



Using Systems Innovation to Tackle the Climate Emergency

**A Case Study of EIT Climate-KIC and Sida's Learning Partnership
Pilot Programme in Moldova**

climate-kic.org/systems-innovation-learning-partnership/



Co-funded by the
European Union

Contents

1. Introduction.....	2
2. Transforming Theory into Practise	3
3. Delivering the Pilot Programme.....	5
4. Sharing Lessons Learned	6
Being open to transformative change:.....	7
Being willing to challenge existing organisations' practices:	7
Making time for the process:	7
Working collaboratively with a diverse group of stakeholders:	7
References	8

1. Introduction

EIT Climate-KIC, the Swedish International Development Cooperation Agency (Sida) and the Dutch Ministry for Foreign Affairs (MFA) have formed an innovative new learning partnership to apply the principles of systems innovation to tackle the climate emergency. The learning partnership marks a highly experiential approach that aims to create practical and meaningful change on the ground whilst also piloting new ways of working between international organisations in response to some of the most complex challenges.

'What we're trying to do is to understand how systems innovation can help us to rethink international cooperation to tackle some of the most difficult challenges the world faces.'

Tom Mitchell, Chief Strategy Officer,
EIT Climate-KIC.

The long-term vision is for the partnership to create a much broader network of collaborators across global regions working together to share learning and to apply the principles of systems innovation in order to create the exponential change needed to meet the targets set out in the Paris Agreement. As Tom Mitchell, Chief Strategy Officer at EIT Climate-KIC, explains: *'We want to build something that's about genuine co-creation, co-ownership, shared resources, shared vision.'*

[The formal learning partnership](#) follows a pilot programme delivered by EIT Climate-KIC and Sida in Moldova. The pilot programme consisted of a series of workshops, facilitated by EIT Climate-KIC and delivered to Sida team members (both international and local to Moldova), as well as key Sida partners within the local ecosystems engaged in an existing programme: Sustainable and Resilient Communities Through Women's Empowerment. The workshop introduced by theoretical and practical elements of systems innovation thinking with a dual focus on developing individual capabilities and identifying leverage points within the local ecosystem to accelerate climate change mitigation practices and policies.

This research article, commissioned by EIT Climate-KIC and delivered by The Research Base, presents insights and lessons learned from the pilot programme delivered in Moldova. The pilot programme tested and refined both the broader model and specific aspects of the partnership approach through a series of in-depth collaborative workshops in late 2021. Key lessons learned include the importance of being open to transformational change at an individual and organisational level; the willingness to challenge existing assumptions and bureaucratic requirements around partnership working; recognition of the value of making time for an intensive learning programme; and the inclusion of a diverse group of stakeholders connected to the local ecosystem to participate in the process.

2. Transforming Theory into Practice

Systems innovation recognises that institutions and actors operate within complex, interdependent networks of relationships in which causal relationships are often non-linear and counterintuitive. At a theoretical level, systems innovation offers a rich and nuanced picture of how social, political, environmental, economic and behavioural forces interact as part of a complex system and how to identify leverage points within that system to bring about dynamic and far-reaching change (Meadows, 1999). The challenge for organisations such as EIT Climate-KIC, who have quickly become one of the leading European organisations working in this field, is how to take those abstract conceptual models and transform them into a practical, accessible model that can be understood and applied by organisations working to tackle the climate emergency.¹

Tom Mitchell describes the potential offered by systems innovation to create the kind of transformative change needed to drastically reduce greenhouse emissions: *'Systems innovation allows us to understand what some of the blockers are to change and what some of the opportunities might be for as fast a change as possible.'* Mitchell goes on to explain that while there are no certainties that systems innovation will hold the key to changing the current environmental trajectory, a willingness to be experimental is vital to achieving the scale and pace of innovation needed: *'What we are acknowledging is that business as usual - or even slightly better - won't get us to where we need to be. We look at what might be possible, what exponential change could happen and see if we can nudge it.'*

'Using systems innovation as a key tool, our aim is to catalyse change in whole cities, regions, industries and value chains by 2035, working with partners to develop and scale ambitious, mission-led programmes.'

EIT Climate-KIC (2019).

Systems innovation presents a far-reaching challenge, however, to the existing status quo within which international organisations operate because it upends many of the underlying assumptions about how to work effectively within domestic and international spheres. The traditional way of conceptualising and delivering development projects, for example, focuses on specific outcomes and impacts that can be measured and audited. System innovation challenges these modes of thinking in a number of ways: firstly, it disputes the idea that effective interventions can be seen as discrete and linear processes that are separate from the systems within which they are delivered. Secondly, the focus on systems naturally lends itself to partnership working and collaborative enterprise across organisations. Finally, it emphasises the importance of being innovative and experimental, allowing these experiments and innovations to produce unexpected

¹ See, for example, Abercrombie et. al.'s (2015) discussion around the lack of practical guides and shared learning to support institutions to apply systems innovations principles effectively.

outcomes and even to fail entirely.

To this end, EIT Climate-KIC has been developing and testing its own model of systems innovation through its portfolio of Deep Demonstrations. Deep Demonstrations bring together key stakeholders across a local ecosystem to map out a whole systems approach to deliver transformational climate change action across multiple social, political and economic levers (EIT Climate-KIC, 2021a). The pilot programme in Moldova captured the essence of the Deep Demonstrations approach but with a different remit and strategic goal. Working to develop individual and organisational capacity within Sida's project team in Moldova, together with Sida's key partners in the local ecosystem, the pilot programme sought to share and embed the knowledge, skills and understanding of how systems innovation can drive climate change action.

'Structures have an impact on how an organisation works, of course, but if the individuals are not trained and their capacity to think in different ways [is not] developed, then change cannot happen.'

Thomas Alveteg, Sida Senior Programme Specialist in the Unit for Global Cooperation on Environment

The emphasis on developing capacity and capabilities gave the pilot programme a dual focus. On the one hand, participants in the learning partnership worked collaboratively to map and understand better the local ecosystems within which they operate and to identify leverage points to create momentum for meaningful climate change action. On the other hand, the programme explored and challenged participants' underlying mindsets, assumptions and behaviours that may unconsciously inhibit their capacity to achieve transformational change within and across organisations. As Tom Mitchell explains, *'Systems innovation is not just about learning to use new tools*

or software or practices. It is also about questioning your mindset, your ways of relating to colleagues and your ways of understanding the world.' Capacity development, in this sense, becomes a means of moving beyond habitual patterns of thought and behaviour in order to enable individuals to unlock innovative and creative solutions that reflect and respond to the inherent complexity of local ecosystems.²

As well as developing individuals' capacity and capability to become change agents, the pilot programme also sought to create a collaborative working space by bringing together individuals from key stakeholder organisations across the local ecosystem in Moldova. The focal point for the Moldova pilot was an existing UNDP-funded programme, Sustainable and Resilient Communities Through Women's Empowerment, that connected local stakeholders. These include community and international organisations committed to creating an enabling environment for climate resilient practice in 30 localities across Moldova, which they do through engagement with local public authorities, women-led businesses, and women-led households.

As Virginia Bîlici, Programme Officer for Development Cooperation at the Embassy of Sweden in Chisinau and the Sida project lead in Moldova, explains: *'It was clear to us that partners play a huge role in systems innovation... so we thought about [which] existing project of ours is doing something similar [and] that we could put under the microscope and apply the principles of systems innovation to it.'* Stakeholders from across organisations participating in the Sustainable and Resilient Communities Through Women's Empowerment programme were invited to participate in a series

² The work of Jennifer Garvey Berger has been influential in understanding how habitual mindsets can become barriers to understanding and working creatively within complex systems to affect change. See, for example, Jennifer Garvey Berger (2019).

of workshops hosted by Sida and facilitated by EIT Climate-KIC to share learning with participants to engage with innovative and experimental approaches to drive forward change actions within their professional spheres.

3. Delivering the Pilot Programme

The format for the pilot programme was a series of four participatory workshops each delivered across one or two full days from October 2020 to January 2021. The workshops were originally conceived as a series of in-person events; however, the Covid-19 pandemic led to the workshops being delivered virtually. Given that many of the tools and techniques that EIT Climate-KIC uses to engage participants in systems innovation encourage a process of reflexive self-inquiry to unlearn old processes and discover new mindsets, one of the biggest challenges for online delivery was how to build trust and open channels of communication across the group. In addition to the theoretical tools, EIT Climate-KIC made use of collaborative tools that allowed participants to create outputs collaboratively, as well as lots of space for people to come together and share experiences whilst working through the core activities. Feedback from participants highlighted how the programme had encouraged them to embrace uncertainty whilst remaining proactive and curious in looking for potential solutions.

The workshops offered participants the chance to learn more about the theory behind systems innovation and to engage in a series of collaborative activities to develop their understanding of the complexities of the system within which they were working in Moldova, as well as their own role as actors within that system. In the first workshop, for example, participants were invited to *'explore what it means to develop a systems innovation mindset and what it means to catalyse systemic change through innovation in a practical way'*. This involves looking at how systems work and how individuals can enact change within the system; raising awareness of how individuals' own mindsets can help drive change by training themselves to look beyond the visible outcomes that they can see occurring with the system to the underlying structure, patterns and mental models that perpetuate these outcomes (the 'iceberg model'); and taking part in collaborative activities to map the specific system in which stakeholders in Moldova are working.

The purpose of the workshops was to engage participants in cyclical learning processes, where the same set of issues or challenges within the local ecosystem are looked at from multiple perspectives in order to generate new ways of thinking about how to respond to these challenges effectively from a systems-based perspective. In the second workshop, for example, participants developed a PESTLE analysis (Political, Economic, Sociological, Technological, Legal and Environmental) that was used to inform ongoing activities including creating a vision around what is achievable now in terms of concrete action and developing a broader statement of intent on

achieving transformative change going forwards. Thomas Alveteg, a participant in the workshops and a Senior Programme Specialist in the Unit for Global Cooperation on Environment at Sida, emphasised how the process of applying these tools and techniques collaboratively with individuals from different organisations helped to unlock the potential of the hive mind: *'To do these activities in a group and come to a consensus and to really understand others' points of view, that was very useful.'*

The workshops culminated in a series of activities that encouraged participants to create a vision of what they want to achieve in terms of systems innovation and to map and identify potential actions and initiatives towards achieving that vision based on identified leverage points within the existing system. The statement of intent that emerged from these workshops is: *'The intent of the climate and environmental ecosystem in Moldova is to leverage emerging knowledge, innovation, partnerships and finance to accelerate transformation in the areas of inclusive, participatory environmental and climate governance, infrastructure and biodiversity management to produce a system-wide impact encompassing: 1) aware and responsible stakeholders; 2) enforced policies and regulations; and 3) sustainable ecosystem services.'* (EIT Climate-KIC, 2021b). Actions agreed to help realise this vision included a series of environmental breakfasts that bring together key stakeholders, as well as a drive to identifying local expertise and capacity to support the achievement of these objectives; engaging with media and policymakers to raise awareness; identifying potential funding sources and coordinating with existing donors; and developing pilot initiatives to support the development of a circular economy.

'We are now viewing nature as a stakeholder and reflecting this in how we formulate and coordinate projects that we are currently implementing.'

Virginia Bilici, Programme Officer for Development Cooperation at the Embassy of Sweden in Chisinau

The pilot programme has also created impact beyond the outcomes attached to the workshops. The local Sida team in Moldova has already started to apply systems thinking across all its projects. *'It is important to use systems innovation as another layer, one that is not impermeable but that is interlinked with your current processes,'* explains Virginia Bilici, *'For, example, another clear outcome of the workshops for us was the fine tuning of our Green Justice Programme to reflect the systems thinking approach.'* At a wider organisational level, the goal for the next phase of the learning partnership is to expand the process of integrating systems innovation into Sida's broader portfolio of work. According to Thomas Alveteg, one of the advocates for systems thinking within Sida, *'Systems innovation will transform how we are doing our work as an organisation if we integrate it into our processes. We're not there yet but that's something that I hope for in the future.'*

4. Sharing Lessons Learned

There is a broad consensus from both EIT Climate-KIC and Sida that the pilot programme has delivered valuable lessons for organisations in terms of how to share learning around systems innovation and also how to integrate systems innovation processes within organisational practices.

Being open to transformative change:

Integrating systems innovation into the practices adopted by individuals and organisations requires staying open to new approaches and ways of thinking. This can be challenging as the success of the programme relies on a willingness at senior levels within an organisation to support and facilitate transformational change, as well as individuals participating in the process with the capacity to act as change agents. As Tom Mitchell explains, *'We cannot underestimate the importance of individual champions in the change processes of organisations. People with a passion and a restlessness for change.'*

Being willing to challenge existing organisations' practices:

One challenge highlighted by both Sida and EIT Climate-KIC is how to deliver a programme focused on delivering transformational change across organisations without having the pre-defined outputs and impact measures typically required by existing bureaucratic processes. Tom Mitchell recommends looking for space and flexibility within these bureaucratic processes: *'Treat it as an object for change within systems innovation itself. We have learned to interpret the bureaucracy to such a point that it works for us but that has taken a lot of time to navigate.'*

Making time for the process:

The pilot programme required participants to commit to seven days of training and development. Thomas Alveteg emphasises, however, that this time commitment is relatively small in contrast to the potential to transform individuals' capabilities and organisations' structures: *'Do not see it as something that is taking time, but as something that will make your work more efficient in the future.'* The decision to deliver the learning partnership in concert with an existing programme also helped to give the programme a clear focus and to encourage the process of integrating systems innovation within existing practices rather than seeing it as something separate.

Working collaboratively with a diverse group of stakeholders:

The local team at Sida extended the invitation to attend workshops to more than ten partner organisations working within the local ecosystem. According to Virginia Bilici, the process of working with partners helps to build consensus and identify the most appropriate intervention points within the system. It has also informed the approach to partnership working adopted by the local team at Sida Moldova with plans for refresher sessions to keep systems innovation practices working effectively across these new partnerships.

The big challenge for the learning partnership going forwards is how to apply the lessons learned and scale up collaborative operations. Tom Mitchell describes EIT Climate-KIC's broader vision for the learning partnership: '*We want to think about diversity and inclusion on a global basis. To see how easy or difficult it is to apply systems innovation in different cultural context... to build new relationships and explore together what might be possible.*' True to the spirit of systems innovation, there is not a fixed pathway for these next steps but rather a further series of experimental, collaborative programmes to understand better the potential to apply the methods and approaches developed during the pilot phase with new partners and across new geographical regions.

References

Abercrombie et. al., 2015. *Systems Change: A Guide To What It Is And How To Do It*. London: New Philanthropy Capital (NPC) and the LankellyChase Foundation.

<https://www.thinknpc.org/resource-hub/systems-change-a-guide-to-what-it-is-and-how-to-do-it/> (accessed 16 December 2021).

Berger, J. G., 2019. *Unlocking Leadership Mindtraps: How to Thrive in Complexity*. Redwood City: Stanford University Press.

EIT Climate-KIC, 2021a. Deep Demonstrations. <https://www.climate-kic.org/wp-content/uploads/2021/10/Deep-Demonstrations-Methodology.pdf> (accessed 16 December 2021).

EIT Climate-KIC, 2021b. Internal documentation.

EIT Climate-KIC, 2019.). *Work With Us To Achieve Net Zero, In Time*. https://www.climate-kic.org/wp-content/uploads/2019/10/191029_EIT_Climate-KIC_FundingNetZero_Double.pdf (accessed 16 December 2021).

Meadows, D., 1999. *Leverage Points: Places to Intervene In A System*. Stellenbosch: Sustainability Institute. drbalcom.pbworks.com/w/file/35173014/Leverage_Points.pdf (accessed 16 December 2021).