

Transformative innovation beyond economics and technology.

Insights from practice, policy, and research in Switzerland

Innovation for sustainability transformation in Switzerland is constrained by the predominant focus on market-driven technological innovation, while social innovation receives insufficient support.

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Previous work by the saguf working group on Innovation for Sustainability Transformation (AG INSIST) has identified key fields of tension in sustainability innovation, including the interplay between technological and social innovation, the dominance of market-driven scaling over systemic change, and the role of governance in enabling or hindering transformation (Bornemann et al. 2022, Ejderyan et al. 2024). The goal of the 2024 saguf annual conference (held on November 22, 2024 at Kulturpark Zurich)¹ was to explore these tensions in the Swiss context and examine how they can be addressed through policy, funding, and collaboration.

The conference featured contributions from policymakers, researchers, and practitioners during a fishbowl with the four panelists (see figure 1, p. 58) *Ingrid Kissling-*

Näf (Bern University of Applied Sciences), *Karin Mader* (Swiss Donut Economics Network), *Sophie Schumacher* (Innovation Office, University of Basel), and *Fabian Streiff* (Amt für Wirtschaft, Kanton ZH), followed by a world café and a plenary session. Discussions focused on the role of innovation for sustainability transformation in Switzerland, challenges of funding social innovation, the role of public and private actors governing innovation, and alternative models for evaluating innovation success. This article summarizes the key discussion points and takeaways from the conference.

Switzerland's challenge: Tech leader, weak in social innovation

Throughout the conference, participants repeatedly highlighted that Switzerland is

widely recognized as an “innovation champion”, having secured the top position in the *Global Innovation Index* for the 14th consecutive year thanks to its world-class universities, strong Research & Development (R&D) sector, stable political and economic climate, international partnerships, multinational presence, and a thriving entrepreneurial ecosystem. However, this reputation is largely based on technological and economic innovation, leaving social innovation under-supported and the understanding of sustainability transformation under-reflected. Participants generally associated social innovation more strongly – though not exclusively – with transformation.

Ingrid Kissling-Näf emphasized that the Swiss innovation ecosystem is deeply market-driven, prioritizing patent generation, start-up funding, and export potential. This focus makes it difficult for social and transformative innovations to gain institutional backing. Many social innovation projects struggle to secure funding or recognition because they do not fit the conventional metrics of success used in Swiss innovation policy.

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¹ See the conference program: https://scnat.ch/de/uuid/i/cfffc274-163a-514b-b8fc-5b973555c2c2-saguf-jahrestagung_2024_innovation_in_Transformation.



FIGURE 1: During an initial podium discussion at the 2024 saguf annual conference, the four panelists elaborated on their understanding of innovation for sustainability transformation.

Furthermore, conference participants discussed the role of regional disparities in sustaining the gap between technological and social innovation promotion. Economically strong and competitive regions like Zurich benefit from business-driven innovation, generating income that enables the canton to provide public services or support for social innovation. In contrast, other cantons or rural areas with fewer resources seemingly struggle to support non-market-based social initiatives. This leads to unequal access to innovation opportunities and contributes to the dominance of technological over social innovation. Without addressing these disparities, transformative innovation may remain concentrated in a few well-funded regions, limiting its transformative impact across Switzerland. This gap reduces the country's ability to implement sustainability transformations, underscoring the need for alternative funding mechanisms and policy adjustments.

Indeed, the lack of longer-term funding was identified as one of the most important barriers to transformative innovation. As *Sophie Schumacher* highlighted, the prioritization of funding for start-ups and scalable technologies more likely to be taken up by the market has led to a widespread assumption that innovations do not require sustained financial support.

However, this model is ill-suited to social innovation, which can hold significant societal value but does not easily translate into direct commercial applications. Furthermore, participants pointed out that social innovations typically operate outside traditional market dynamics, making them ineligible for conventional funding sources such as venture capital or research and development grants.

A proposition to have social innovations funded by philanthropic foundations sparked controversial debates about engagement, responsibility, and commitment to transformation by public authorities. Expanding hybrid funding models that blend public grants, philanthropy, and social impact investments could provide more stable financial support for transformative initiatives, ensuring their long-term viability beyond conventional market-driven mechanisms.

The need for new framework conditions and new narratives for transformative innovation

A key challenge is the lack of evaluation frameworks that account for societal change rather than economic return of transformative innovation. Because of how innovation success is currently measured, even when social innovations receive support, it is often in the form of short-term

project grants that fail to provide the long-term stability needed for change to unfold. To foster transformative innovation in Switzerland, conference participants emphasized the need for new evaluation approaches that move beyond traditional economic measures, integrating well-being, resilience, sufficiency, and long-term systemic benefits.

Another key insight from the discussion is that successful transformative innovations (such as a car sharing system that reduces individual car ownership in urban areas) do not always resemble traditional innovations (like a new technology product). These innovations may not be immediately recognized as such, as they may not generate financial profit or scale in a linear way. However, they create systemic shifts by altering governance, public participation, and social norms.

Karin Mader emphasized that embracing sufficiency-oriented innovation – where success is defined in terms of resilience and well-being rather than growth – could redefine how transformation is understood. She stressed that alternative frameworks such as *Doughnut Economics* (Raworth 2017) offer new ways to evaluate success beyond GDP growth and market share. Several participants highlighted the need to rethink economic indicators to better capture the societal and environmental benefits of transformative innovation.

Getting policymakers to adopt alternative perspectives remains the challenge, as they continue to prioritize economic expansion and technological development. Narrative shifts accompanied by institutional change are necessary to enable greater acceptance of transformative innovation. This requires changes in the policy discourse and institutional training to encourage non-market-oriented approaches. Overall, participants agreed that transformative innovation requires rethinking funding, governance, and evaluation criteria, rather than merely integrating social innovations into existing frameworks.

Fabian Streiff highlighted several strategies for narrative change that could create more space for transformative innovation within existing support frameworks.

A key step towards such narrative change is inventing new concepts to capture the specificities of innovations for sustainability transformation. He proposed terms like “pooling and bundling experiences” instead of “upscaling innovations”, emphasizing the integration and adaptation of various innovative solutions across different contexts rather than focusing solely on uniform scaling. Another example is the intentional naming of the cantonal funding programme for economic promotion by the Office for Economy of Canton Zurich as *Standortförderung* (locational promotion), reflecting a shift toward systemic incentivization rather than exclusive focus on economic growth.

This acknowledges that transformation often requires context-specific adjustments rather than direct replication. Additionally, embedding innovation within regional contexts is crucial, as governance and

Innovating for transformation requires rethinking how we define and assess “the good” in sustainability transitions.

funding structures differ significantly across Switzerland, affecting the feasibility and success of transformative initiatives. Strengthening cross-sectoral collaboration between academia, civil society, and public administration was also emphasized as essential for fostering a more inclusive and systemic approach to innovation.

Education and trust-building: Key enablers of innovation for transformation

Building trust and working across boundaries in the innovation process is crucial for enabling transformation to sustainability. Conference participants highlighted that public skepticism about innovations for transformation often arises due to a lack of involvement in shaping innovation strategies. To address this, more inclusive governance mechanisms are needed that integrate local communities and diverse stakeholders into innovation planning processes.

Education also plays a crucial role in fostering the cultural change needed for transformative innovations. *Ingrid Kissling-Näf* pointed out that, especially in business schools and professional management courses, teaching should integrate plural economic perspectives, moving beyond neoclassical models to include systems thinking and sustainability-focused approaches. Training programs for policymakers and innovation managers should incorporate frameworks that recognize social impact and long-term transformation rather than focusing on short-term economic returns.

Furthermore, several participants emphasized that interdisciplinary education and cross-sectoral collaboration are crucial for breaking down knowledge silos that separate technical innovation from social and policy-driven transformation. *Sophie Schumacher* mentioned that many

social science and humanities researchers do not feel addressed by the concept of innovation when her office attempts to reach out to them. There was broad agreement that embedding a more comprehensive understanding of innovation into existing curricula and professional training will be essential for building long-term trust in sustainability transitions.

Conclusion: Reflections and next steps for transformative innovation

A key takeaway from the 2024 saguf annual conference was that transformative innovation cannot be measured solely by economic success or technological advancement. Instead, it must be understood as an ongoing, collective process that reconfigures governance structures, challenges existing paradigms, and engages diverse stakeholders in shaping a sustainable future.

Throughout the conference, participants emphasized the importance of stronger collaboration between academia, policy,

and civil society to enable transformative innovation. This directly connects to the new saguf strategy (Bornemann et al. 2023, saguf 2024), which calls for promoting transformative partnerships between science and society. Several discussions at the conference highlighted the necessity of interdisciplinary cooperation and participatory governance models to foster systemic change. Similarly, the call for new evaluation frameworks for social innovation resonates with the saguf strategy's emphasis on developing sustainability-oriented methodologies. A recurring theme in discussions was the need to align innovation policies with sustainability indicators, highlighting the importance of alternative evaluation models that recognize long-term societal change.

Ultimately, innovating for transformation is not just about developing new solutions. It requires rethinking how we define and assess “the good” in sustainability transitions, and ensuring that the social dimensions of innovation are recognized as critical drivers of systemic change. The next steps for our working group include formulating concrete policy recommendations, developing systemic indicators for the assessment of transformative innovation, fostering experimental spaces for transformative innovation, and strengthening intersectoral dialogue.

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