## THE SCIENCE IS CLEAR

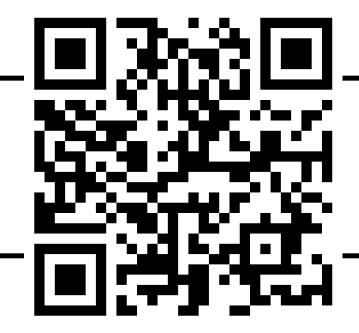
## The 2024 state of the climate report: Perilous times on planet Earth

Ripple, William J., et al. "The 2024 state of the climate report: Perilous times on planet Earth." BioScience (2024): biae087.

Rapidly phasing down fossil fuel use should be a top priority. This might be accomplished partly through a sufficiently high global carbon price that could restrain emissions by the wealthy while potentially providing funding for much-needed climate mitigation and adaptation programs. In addition, pricing and reducing methane emissions is critical for effectively mitigating climate change. Methane is a potent greenhouse gas, and unlike carbon dioxide, which persists in the atmosphere for centuries, methane has a relatively short atmospheric lifetime, making reductions impactful in the short term (Shindell et al. 2024). Drastically cutting methane emissions can slow the near-term rate of global warming, helping to avoid tipping points and extreme climate impacts.

In a world with finite resources, unlimited growth is a perilous illusion. We need bold, transformative change: drastically reducing overconsumption and waste, especially by the affluent, stabilizing and gradually reducing the human population through empowering education and rights for girls and women, reforming food production systems to support more plant-based eating, and adopting an ecological and post-growth economics framework that ensures social justice. Climate change instruction should be integrated into secondary and higher education core curriculums worldwide to raise awareness, improve climate literacy, and empower learners to take action. We also need more immediate efforts to protect, restore, or rewild ecosystems.

Humanity's future depends on our creativity, moral fiber, and perseverance.



https://doi.org/10.1093/biosci/biae087

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