



LEARNING MUNICIPALITY
NETWORKS

Lessons from municipal networks for mutual support: Empowering municipalities to lead the transition towards a low-carbon society

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PATH2LC Agenda

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Background

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Discussion

Conclusion and Outlook



Background





- **Municipalities play a crucial role** in the transition from a fossil-based to a low-carbon society
- To foster the transition process at local level, the EU introduced the instrument of **Sustainable Energy (and Climate) Action Plans (SE(C)APs)**
 - part of the voluntary **Covenant of Mayors (CoM)** initiative (Andreanidou et al. 2018)
 - however, challenges arise due to ...
 - ... many municipalities **just having started the process** of setting up such a plan
 - ... **little experience** with the implementation of the defined measures
 - ... **complexity** of the transition process (Strasser et al. 2018)

Background: Learning Municipality Network approach



PATH2LC: Public Authorities together with a holistic network approach on the way to low-carbon municipalities

Goal of the project: Support municipalities on regional and international level in the process of implementing their existing Sustainable Energy (and Climate) Action Plans (SEAPs / SECAPs).

‘Learning Municipality Network’ (LMN) approach: Link stakeholders in public authorities among municipalities enabling peer-to-peer learning and to increase the engagement for the energy and climate transition.

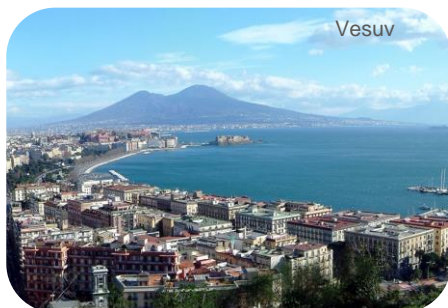
www.path2lc.eu

Project lifetime: September 2020 - August 2023
H2020 project



Background:

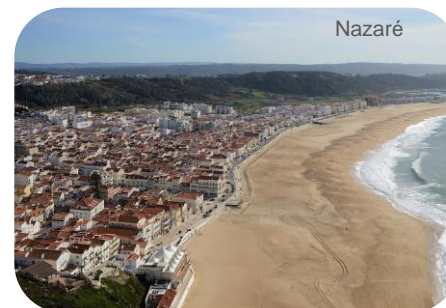
Five existing networks of municipalities in five countries



Italy
(4 municipalities)



Greece
(8 municipalities)



Portugal
(9 municipalities)



Netherlands
(18 municipalities)



France
(4 intermunicipalities)

Objectives and Methods





Objectives:

1. Evaluate **process and outcomes of the LMN approach**
 - a. Socio-scientific monitoring:
Perception of network approach by municipalities and network operators
 - b. Technical monitoring:
Progress of each network in terms of the **implementation status of measures** defined in the SE(C)APs
2. Derive **recommendations for a replication** of the network approach

Methods:

Socio-scientific monitoring

Interviews with
network
operators

Interviews with
network member
municipalities

Technical monitoring

Annual survey of representatives
from each municipality




Data base: Socio-scientific monitoring



	Interviews network operators	Interviews municipalities
France	1	4
Portugal	1	1
Greece	1	8
Netherlands	1	4
Italy	1	3
Sum	5	20

Data base and data quality: Technical monitoring



- For all monitoring rounds, we received measures from 23 of the 25 municipalities (92% response rate)
 - In total 407 measures were reported in the survey
- 
- 143 measures (35%) with additional information on **savings**
 - 108 measures (27%) with information on the **energy carrier**
 - 228 (56%) with information on the **year of implementation**

Results



Results: How is the PATH2LC learning municipality network approach evaluated?



Overall evaluation of the LMN approach:

The LMN approach was evaluated positively

- by the interviewed network operators &
- by the interviewed municipalities

*"The network approach offers real added value"
(FR)*

➤ perceived as **useful** and **beneficial**

➤ **applies to all elements of the LMN approach:**

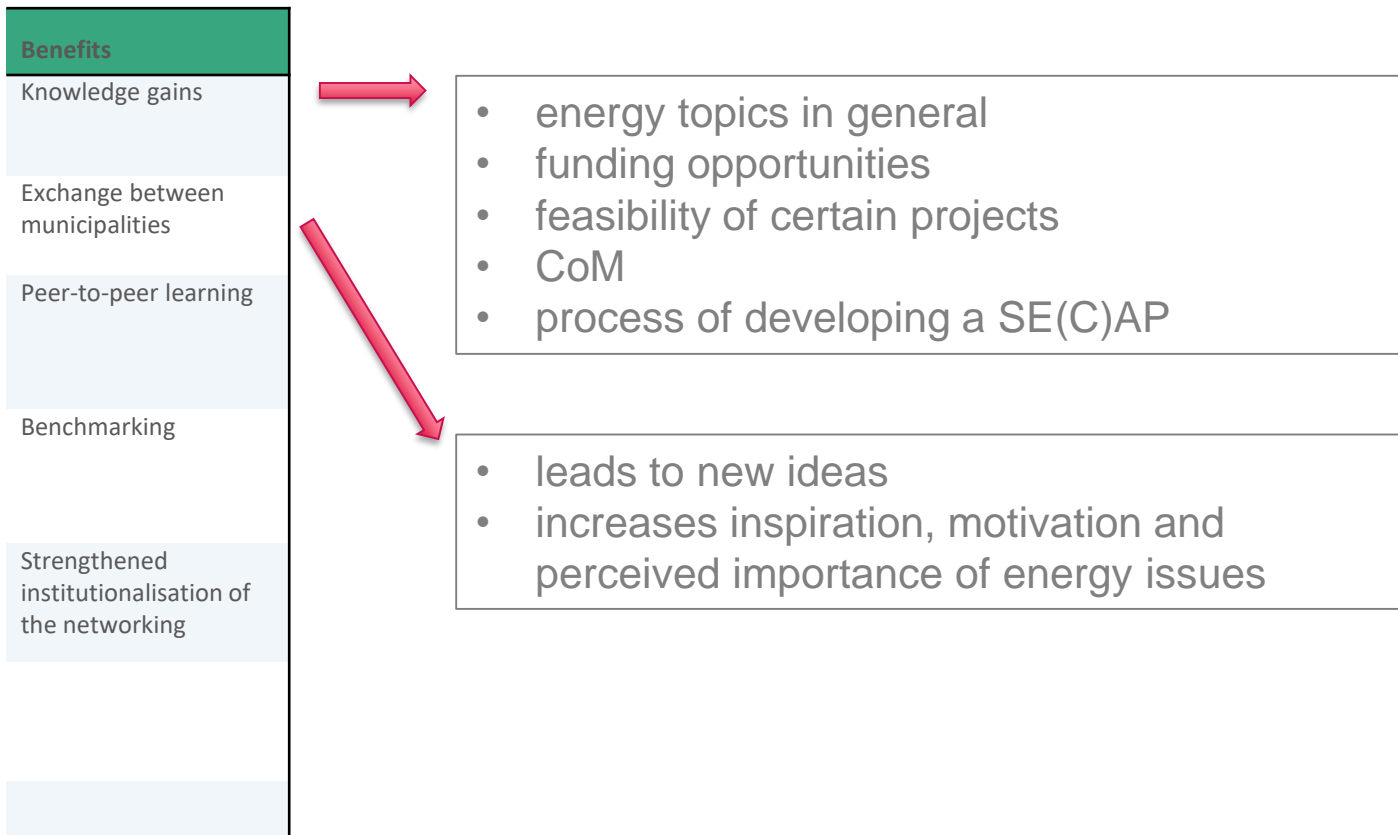
1. Network meetings
2. Trainings and capacity building measures
3. Peer-to-peer learning measures
4. Common target setting

➤ many municipalities and network operators would like to see the **cooperation in the network continue after the project period**

Results: Perceived benefits, shortcomings, drivers and barriers of the LMN approach



In particular, the **benefits** of the LMN approach were **highlighted very positively** by the municipalities.



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Benefits
Knowledge gains
Exchange between municipalities
Peer-to-peer learning
Benchmarking
Strengthened institutionalisation of the networking

In line with findings in previous studies, ...

... municipal networks tend to focus on soft mitigation measures (Bansard et al. 2017; Kern and Bulkeley 2009)



... benchmarking contributes to knowledge generation within municipal administrations (Askim et al. 2007)



... municipal networks act as facilitators of personal networking among local policymakers (Haupt 2019)

Results: Perceived benefits, shortcomings, drivers and barriers of the LMN approach



In particular, the **benefits** of the LMN approach were **highlighted very positively** by the municipalities.

Benefits	Shortcomings
Knowledge gains	Time-consuming
Exchange between municipalities	Mixed relevance of contents
Peer-to-peer learning	Difficulties in translating methodology to local context
Benchmarking	Short project duration
Strengthened institutionalisation of the networking	Lack of examples from concrete projects

Results: Perceived benefits, shortcomings, drivers and barriers of the LMN approach



In particular, the **benefits** of the LMN approach were **highlighted very positively** by the municipalities.

Benefits	Shortcomings	Drivers
Knowledge gains	Time-consuming	Experience of the network operators
Exchange between municipalities	Mixed relevance of contents	Mutual motivation
Peer-to-peer learning	Difficulties in translating methodology to local context	Willingness to collaborate
Benchmarking	Short project duration	Commitment of the mayors and the municipal administrations
Strengthened institutionalisation of the networking	Lack of examples from concrete projects	Clear communication of goals

Results: Perceived benefits, shortcomings, drivers and barriers of the LMN approach



In particular, the **benefits** of the LMN approach were **highlighted very positively** by the municipalities.

Benefits	Shortcomings	Drivers	Barriers
Knowledge gains	Time-consuming	Experience of the network operators	Lack of time and resources
Exchange between municipalities	Mixed relevance of contents	Mutual motivation	Administrative issues of municipalities
Peer-to-peer learning	Difficulties in translating methodology to local context	Willingness to collaborate	Difficulties in involving external stakeholders
Benchmarking	Short project duration	Commitment of the mayors and the municipal administrations	Limited language skills
Strengthened institutionalisation of the networking	Lack of examples from concrete projects	Clear communication of goals	Differences in size between municipalities
			Reluctance to share information between municipalities
			Covid restrictions

*"The idea to give tools [...] means that behind that you have human beings' availability of working with those tools. And typically, those people have no time. [...] Because I mean, at best, there is one person who is working full time for that. But that is an exception."
(FR)*

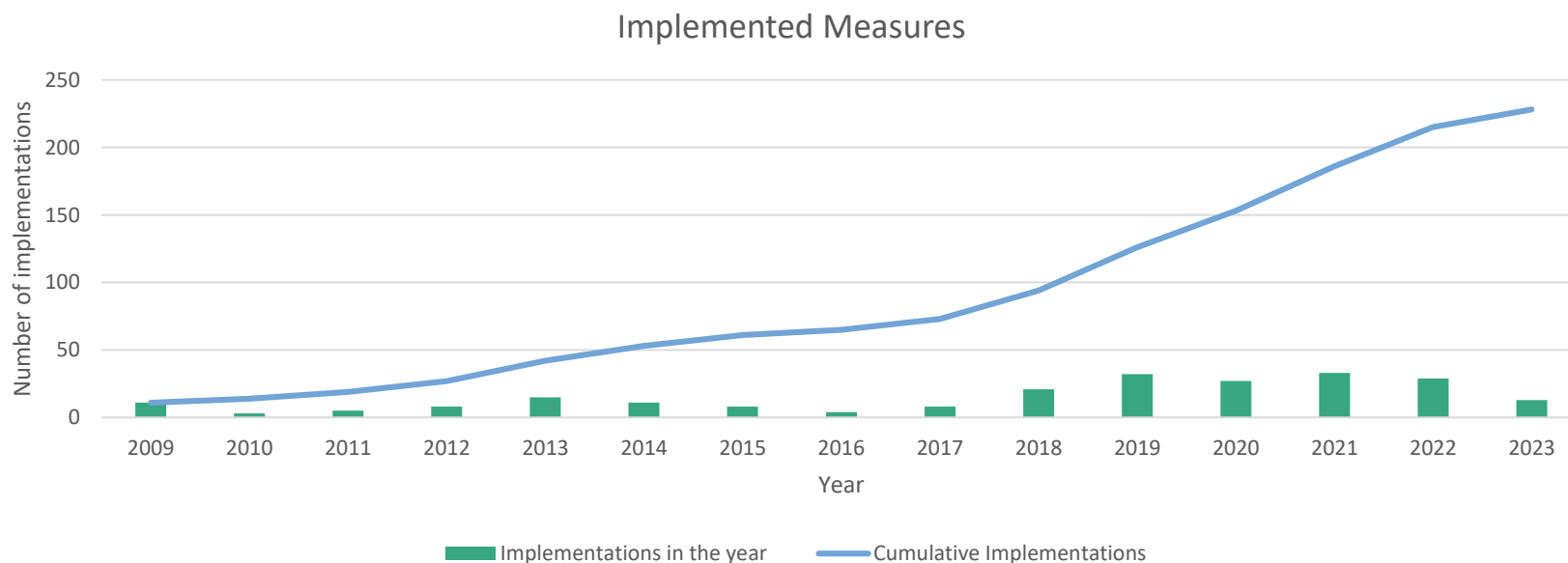
Results: Effects of the LMN approach on the implementation of climate protection measures in the municipalities



From the perspective of the interview partners PATH2LC has **positive effects**, in particular

- on the **development or update of SE(C)APs**,
- ... as well as on the **implementation of measures**

➤ However, also a few barriers for measure implementation were identified



Results: Category and annual savings of measures

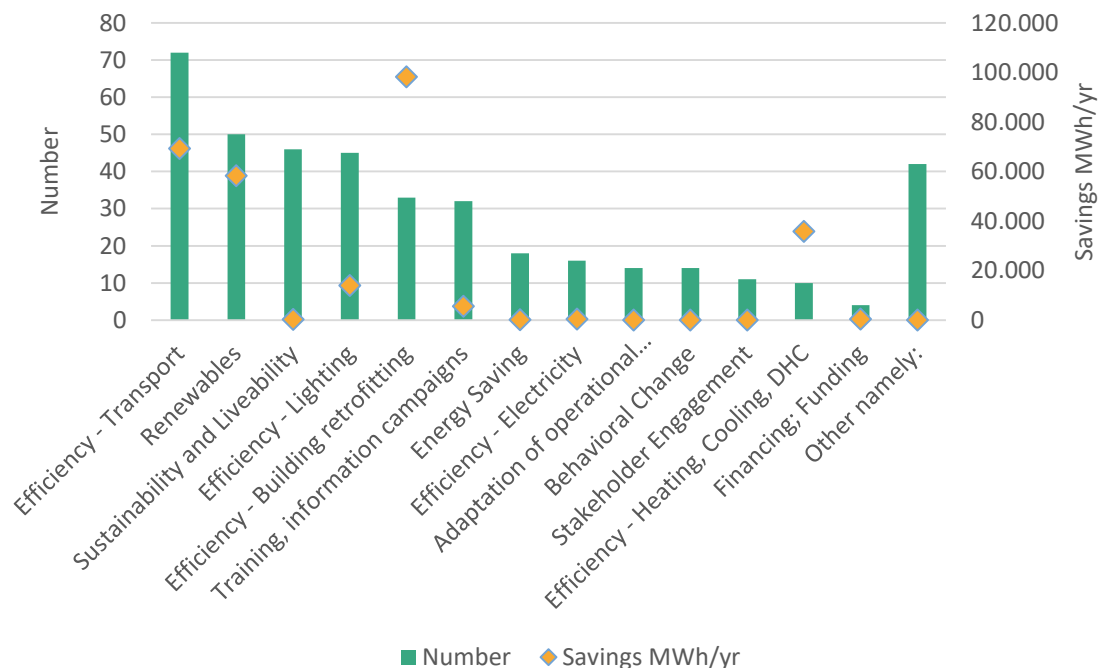


Efficiency measures and renewables and sustainability measures are often implemented

- clear focus on transport, renewables, lighting

Especially a few measures in the area of **building retrofitting** and **heating & cooling** lead to annual savings of over **135 GWh/a***¹

- It should be noted again, that savings were not indicated for all measures



*¹ This value applies to all savings from 2009

Results: Estimated savings throughout the project period



- In total, **75 measures were recorded** in the project in 2021, 2022 and 2023
 - The **8 measures for which savings were reported** during the project period saved a total of 7.7 MWh/year
 - The **median savings are 239 MWh/year**, resulting in total savings of the remaining 67 measures of 16 GWh/year during the project period
- Taking into account the primary energy factor (1.1 for fuel and 2.4 for electricity), this results in a **total primary energy saving of 30 GWh/year**
- The **median financial efficiency of the measure is 0.58 €/kWh**, resulting in a **total investment of 13.7 million €**

Conclusion and Outlook





- **LMN approach is viewed very positively** and **brings many benefits** to the municipalities
 - Goes along with **continuous implementation of measures** throughout the project period
 - **However:** Difficult to distinguish between direct benefits of the LMN approach and changing context factors that raised the importance of energy topics in general
- Especially a few measures in the area of **building retrofitting** and **heating and cooling** can generate large savings
- It appears that success often depended on **individual persons** in the municipalities, e.g. top management of a municipality, network operator
- Because of **limited resources** in the municipalities, administrations often lack structures that facilitate the anchoring of the LMN approach
 - Only 22% of the implemented measures received funding → Relevant future topic
- In addition, PATH2LC's **project lifetime of three years** was rather short - processes often take a long time, especially in municipalities
 - Results obtained in this study make it possible to **tailor future projects with a similar approach** even better to the specific network participants, while taking barriers and challenges into account



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