

EDITORIAL

Advancing action on the UN Sustainable Development Goals

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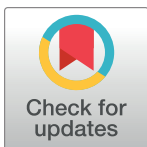
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The UN Sustainable Development Goals (SDGs) are a set of objectives that were agreed by the global community in 2015 as a “shared blueprint for peace and prosperity for people and the planet, now and into the future” [1]. Climate action is directly embodied in one of the seventeen goals (SDG 13), in recognition of the extreme risks to humanity posed by the impacts of climate change. However, as highlighted in a recent report by the World Meteorological Organization [2], the intensifying effects of climate change are rapidly undermining progress on almost all the SDGs. These interactions look set to become even more important as it appears increasingly likely that we will exceed 1.5 C of warming.

The UN SDG Summit of September 2023 was held at the mid-point on the journey towards the 2030 deadline for achieving the goals, and was described as an opportunity for the global community to take stock of progress and reinvigorate its collective efforts. A report delivered to the UN General Assembly by the Secretary-General carried the sobering message that work towards many of the goals is “moderately to severely off track” [3]. Meanwhile, the Sustainable Development Report team undertook a major stocktake of progress within individual countries [4]. It showed that many countries are making very limited headway in fulfilling the SDGs, or even going backwards. Clearly, there is a pressing need for a more concerted global effort to improve delivery on the SDGs, which, after all, represent a positive and urgent ambition for the safety and well-being of humanity and the planet. Whilst much of this renewed impetus must come from the political community, there are important roles for other groups to play, including researchers and publishers.

Whilst *PLOS Climate*'s scope and mission is of course very closely aligned with SDG 13: Climate Action, we firmly believe that the journal has an important part to play in supporting evidence-based progress towards the other sixteen interlinked goals (Fig 1). Recognising synergies and coordinating action on all the SDGs is critical, and our interdisciplinary community is well-placed to support this kind of approach. As a global journal with a strong interest in equity, we hope our published work can contribute to integrating concerns of social justice and equity into climate change science and applications, as well as achieving improved representation and parity in the scientific community. SDG 10: Reduced Inequalities is therefore fundamental to our mission and goals, and is reflected in our use of PLOS's Global Equity model (<https://plos.org/resources/global-equity-model/>) and in editorial policies such as that on inclusivity in global research (<https://journals.plos.org/climate/s/best-practices-in-research-reporting#loc-inclusivity-in-global-research>). Furthermore, in line with SDG 17: Partnerships for the Goals, we are also working with partners to build capacity and in the development of initiatives that bring together stakeholders to share perspectives and knowledge.

In addition to the connections between the SDGs and the overarching mission of *PLOS Climate*, the journal's sections, led by a committed team of Section Editors, have clear alignment

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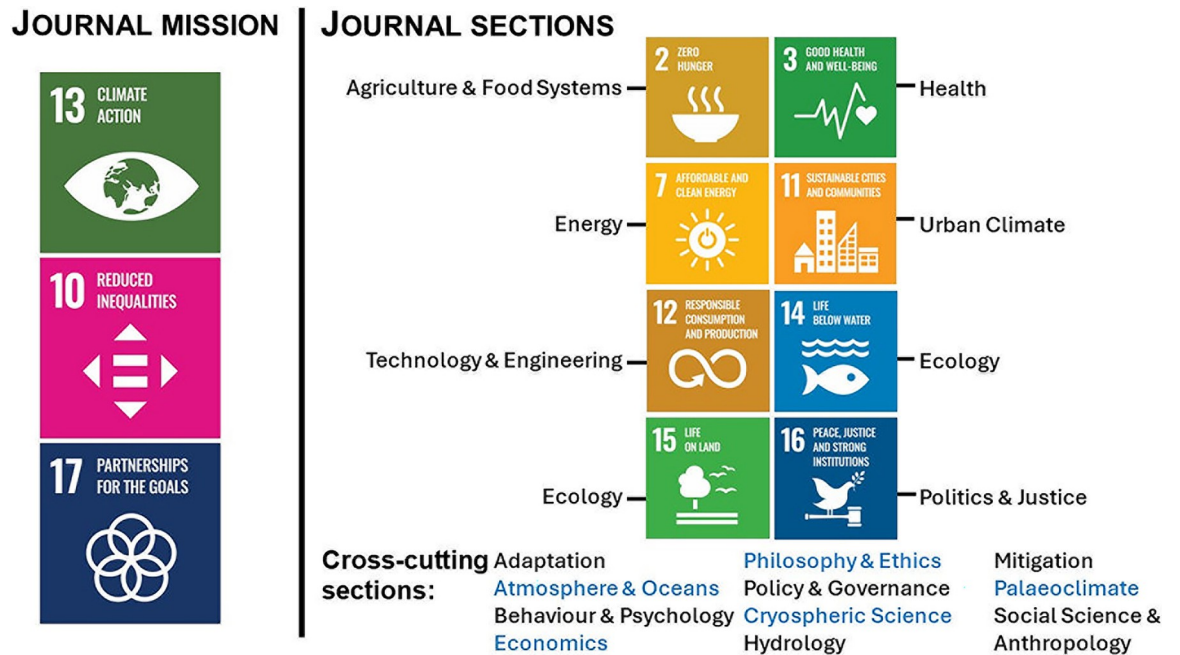


Fig 1. Examples of alignment between UN Sustainable Development Goals and *PLOS Climate*'s mission and journal sections.

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to specific SDGs (Fig 1). Progress towards the SDGs is also very much a priority in the work of many members of our editorial board. They have taken leading roles in conceptualising and supporting some of our special projects that speak to the SDGs, for example our forthcoming Collections on Gender and Adaptation in the Global South (SDG 5: Gender Equality), Climate Change and Human Health (SDG 3: Good Health and Well-being), and Nature-based Solutions (with links to SDG15: Life on Land, among others).

Alongside these editorial focus areas, another central strand of *PLOS Climate*'s work relates to Open Science. An accelerated shift to Open Access and Open Science in climate research is critical to facilitating access to research findings that can support evidence-based climate action, and we urge all stakeholders to prioritise this. In recent months, PLOS has endorsed the Open Climate Campaign (<https://openclimatecampaign.org/>), and we look forward to continued collaboration with this group and with other partners in our shared mission of increasing the accessibility and transparency of climate research publications. It goes without saying that action on climate change is time-sensitive, and we cannot afford for the dissemination of vital new research to be hindered by paywalls or exclusionary gatekeeping. Even within the academic community, these practices can severely disadvantage early career researchers and those working in the Global South, and the consequences are even more pronounced for those outside of academia.

Since *PLOS Climate* began publishing in February 2022, our growing community of authors has been making a steady contribution to the peer-reviewed evidence base for action on many of the SDGs. A high-level analysis of all articles that have been published in the journal to date reveals these connections (Fig 2). Notably, a significant proportion of *PLOS Climate* publications contain insights of relevance to SDG 2: Zero Hunger, SDG 3: Good Health and Well-being, and SDG 14: Life Below Water. Furthermore, a number of articles have reported on research that explicitly addressed the SDGs, for example a study by Debnath et al. which found that heatwaves in India are undermining the country's ability to deliver on the SDGs [5].

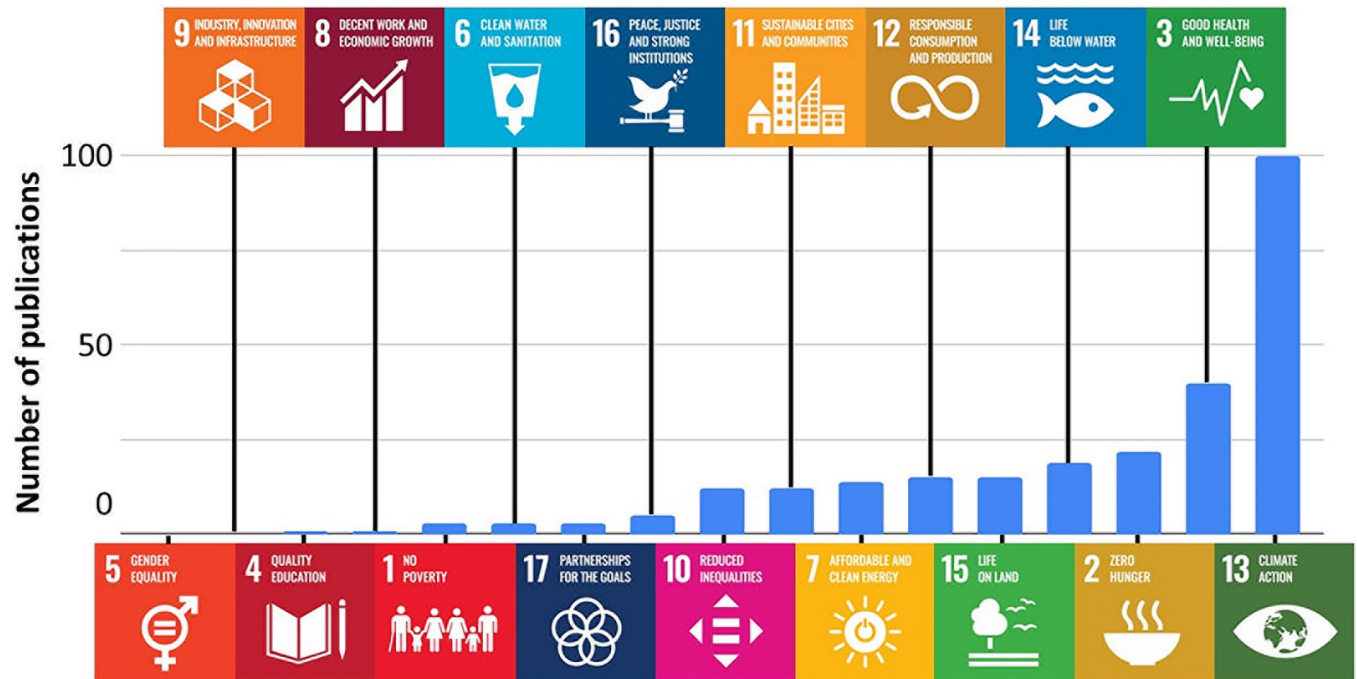


Fig 2. Mapping of *PLOS Climate* publications to UN Sustainable Development Goals. Only one SDG was selected per publication, according to closest fit as judged by journal editors. Data retrieved 25 October 2023.

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The commissioned front matter articles that we publish in *PLOS Climate* have a special role to play in supporting dialogue and progress around the SDGs. They provide space for debate and the identification of knowledge gaps, as well as the translation of scientific outputs to help support more informed decision-making. For example, Pflieger's reflection on COP27 outcomes on loss and damage [6], and a call from Brückmann et al. for a more central role for the social sciences and humanities in energy research [7].

Last year, PLOS became a signatory of the SDG Publishers' Compact (<https://www.un.org/sustainabledevelopment/sdg-publishers-compact/>), a commitment by members of the publishing industry to support the SDGs through dedicated actions and advocacy. A steering group has been established to explore ways in which PLOS can develop and support practices that contribute to the SDGs (<https://plos.org/our-commitment-to-sustainability/>). *PLOS Climate's* leadership is involved in these efforts, and we are looking forward to pursuing a wider programme of editorial initiatives aligned with the SDGs. As we go about this work, we intend to involve members of our transdisciplinary community- including academic researchers, decision-makers, and other stakeholders- to help guide us towards the most effective interventions. We look forward to sharing more updates on these activities as they progress.

In the meantime, we warmly encourage *PLOS Climate* authors to highlight the connections of their work to the SDGs where relevant, including intersections between goals. This can help improve the discoverability of scientific evidence for decision-makers, as well as surfacing the interdisciplinary linkages that are so vital to evidence-based cross-sectoral action.

Author Contributions

Conceptualization: Emma Archer, Jamie Males.

Writing – original draft: Emma Archer, Jamie Males.

Writing – review & editing: Emma Archer, Jamie Males.

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