

## NAVIGATING PLANETARY HEALTH: A GLIMPSE INTO THE POST-COP28 ERA AND THE NECESSITY TO PHASE OUT FOSSIL FUELS

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### HIGHLIGHTS

- Swift and impactful measures are vital to curb greenhouse gas emissions and limit global warming to 1.5°C.
- A historic departure in global attitudes toward fossil fuels indicates a potential turning point in combating climate change.
- The intrinsic link between climate change and global health, emphasising the need for policies that prioritise well-being for both the environment and human societies, should be acknowledged.

### GRAPHICAL ABSTRACT



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### ABSTRACT

This manuscript highlights the ever-growing urgency to take climate change seriously and address its implications. In the midst of today's global challenges, the recently concluded 28th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP28) stands out as a significant moment in our ongoing struggle against global warming and the pursuit of planetary well-being. The deal struck at this crucial world gathering signifies a shared realisation of the pressing need to shift away from fossil fuel, opting instead for sustainable practices that safeguard both our planet and its inhabitants. Considering our profound commitment to environmental sustainability, planetary health and the intersection of climate change, food security and health, this editorial perspective delves into the latest developments from COP28, exploring their implications and charting a course for a more sustainable future.

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## **The Urgency for Change**

The urgency surrounding climate change and its far-reaching impacts on planetary health has never been more evident. The latest scientific assessments underscore the necessity for swift and impactful measures to rein in greenhouse gas emissions, combat environmental degradation and protect the intricate ecosystems that sustain life on Earth (Nguyen *et al.*, 2023).

Undeniably, human activities are causing unprecedented shifts in the Earth's climate, where temperatures are rapidly rising. This leads to severe consequences, most notably the rise of sea levels due to the melting of glaciers and polar ice caps that threaten to overwhelm low-lying nations within this century. Others include ocean acidification and extreme weather that threatens food security. Therefore, immediate and transformative measures are non-negotiable in limiting global warming to 1.5°C above pre-industrial levels and preventing its catastrophic consequences to the environment (IPCC, 2022). To achieve this objective, nations would have to make painful sacrifices to halve their carbon emissions by 2030 and become net-zero emitters by 2050.

### ***COP28 Agreement: A Shift in Fossil Fuel Dependency?***

The COP28 agreement signals a historic departure in global attitudes towards fossil fuels. The recognition that we are entering the twilight of the fossil fuel era serves as a stark acknowledgement of past missteps, while offering a hopeful stride towards a sustainable future.

Arguably, the COP28 agreement could potentially mark a turning point in our collective commitment to combat climate change. The gradual reduction of fossil fuel usage and push for renewable energy sources represent a fundamental shift in how we approach sustainable energy production and consumption (COP28 Agreement, 2023).

## ***Addressing Climate Change as a Global Health Crisis***

From a planetary viewpoint, the intricate interplay between climate change and human health is undeniable. The impact of rising temperatures, extreme weather events and evolving disease patterns are already disproportionately affecting vulnerable populations. As we grapple with the challenges posed by climate change, it becomes essential to view this crisis through the lens of public health, enacting policies that prioritise the well-being of both the environment and human societies (Haines & Frumkin, 2021).

For the first time in the history, the COP28 agreement recognises the intrinsic link between climate change and global health. This paves the way for the formulation of comprehensive strategies that not only address climate change, but also safeguard the health of present and future generations.

### ***Sustainable Agriculture and Food Security***

Agriculture, although being vulnerable to climate change, plays a crucial role in both contributing to and mitigating the environmental challenges. The global focus on sustainable farming aligns with the need to ensure food security while minimising the ecological footprint in food production (Walsh *et al.*, 2020).

Sustainable agriculture is not just an alternative; it is has become a necessity. A worldwide emphasis on promoting regenerative farming practices and reducing the environmental impact of food production could reflect a holistic approach to addressing the intertwined challenges of climate change and food security.

### ***The Role of Science and Innovation***

As we embark on this transformative journey towards sustainability, the significance of scientific research and innovation cannot be overstated. Investments in cutting-edge technologies, renewable energy solutions and nature-based interventions are integral parts of the global strategy to combat climate change (Mgomezulu *et al.*, 2023).

Science provides the foundation for well-informed decision-making. The global community acknowledges the need for ongoing research and innovation to develop sustainable solutions in addressing the complexities of climate change, ensuring that our actions are grounded in tangible evidence and guided by principles of environmental stewardship.

### Challenges and Opportunities

While recent efforts represent a significant step forward, it is crucial to acknowledge the challenges ahead. The shift away from fossil fuels and the adoption of sustainable practices requires coordinated efforts from governments, businesses and individuals worldwide (Dordi *et al.*, 2022). Overcoming economic, political and social barriers demands a collective commitment to the greater good and a recognition of the shared responsibility to protect our planet for future generations.

It is essential to recognise that the challenges we face in transitioning to a sustainable future are substantial, but so are the opportunities. The COP28 agreement sets the stage for economic transformation, job creation in renewable industries, and the establishment of a green economy that prioritises both environmental sustainability and social equity (Girón & Ivanova, 2023).

### Conclusion: Nurturing Planetary Health

In conclusion, the COP28 agreement signifies a historic moment in the global endeavour to tackle climate change and foster planetary health. The acknowledgement that we are at the outset of the end of the fossil fuel era signals a collective commitment to a more sustainable future. Academics deeply invested in environmental sustainability, planetary health and the intricate connections between climate change, food security and health should embrace this pivotal moment and encourage continued collaboration, innovation and commitment across all segments of society. The journey towards better planetary health is ongoing, and with the momentum generated by

COP28, we have a unique opportunity to forge a path that ensures a thriving, resilient planet for generations to come.

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### Conflict of Interest

All authors declare that they have no conflicts of interest.

### References

- Dordi T., Gehricke S. A., Naef A., Weber O. (2022). Ten financial actors can accelerate a transition away from fossil fuels. *Environmental Innovation and Societal Transitions*, 44, 60-78. <https://doi.org/10.1016/j.eist.2022.05.006>
- Girón A., & Ivanova A. (2023). Climate action, institutional investors, and just transition. *Journal of Economic Issues*, 57(2), 575-585. <https://doi.org/10.1080/00213624.2023.2202142>
- Haines A., & Frumkin H. (2021). Climate change. In *Planetary Health: Safeguarding Human Health and the Environment in the Anthropocene* (pp. 34-76). Cambridge: Cambridge University Press. <https://doi.org/10.1017/9781108698054.002>
- Intergovernmental Panel on Climate Change (IPCC). (2023). Summary for Policymakers. In *Climate change 2022 – Impacts, adaptation and vulnerability: Working group II contribution to the sixth assessment report of the intergovernmental panel on climate change* (pp. 3-34). frontmatter, Cambridge: Cambridge University Press. <https://doi.org/10.1017/9781009325844.001>
- Mgomezulu W. R., Machira K., Edriss A. K., Phiri I. P. (2023). Modelling farmers' adoption decisions of sustainable

- agricultural practices under varying agro-ecological conditions: A new perspective. *Innovation and Green Development*, 2(1), 100036. <https://doi.org/10.1016/j.igd.2023.100036>
- Nguyen T. T., Grote U., Neubacher F., Rahut D. B., Do M. H., Paudel G. P. (2023). Security risks from climate change and environmental degradation: Implications for sustainable land use transformation in the Global South. *Current Opinion in Environmental Sustainability*, 63, 101322. <https://doi.org/10.1016/j.cosust.2023.101322>
- United Nations. (2023, December 13). COP28 agreement signals “Beginning of the End” of the fossil fuel era (UN Climate Press Release). *UN Climate Change News*. <https://unfccc.int/news/cop28-agreement-signals-beginning-of-the-end-of-the-fossil-fuel-era>
- Walsh, M. K., Backlund P., Buja L., DeGaetano A., Melnick R., Prokopy L., Takle E., Todey D., Ziska L. (2020). *Climate Indicators for agriculture*. Washington, DC: USDA Technical Bulletin. <https://doi.org/10.25675/10217/210930>