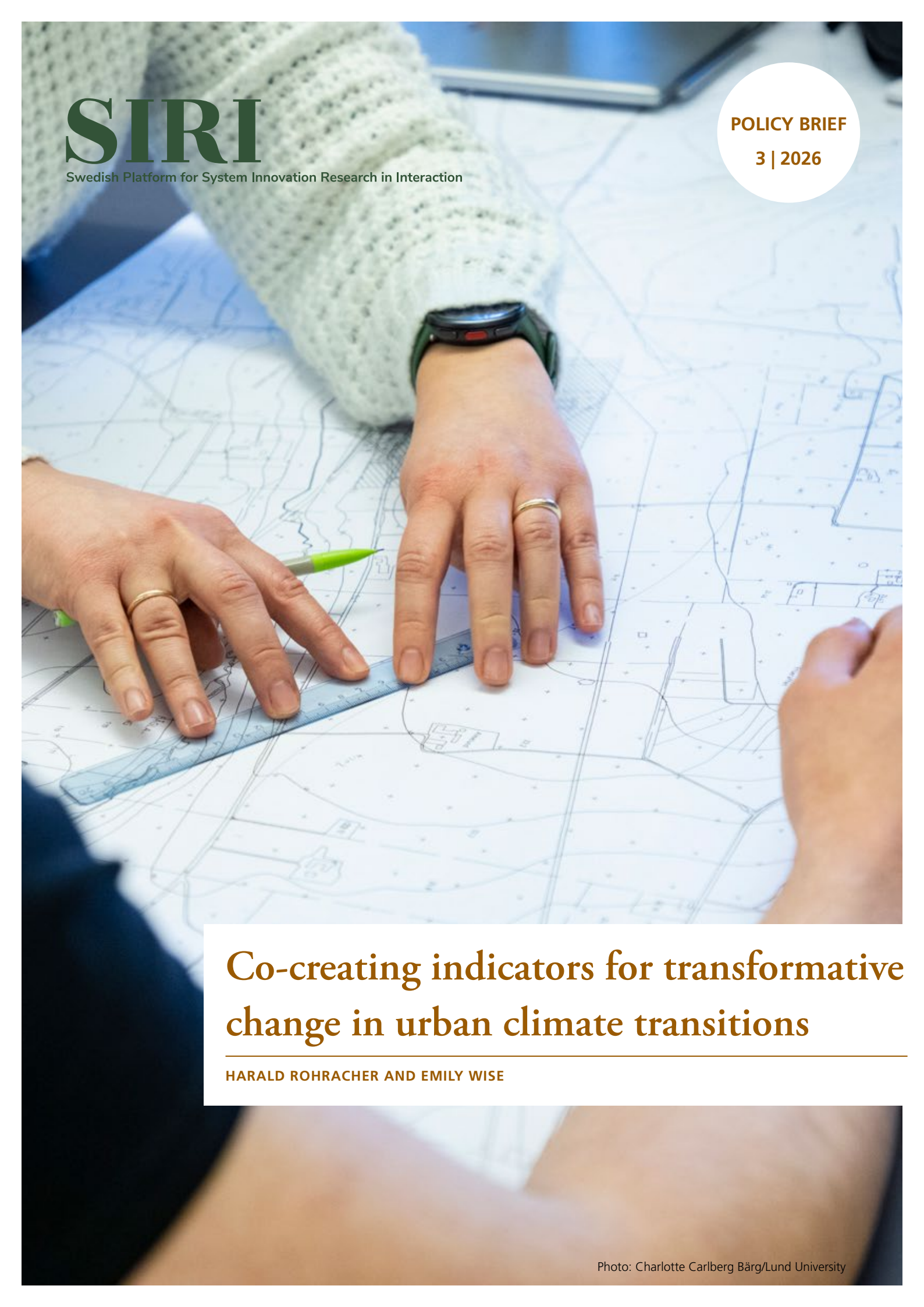


A close-up photograph of two hands working on a large map or technical drawing spread on a table. One hand, wearing a black watch and a gold ring, holds a blue ruler. The other hand, also with a gold ring, holds a green pen. The map shows various lines, shapes, and text, including the word 'Tavla'.

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POLICY BRIEF

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Co-creating indicators for transformative change in urban climate transitions

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Co-creating indicators for transformative change in urban climate transitions

This project explores how monitoring can support learning in mission-oriented policies for transformative change. Through co-creation with Stockholm and Linköping, it develops process-oriented indicators to make system transformation visible.

Mission-oriented policy programmes and transition governance aim to achieve long-term transformative change in response to major societal challenges. Without regular monitoring that provides feedback and learning on the structural effects of transition policies, it is difficult to adjust policies as transitions and contexts evolve. Yet there is considerable uncertainty about what should be monitored in ongoing transformation processes. Existing evaluations and indicators are typically designed for external accountability and rarely reflect the needs of those implementing transition policies. For actors such as municipal administrations, regular feedback on activities and interventions is more relevant, as it supports strategic adaptation and needs to be integrated into daily work without substantial additional data collection.

This project was an initial effort to develop procedures and qualitative and quantitative indicators of ongoing transformative change through co-creation with the cities of Stockholm and Linköping. Through three workshops in each city, a reflexive, learning-oriented monitoring process was developed, together with preliminary indicators that make system transformation visible. Stockholm focused on urban planning and its contribution to the urban climate mission, while Linköping focused on the reuse and circularity of building materials and furniture.

CONCEPTUAL AND PRACTICAL FINDINGS

The project generated both conceptual and practical findings. Conceptually, it developed a framework for assessing transformative change based on transition studies and evaluation research. Beyond aggregate indicators such as overall CO₂ emissions, it proposed process-oriented indicators inspired by transformative outcomes. These focus on key processes including the direction of change and shared narratives for a climate-neutral future; cross-sectoral actor networks; collaborative governance and policy integration; infrastructures for learning and experimentation; and

the phasing out of unsustainable structures. Together, these indicators address whether the right processes are driving transformation. A second set captures whether the systems studied, urban planning in Stockholm and circularity in Linköping, are moving toward a “new

KEY POINTS FOR POLICY

- Tracking long-term transformative processes such as the transition to climate-neutral cities requires new indicators and monitoring approaches that go beyond aggregate performance measures such as CO₂ emissions.
- To provide meaningful feedback for policy improvement, key transformation processes must be made visible to assess whether change pathways are progressing as intended.
- Together with the cities of Stockholm and Linköping, we identified prototype quantitative and qualitative indicators of transformative change in urban climate transitions that can be regularly monitored to support reflection and learning.
- To ensure relevance for those implementing transformative policies within and beyond municipal administrations, such indicators should be co-created by researchers and practitioners.
- Importantly, not only the indicators but also the interactive development process, focusing on system elements, goals, visions, theories of change, and transformative processes, supports the governance of urban climate transitions.

normal”, for example through new actor roles or adapted decision-making. Monitoring such change requires shared visions and scenarios as reference points.

At the practical level, co-creation with participants in each transition arena showed that the collective development of indicators is often more valuable than the indicators themselves. Participants rarely had opportunities to jointly reflect on how transitions unfold, are governed, or followed up. Working with indicators clarified system boundaries, key elements, and theories of change, supported cross-departmental collaboration, and enabled reflection on both long-term transformation and short-term successes. While no final indicator set emerged, ideas for assessing knowledge development and infrastructures supporting material reuse became more concrete. Both cities intend to continue developing integrated monitoring structures for their climate work.

The focus on process-oriented indicators to make transformative change visible and on indicators showing the degree to which an envisioned “new normal” is approached proved a viable strategy for monitoring and learning from mission-oriented and transformative policies and their impacts on transformative change. At the same time, the efforts required to specify and operationalise such indicators were underestimated. This was largely due to the need to jointly understand the systems addressed by change policies, develop more concrete and plausible visions of what a new normal could look like, and develop theories of change connecting measures and interventions to system change. Joint development of indicators by those implementing transformative programmes proved crucial for collaboration across municipal departments, as well as for developing a better understanding of what transformative change involves and how it can be integrated into the tasks and procedures of those working with these challenges. In this sense, developing transformative indicators is important not only for monitoring and learning, but also for organising transformative work in a way that is better integrated with the experiences and expectations of those responsible for implementation.

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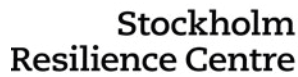
THE ROAD FORWARD FOR POLICY

- Shift the emphasis from designing policy programmes and focusing on overarching long-term goals, to the everyday work of implementing such programmes, and to concretising and breaking down goals.
- Involve those working with implementation in their concrete work settings in developing structures for following up the impact of their work on change processes and in selecting a limited number of indicators that are meaningful to their work, make successes visible and help to adjust measures and activities, if they do not produce desired outcomes.
- Include resources for follow-up and learning, e.g. for coordinating efforts across municipal departments, joint process and learning reflections, or the visualisation and documentation of change, from the outset of transformative policy programmes.
- Develop monitoring structures that also make smaller and shorter-term successes visible while placing them in the context of a holistic vision and strategy for transformative change.
- Find a balance between the needs for accountability-oriented evaluations (have the programmes delivered cost-effectively) and learning-oriented internal monitoring structures which provide a space for bringing in new ideas and creative solutions, which allow for failures and help to adjust programmes in the course of their implementation.

FORTHCOMING PUBLICATIONS

- Monitoring, evaluation and learning for transformative innovation policies. Emerging concepts, methods, and practice in monitoring, evaluation and learning for transformative policies, European Commission; chapter Co-creating indicators for transformative change
- Samskapande av indikatorer för transformativ förändring i städernas klimatomställning – en guide och summering av lärdomar, to be published in collaboration with Viable Cities

SIRI is a transdisciplinary and cross-sectoral platform, connecting researchers, practitioners, and policymakers interested in the design and implementation of transformative innovation policies. SIRI facilitates networking, community building, and joint initiatives to co-create and exchange knowledge and best practices for systems transformation.



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