping points—like renewable energy becoming cheaper than coal; critical points in networks—like powerful political figures or important technologies; and critical points in time or "windows of opportunity" that might prime the existing systems for change, such as the COVID-19 pandemic.

These intervention points must be assessed by the ease with which they can be implemented, their impact potential, and the potential for creating risks. The authors stress that while the framework is highly applicable to climate change, it could also be applied to solving other economic and social problems.

The ratings provided for each SIP intervention were applied subjectively based on discussions with experts, literature research, and modeling. The framework can and should be applied regularly to reassess priorities as new data and insights become available, the authors say.

Co-author Dr. Matt Ives comments, "1.5°C is not dead yet, but targeted and speedy interventions that can bring about the non-linear change necessary to keep it alive. As COP28 nears, our research highlights key sensitive intervention points we can prioritize to help turn the tide while providing a valuable framework for policymakers."

The findings are published in the journal *Oxford Review of Economic Policy*.

More information: Penny Mealy et al, Sensitive intervention points: a strategic approach to climate action, *Oxford Review of Economic Policy* (2023). DOI: 10.1093/oxrep/grad043

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