

Call for Abstracts for a Special Issue in *Research Policy* on “Accelerating Net-zero Transitions”

The global climate crisis, which demands urgent and fundamental net-zero transitions in essentially all contemporary production and consumption systems (Geels et al., 2023), opens new research avenues for innovation and transition scholars to explore the entanglement between the speed and direction of socio-technical changes. Over the past decade, the acceleration of such net-zero transitions has become a critical focus within governance (Meadowcroft & Rosenbloom, 2023; Rosenbloom & Meadowcroft, 2022) and across diverse research traditions in the broader social sciences (Allen & Malekpour, 2023; Sovacool et al., 2025). At the same time, several systems have entered the acceleration phase of net-zero transitions – marked by increasing rates of technological advancements, but also heightened conflicts, complexity, and uncertainty (Andersen et al., 2023; Markard, 2018; Markard et al., 2020; Rogge & Goedeking, 2024). In this context, acceleration is a multifaceted notion (Sovacool et al., 2025), encompassing strategic ambitions (how to achieve desired climate outcomes more rapidly), dynamic processes (the rapid evolution of technologies and practices), evolving sectoral patterns (involving the redefinition of core sectors and sectoral boundaries), and mounting challenges (including deepening resistance and contestation). However, the emerging literature on **accelerating net-zero transitions** remains fragmented across disciplines, conceptually and terminologically ambiguous, and empirically underdeveloped. Overcoming these limitations will be of essential importance for deepening our understanding of acceleration phenomena, enhancing cross-disciplinary exchange, and informing genuine action.

This proposed Special Issue (SI) in *Research Policy* – which has received editorial approval for its Letter of Intent – aims to establish a coherent new line of inquiry by refining terminology, concepts, and approaches for studying the co-evolution of innovation and policy in accelerating net-zero transitions. This ambitious and forward-thinking research agenda necessitates the wide mobilisation of diverse **insights from innovation studies, policy studies, and other social sciences**. In innovation studies, especially, the question of accelerating the emergence, adoption and diffusion of novelties has been explored across multiple domains over the past decades: ranging from the speed of corporate innovation activities (Cankurtaran et al., 2013; Kessler & Chakrabarti, 1996; Markman et al., 2005; Schmidt et al. 2012) to the pace of sectoral technological progress (Malerba, 2005; Mansfield, 1988; Pavitt, 1984), and from technological characteristics enabling acceleration (Malhotra & Schmidt, 2020; Wilson et al., 2020) to the development of more targeted and mission-oriented innovation policy designs (Foray, 2019; Mazzucato, 2018; Schot & Steinmueller, 2018). The importance of effective policy design has, for example, been demonstrated by historical initiatives, such as the Manhattan Project and the Apollo Program (Mazzucato, 2018; Mowery et al., 2010) and more recent experiences surrounding the COVID-19 pandemic (Cooper, 2021; Geurts et al., 2022). These insights highlight the practical feasibility of accelerating innovation to address urgent global challenges within tight timeframes, but they also reinforce the necessity to rethink existing policy approaches in order to accelerate net-zero transitions.

With this call for abstracts, we invite conceptual, empirical, and methodological contributions bridging innovation studies with policy studies and other social sciences to address the following critical **themes in accelerating net-zero transitions**, among others:

- examining the genesis, evolution and meanings of the **concept** of acceleration and its governance in net-zero transitions, by drawing upon evolutionary innovation studies, socio-technical transition studies and policy sciences;
- analysing the drivers and barriers to increasing rates of **whole system change** in net-zero transitions (e.g., in technologies, organisations, practices, behaviour, demand, policies and institutions) and how these forces **interact** through feedbacks and cumulative causation across dimensions, scale and time;
- exploring the capacities of a range of **actors** (e.g., businesses, policy makers, civil society and academia) **and their strategies** in accelerating or delaying net-zero innovation and transition processes;
- investigating the contributions of novel **governance arrangements**, including institutional innovation and transformative policy mixes aimed at accelerating net-zero transitions;

- unpacking the **dual politics of accelerating transitions** – resistance, backlash, and obstruction arising from the decline of legacy, polluting arrangements, and contestation around newly emerging dominant designs in expanding net-zero pathways;
- unravelling the role of, and tensions surrounding, **justice and equity** in influencing both the rate and direction of change in unfolding net-zero transitions;
- studying **international dynamics** in accelerating net-zero transitions, both in light of global innovation trends, green industrial policy competitions and geopolitical considerations.

Particularly welcome are contributions that enhance the **diversity of evidence** on accelerating net-zero transitions. Empirically, these contributions are encouraged to explore the rapid decarbonisation of sectors with the highest greenhouse gas emissions as well as the most promising socio-technical advancements observed to date (e.g., in energy and mobility). Geographically, the contributions included in our SI should, as a whole, offer global and contextually diverse insights, and we are therefore particularly welcoming of submissions that move beyond the conventional focus on European transition cases. This includes capturing insights from net-zero technological leaders and transition pacesetters (e.g., in North America or East Asia), which have largely remained underexplored in studying systemic socio-technical transitions. Finally, given recent political developments we would like to emphasise that we are also open to submissions exploring how net-zero transitions are slowed down, thereby offering highly relevant insights into acceleration and deceleration patterns.

Submission Guidelines and Key Dates

As the LoI for the proposed SI on “Accelerating Net-zero Transitions” has been approved by the Research Policy Editorial Team, we are now inviting extended abstract submissions for potential contributions. Selected submissions will be included in the full SI proposal, which will be developed by the Guest Editors and subsequently undergo the final approval process by the Research Policy Editorial Team. Below are the **key dates and timeline** for our planned SI process:

- 31 March 2025: Abstract submission deadline (for instructions see below)
- April 2025: Selection of abstracts and submission of full SI proposal to Research Policy
- May 2025: Decision by Research Policy; thereafter invitation of selected abstracts to the SI
- September 8-12, 2025 (tbc): 3-day paper development workshop in Brighton, UK with lead authors of invited contributions (with mutual paper feedback, and draft papers due September 2, 2025)
- November 2025 – January 2026: Submission of papers to Research Policy & start of review process
- February – October 2026: Continued review process and online publication of accepted papers
- November 2026 – February 2027: Completion of SI with introductory article

At this stage, we welcome submissions of **extended abstracts** (approx. 700 words, excluding references) that outline the motivation, theoretical lens, empirical setting, methods, (expected) primary findings and original contributions, showcasing the rigor and relevance expected by Research Policy. The submission also needs to include **authorship information** with brief biographical information for all authors (approx. 150 words each) along with institutional affiliations and ORCID links (if available). All submissions should be sent as MS Word and PDF documents to Prof Karoline Rogge with the subject line “*Research Policy SI on Acceleration: NAME (first author) & TITLE (short version)*” to k.rogge@sussex.ac.uk (cc’ing qi.song@sussex.ac.uk) by **31 March 2025, 17:00 UK time**. For any inquiries, please feel free to reach out via email to k.rogge@sussex.ac.uk.

Guest Editors

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