GOVERNING SUSTAINABILITY TRANSITION PROCESSES IN OUR CITIES

Insights from the Energy Transition Learning Relay 2020

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TOMORROW

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Disclaimer

Introduction

There is broad societal agreement that we need to drastically reduce carbon emissions to soften the effects of the climate crisis. In this regard, cities have for long been considered the spaces and the actors for decisive action. On the one hand this is due to cities using 78 percent of energy globally and producing over 60 percent of carbon emissions according to the United Nations. On the other hand, local authorities have started to play a key role globally in fostering sustainability transitions nearly 3 decades ago. They do so in a variety of ways, including the facilitation of innovative participatory processes engaging citizens and other local actors in sustainability actions. Some municipalities have become pioneers in leading climate action and do their part in reducing emissions by implementing climate policies, facilitating transition roadmapping processes, setting up climate action plans, innovating their local governance and supporting grassroots initiatives in their cities. Learning within and between cities is vital to share challenges in fostering sustainability transitions and strategies to overcome these.

As part of the TOMORROW Energy Transition Learning Relay 2020, 30 participants[1] engaged in facilitated peer-to-peer learning on how to foster sustainability transitions in their cities (see Figure 1 for an overview of the process).

Online kick-off workshop
Presentations on transition management and by Brest, combined with group exercises

Peer-learning webinar #3
Presentation on diverse multi-stakeholder engagement processes and strategies with various examples

24/9/2020
14.00-16.00 CET

19/11/2020
14.00-16.00 CET

28/1/2021
14.00-17.00 CET

22/10/2020
10.30-17.00 CET

10/12/2020
14.00-16.30 CET

Introductory webinar #1
Explaining the TOMORROW project, getting to know each other, and exchanging questions and insights

Peer-learning webinar #2
Presentations by Dublin and Valencia teams, and interactive session on stakeholder mapping and engagement

Peer-learning webinar #4
Presentation from Växjö, short pitches by participants on their work done in regard to the Relay, and wrap-up of Learning Relay #1

Figure 1. Overview of the timeline of the Relay

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[1] For an overview of the participants, please see Box 3 on page 13-14.

In peer-learning groups of 5 to 6 people, participants worked on their individual learning question (for an overview of topics see Figure 2), as well as on course assignments and exchanged knowledge and experiences. In the peer-learning webinars, they got acquainted with (new) tools and reflexive exercises – such as those included in the TOMORROW Workbook for Urban Transition Makers.
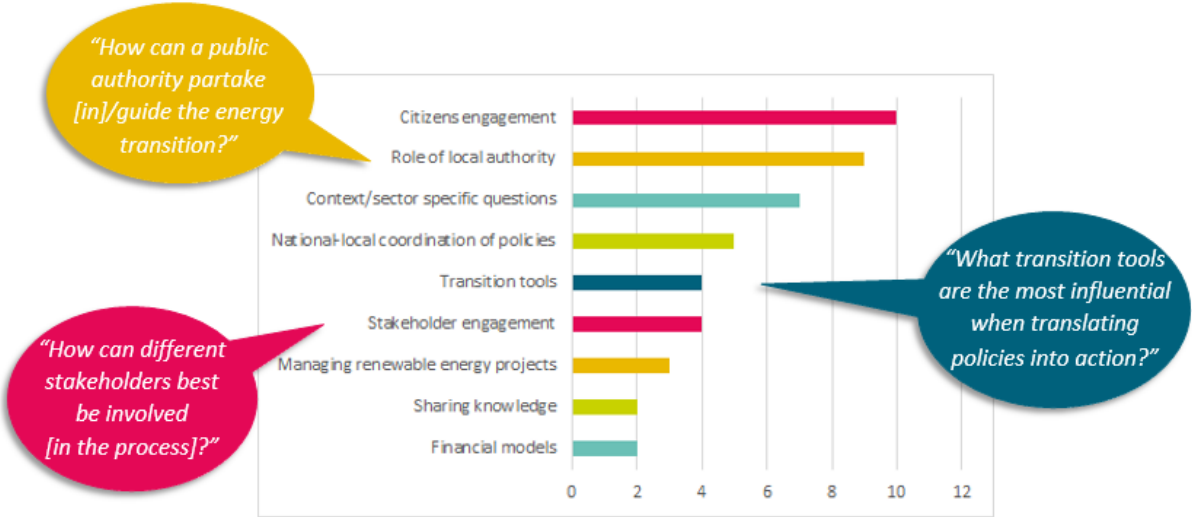

Figure 2. Learning question topics

For all those working at and with municipalities to accelerate the energy transition, we share here some of the main insights, inspirations and lessons learned by the Relay participants.

Lesson #1: *Engage motivated people within your organisation*

You cannot accelerate the energy transition in your city alone. One of the most important steps is to engage motivated people in your organisation to join you in the process of accelerating a change towards more just and sustainable cities. How can you do this?

You can start by asking yourself 'who would be interested in this topic?' Maybe some of your colleagues are already active in sustainability projects in their free time or they are the best at recycling at the office or simply they care a lot about the common good. This could be a first step of identifying co-workers that could join your efforts and form a 'transition team'.

Another way would be to gain the attention of your colleagues by sharing inspiring ideas, organising a workshop or webinar to show the key role that municipalities can play in advancing sustainability or by showing the benefits for the municipality in becoming a sustainability pioneer.

When you have them engaged, it is important that you build trust with each other and that you build a team with a shared vision. In this way you would be able to create the basis of a strong team leading the change towards a more sustainable city!

Figure 3. Learning question topics

Lesson #2: *Better understand your context by using system analysis tools*

System analysis tools are fundamental for designing and implementing a process towards sustainability transitions. These tools support any person, team or group to better understand the dynamics, challenges and opportunities of their system such as a city or neighborhood. As part of the application of system analysis tools, individuals or teams need to reflect on the different elements of the specific context and how they are connected and interrelated to one another. This helps people to zoom-out and to identify some major patterns or dynamics of the overall system. The system analysis also provides the opportunity to more deeply reflect on the interconnections between (persistent) problems, and their root causes. When applied in a group, system analysis tools can therefore support the team to create a shared language and common understanding of the problems and challenges in their context. There are different tools and frameworks that can be used to conduct the system analysis such as the Multi-Level Perspective (see Box. 1). Having a clearer idea on what is going on in your city is the first step for then being able to identify and plan the right actions ahead.

Box 1. An example of the system analysis of the city of Križevci (Croatia) by using the MLP.

One tool that can be used for analysing your system is the Multi-Level Perspective (MLP). The MLP is a tool that can support you in characterising the system from a transitions perspective. It can give you a better understanding of the relationships between different elements of the system and it can support the reflections on the transition dynamics existing in it. The MLP is divided into three levels:
- *Landscape*: autonomous factors or "trends" in the system influencing both niches and regimes. (Examples in the energy system: Climate Change, resource scarcity, SDGs).
- *Regime*: the dominant structures, cultures and practices. Examples in the energy system: centralised fossil energy incl. market-led fossil-based economy.
- *Niches*: the alternative structures, cultures and practices (so-called spaces for innovation). Examples in the energy system: solar energy, wind energy, energy cooperatives, innovative energy practices, etc.

Below you can find the example of the application of the MLP at the city of Krizevci (Croatia).
- 22.122 inhabitants, 263,7 km^2 area with 59 villages
- City of Križevci is on their energy independence pathway- willing to be 100% renewable energy by 2030.
- Favorable climate and abundance of water, fertile soil = foundation economic and demographic development of Križevci
- Predominate activities: metal industry, agriculture, trade, construction- there aren't major pollutants
- Good potential for the development of solar PV energy (~ 1300 kWh/kWp yearly)
- Member of Climate Alliance and Energy cities- Mayor in the Board of Directors, Covenant of Mayors
- Geothermal source
- SECAP

Landscape:
- EU Green Deal

Regime:
- Energy is produced is produced in highly centralised manner
- 54% CO_2 emissions from traffic, no local public transport
- traditional combustion private vehicles are still dominant over alternative electric and hybrid vehicles
- 46% CO_2 emission from building sector (75% thermal energy), dominant residential sector

Niche:

- Community energy: Križevci solar roofs- 2 PV's of 30 kW on 2 public buildings financed by citizens via crowdinvesting; in 2020., 11 of investors, citizens established KLIK, energy cooperative to lead energy transition of the city and to help LA on their pathway; co-financing of solar power plants on family houses
- Energy efficiency: energy renovations of public buildings, LED public lighting; use of biomass as a source of thermal energy (Utility company- household waste and maintenance of public areas); energy advisors for energy poor households
- Renewables: potential for geothermal energy use (in research for heating); developing 7MW Solar power plant;
- Sustainable mobility: electric and hybrid city vehicles; e-charging stations; electric city bicycles; SUMP
- Climate resilience: Study and strategy for the development of green infrastructure of the City of Križevci until 2027, Cadaster of greenery and urban equipment of the town of Križevci
- Innovation: hydrogen, innovative governance models.

Lesson #3: *Consider actor mapping and actor engagement as key for the process*

Next to the system analysis, the mapping, identification and engagement of diverse actors is also very important for advancing a process of sustainability transition. But how can you start?

There are multiple tools that can help you to map and identify actors in your system, such as the tools listed in Chapter 4 of the [Workbook for Urban Transition Makers](). As part of the TOMORROW Relay, participants conducted an actor analysis in their contexts. In Box 2 you can find one example of the application of one actor mapping tool, the power-domain stakeholder map, in Arad Municipality (Romania).

Box 2. The application of the Power-Domain-Mapping (adapted from Wittmayer et al. 2011) at Arad Municipality.

A representative from Arad Municipality participating in the Relay, applied the power-domain map tool and analysed what kind of power (innovative, re-inforcive, transformative or systemic) the different local actors have, how the power is exercised and how these types of power can be influenced.
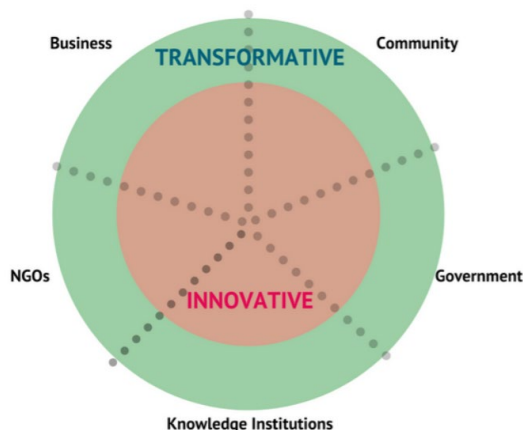
TYPE OF POWER	DEFINITION	TRANSITION NOTION
Innovative	...capacity of actors to invent and create new resources	Niches
Re-inforcive	...capacity of actors to reinforce and reproduce existing institutions and structures	Regimes
Transformative	...capacity of actors to invent and develop new structures and institutions	Niches/Regimes
Systemic	...collective capacity of actors to shape (reproduce or challenge) macro-trends	Landscape

N.	Local actors(stakeholders)	Kind of power -innovative -re-inforcive -transformative -systemic	How is the power exercised?	How can these types of power be influenced?

1.	Government- Arad Municipality Local Authority's Team(City Manager, departments' managers, employes with different tasks in specialized fields, chefs of departments)	-transformative-planning power -systemic-generating steps for drafting SECAP's documents - re-inforcive: it can improve the development of managing concepts conjunctively with the City Manager to create structures	-on the base of decision-making documents-by plans, actions on energy and climate changes field -program-documents that includes actions in energy and climate changes field -by involving all decision-making levels in management structures with the aim to cover issues in the energy and climate changes field	-political influence at local and national level -by validating the documents (that is not made entirely) -by less consistent involvement at decision levels - that can generate delays in SECAP's development and implementation
2.	Business-Local Council's subordinated companies and providers of public services /thermal energy company	-systemic-for macro-trend modeling -innovative-to adapt the new non-polluting technological resources	-by the activities that are carried out in the privat system -it is permanently take into consideration the costs reduction. By this point of view it is relevant the issue of costs reduction - implementa tion and verification of technologies that generate costs reduction during production activities	-by creating tax facilities for economic agents in the energy efficiency -by creating tax facilities for economic agents in the energy efficiency field
3.	Knowledge Institutions-..Aurel Vlaicu" University, ,,Vasile Goldiș" University, Chamber of Commerce and Industry, School Inspectorate, Forestry Department, Basin	-innovative- value is achieved in energy and climate changes field -by teaching and innovation activity -re-inforcive-information releases organising conferences, public meetings, launching books- these information	-intense involvement to discovery, application and development of efficient resources -information materials with the innovation results in the energy field in the content of different books, brochures, publications	-dialogue with the university environment and governance regarding efficient energy measures and studies generated by

	Mureș Water Administration, Weather Station	are circulating more easier than in any other institutional environment		knowledge institutions -support for the preparation of information materials and organising meetings
4.	Community-citizen meetings, public debates on relevant topics	-re-inforcive: citizens' ideas can make changes in existing structures	-during debates and discussions activity on specialized fields, ideas are issued by citizens that are trained in a reference field	-takeover by the governess of sustainable ideas and proposals on efficient energy
5.	NGOs-Natural Park Administration of Mureș river Meadow-Nature 2000 Site	-innovative-creating new resources in non-polluting field	-by study activity, researches related to the biodiversity evolution in climate conditions' context	-common actions, NGOs governance on greening activities, restoration of the facilities in the site areas to ensure ecosystem conditions

As we learned from the experiences of Dublin's transition roadmapping process, it is important to engage people from different sectors and city departments and support them to create collaborations. The diversity of the participants involved (e.g. in terms of background, age, gender, knowledge, etc) is very important since it fosters the exchange of cultures, experiences and practices and helps to make the process move along.

As mentioned by the representative of the Valencia transition team, involving citizens in the roadmapping process is a priority, because citizens can actively contribute to the development of the vision for the city and they can develop ideas to be transformed into actions. Citizens should be given ownership over the process. This can be done, for example, by making them feel that their ideas and activities are considered important and by connecting and collaborating with existing citizens-led initiatives and projects.

Once the relevant local actors of the context have been identified, it is important to start engaging them as part of the participatory governance process.

Why do you think it is important to engage stakeholders?

Figure 4. The inputs given by Relay participants on Mentimeter

As participants indicated and shown in Figure 4, actor engagement is considered important because it makes the decision-making process more participatory, allowing the sharing of information and support the identification of common objectives among actors.

To facilitate citizens' engagement, it is important to find a common language to create a meaningful communication with and among actors. For example, in Valencia it was noticed that citizens could not understand or resonate with certain concepts of the energy transition, but they did understand the notion of having a 'liveable' city. Finding concepts that work in your context will increase the understanding of the process by citizens and other local actors.

Another way to contribute to the active actor engagement is to create and maintain networks among the diverse actors. For example, local authorities can make use of external networks to get connected with citizens. In Dublin there are Public Participatory Networks (PPNs): community groups can register in order to form a better relationship with their local governments, and, in turn, local governments can make use of the expertise of citizens in community groups.

Lessons #4: *Get inspired by others and find new peers*

One of the lessons learned is that it is very important to learn by others and to find people willing to contribute to sustainability and just change. This will broaden your perspective, inspire you to take new actions, provide you with new tools and insights and enable you to give and receive support.

There are many inspiring experiences and strategies out there to be taken up in your work on energy and sustainability transitions. Hearing best case examples from cities, organisations or individuals on how they shaped certain steps of the process (such as stakeholder engagement and mobilization) is helpful and inspirational. There are different ways to stay tuned and learn from pioneering cities. For example, there are multiple online platforms showcasing best practices and examples of the energy and sustainability transitions. Also on the TOMORROW website, we have made a collection of best practices in the energy and sustainability transitions (see TOMORROW Transition Toolbox). Energy Cities website has also a very insightful overview of best practices including creative and practical approaches to shifting the energy system. It is very important for a city embarking on the journey towards accelerating sustainability to find partner-up or network with other cities. It is key for change makers to learn from each other and provide support in challenging times. Municipalities can, for example, engage in networks of cities such as Energy Cities, ICLEI or the Covenant of Mayors through which they can create partnerships and networking opportunities as well as recognition for their climate actions. As an

example, Energy Cities keeps in contact with people working in local authorities at very different levels, civil servants or elected persons. Through projects like TOMORROW this link is underlined within a very close collaboration. TOMORROW also runs the development of a community of practice in order to emulate a European group of people, decision makers, working on different fields but related by a strong focus on cities, energy and sustainability.[1] [2] Rescoop is another impactful network of energy cooperatives and their citizens contributing to the energy transition. For people interested in community-led action initiatives, it might be interesting to connect with ECOLISE network, aiming to engage in, support and facilitate accelerated learning and collaboration among community-led initiatives, their networks and partners in order to catalyse systemic transformation within and across society. If you like to learn more about other translocal movements with the purpose of contributing to the transformation towards more just and sustainable societies, you can check the TRANSIT project including information and materials about 20 transnational networks. Another way, it is of course to also search in your own context or city, those people that are more intrinsically motivated to foster sustainability transitions and they would be more willing to collaborate and partner with you.

Box 3. Overview of TOMORROW Relay's participants

Here we provide you with the details of the participants of the TOMORROW Energy Transition Learning Relay 2020.
In terms of geographic diversity, most participants are based in countries across Europe. Besides, participants also joined in from Asia, Africa, and North America.

The participants were relatively evenly spread throughout the different sectors. The majority of the participants work in a local authority, several participants work in the private sector (e.g. for energy producing companies or local energy cooperatives), a few participants are engaged in NGOs, social enterprises and international networks and a few participants belong to the research sector.
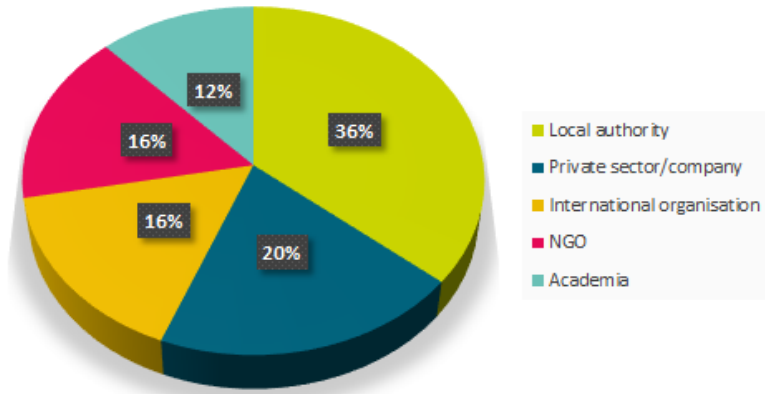
When looking at the division of the participants in terms of gender, there were slightly more females, as shown in below.
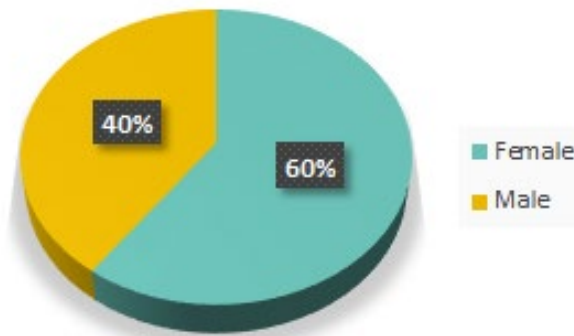
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Tomorrow is a Horizon 2020 funded project, aiming at empowering local authorities to lead the transition towards low-carbon, resilient and more liveable cities. In the framework of the project, six cities will develop 2050 transition roadmaps together with citizens and other local stakeholders and serve as pilot for the transition of European territories.

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