



DISCO Living labs as mission-oriented experiments

Marianne Ryghaug

SINTEF



**Funded by
the European Union**

This project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement No 101103954



DISCO Project and Mission-oriented experiments

- DISCO: Living labs as mission-oriented experiments in urban logistics transformation
- Part of the EU Horizon Mission on **Climate-Neutral and Smart Cities by 2030**
- Importance of real-world settings to test solutions**
- Emphasis on epistemic inclusion for success : broad inclusion of knowledge

Challenge of Epistemic Inclusion

Integrating , technical, social and local knowledge

Cities need to engage in open dialogues addressing:

- Controversies, paradoxes, failures
- Diversity of knowledge frameworks



Focus: avoiding epistemic exclusion in living labs

10 key Recommendations

1. **Learning:** Reflect on who is learning what
2. **Failures:** Normalize sharing experiment failures
3. **Action Understanding:** Include alternative perspectives
4. **Avoid Linear Models:** Recognize the non-linear nature of innovation
5. **Non-Tech Knowledge:** Integrate existing solutions
6. **Governance:** Explore new forms and purposes of governance
7. **Citizen Participation:** Go beyond seeking acceptance; enable co-creation
8. **Upscaling:** Use different modes, not just replication
9. **Funding:** Be aware of how it influences knowledge production
10. **Reflexivity:** Create spaces for critical feedback

SUBMIT

To submit your article to the journal,
please click the link above.

SUBSCRIBE TO OPEN



Downloaded 567 times

Article History

First published: 15 March
2023
Version of record: 30 June
2023

Article Tools

[Add to Favourites](#) | [Share
by Email](#) | [Citation Manager](#)
[Track Citations](#) | [Download
PDF](#)

Related Content Search

Find related content
By Keyword

Commentary

Implementing Mission-oriented Experiments: Recommendations on Epistemic Inclusion for City Stakeholders Working in Climate Change Initiatives

[Chris Foulds](#), [Govert Valkenburg](#), [Marianne Ryghaug](#), [Ivana Suboticki](#), [Tomas Moe Skjøelvold](#), [Marius Korsnes](#), [Sara Heidenreich](#)

Chris Foulds is a Professor of Sustainability and Society at Anglia

<https://doi.org/10.3138/jccpe-2022-0014>

[Abstract](#) [Full Text](#) [References](#) [Cited by](#) [PDF](#) [EPUB](#)

Policy institutions have been increasingly investing in demonstrators, pilots, living labs, testbeds, and so forth, that focus on novel experimental approaches to dealing with climate change. In particular, cities have been advocated as ideal innovation sites for such experiments. However, we argue that insufficient attention has been given to accommodating the different forms of knowledge included and produced through the design, implementation, and evaluation of these city experiments (i.e., epistemic inclusion). This article presents 10 recommendations for city policy officers and other stakeholders involved in delivering mission-oriented programmes of work to achieve epistemic inclusion in their attempts to drive innovation in cities. In illustrating our arguments, we engage with the EU Horizon Europe Mission of Climate-Neutral and Smart Cities as one example of such a programme. 100

1. Reflect on who is learning what: Define stakeholders and learning objectives

- The missions cities have a strong bend towards learning (incl monitoring and evaluation) and aims to facilitate peer to peer learning between cities
- Transition research has taught us that radical innovation may actually consist of negotiations of meaning where incumbents and innovators may have competing interests
- New knowledge may conflict with existing interest: Cities may be constrained by existing policies, material arrangements, duties, obligations --> that may compromise learning
- Learning something in one place does not necessarily mean the lesson can be applied in another place
- Who is learning what, why and how?



2. Normalize the sharing of experiment failures

- Important to share both successes and failures!

3. Be open to alternative ways of understanding actions

- Important to not focusing blindly on individual actions
- Pay attention to institutional constraints that may prevent actions to happen
- Recognize that technologies and infrastructures actively create policy, contestation, forms of engagement, types of knowledge

4. Avoid linear models of innovation

- The reality of innovation is non-linear; as a networked and iterative process
- Evident in an urban context; activities, routines, practises are woven together into the complex cultural and technological fabric that is the city
- Embrace flexible approaches, co-creation is taken seriously, involving a broad number from the community, also to define problems, set agendas and pathways to solving problems
- Not only focus on technological solutions

5. Include existing (non-technological) knowledge

- Integrate existing local practices

6. Search for new forms of governance

- A broader focus on experimentation for societal change (go beyond engaging citizens) ; that challenge dominant cultural understanding, modes of organization, institutions and power relations

7. Go beyond targeting social acceptance

- Warn against gaining acceptance for only already defined solutions which risks producing lack of ownership
- Also pay attention to who benefits and who does not (vulnerable groups)
- Encourage early citizen engagement, co-creation and responsible acceleration

8. Explore different modes of upscaling, beyond just replication

- Pay attention to generic versus distinct qualities of cities
- Cities: how to move from experiments and demonstrations to broader social application?
- ❖ *Growing* - more actors involved (market demand increases)
- ❖ *Accumulation* – experiment linked to other experiments
- ❖ *Transformation*; when the experiment shapes wider institutional changes in society



10. Ensure space for reflexivity in planning and implementation process

- Encourage continuous feedback loops



Conclusion

- Epistemic inclusion is vital for success in climate innovation
- Epistemic inclusion is not just a buzzword but a practical necessity if we are to meet the challenges of climate change effectively because we need diverse knowledge, inclusive approaches and adaptive governance



Marianne Ryghaug
marianne.ryghaug@sintef.no



Funded by
the European Union



THE CIVITAS INITIATIVE
IS CO-FUNDED BY
THE EUROPEAN UNION

DISCO is a project under the CIVITAS Initiative.
Read more - civitas.eu