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LESSONS FROM MUNICIPAL NETWORKS FOR MUTUAL SUPPORT: EMPOWERING MUNICIPALITIES TO LEAD THE TRANSITION TOWARDS A LOW-CARBON SOCIETY

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Overview

Municipalities play a crucial role in the transition to a low-carbon society. To foster the transition process on the local level, the EU introduced the instrument of Sustainable Energy (and Climate) Action Plans (SE(C)APs). However, many municipalities have just started the process of setting up such a plan and thus have little experience in the implementation of the defined measures. Furthermore, challenges arise due to the complexity of the transition process, including the involvement of multiple stakeholder groups, a wide range of topics, differing targets, long project durations, and market dynamics (Strasser et al. 2018). In response to these challenges, more effort is required to support municipalities in drafting SE(C)APs and to implement respective measures required for achieving the climate and energy targets in the EU. To empower municipalities and to fully utilise their potential in the transition to a low-carbon society, the PATH2LC project brings together European municipalities on regional and international levels. The core of the project is the 'Learning Municipality Network' (LMN) approach, which emphasises close cooperation between municipalities through regular, organised, and moderated meetings that include expert input and peer-to-peer learning. The approach is being implemented in municipalities in five established networks in five countries (France, Greece, Italy, the Netherlands and Portugal). The aim of this contribution is to evaluate the process and outcomes of the LMN approach and provide recommendations for the development of future projects that consider employing a similar approach.

Methods

We evaluated the effectiveness of the LMN approach in the five networks through two types of monitoring: socio-scientific and technical. The socio-scientific monitoring aimed at analysing the perception of the LMN approach by the participating municipalities and the local partners moderating the network. To this end, we conducted five guideline-based online-interviews with the moderators of the networks. Furthermore, we provided adapted interview-guidelines to the local partners to conduct 16 further interviews with stakeholders from the network member municipalities who were actively involved in the network process. All interviews were carried out between December 2022 and March 2023, during the final year of the project, and lasted between 20 and 90 minutes. The technical monitoring aimed at assessing the progress of each network in terms of the implementation status of measures defined in the SE(C)APs. This involved an annual online survey of representatives from each network member municipality on the status of implementation of energy efficiency measures. We recorded the measures implemented, including energy savings, increase in the share of renewable energy and reduction in CO_2 emissions.

Results

The results of the socio-scientific monitoring indicate that the LMN approach applied in the PATH2LC project has yielded benefits for local climate change ambitions. The involved networks and municipalities perceived positive effects of the network approach on the implementation of SE(C)AP measures, knowledge creation and spill-over effects such as extended networking on climate-related issues within and across the participating municipalities. However, barriers to the successful implementation of the LMN approach were reported to arise from the involvement of municipalities with different characteristics, contexts and needs, limiting the applicability of the inputs and tools provided. Other barriers stated were the restrictions imposed by Covid,

which affected networking in the early stages of the project (project duration: September 2020 - August 2023), as well as the lack of human resources and the risk of discontinuing the networking process across electoral cycles. In terms of technical monitoring, 371 measures were reported in the survey, of which 265 measures are part of a SE(C)AP and 71 measures are not part of a SE(C)AP. The results show that measures have been continuously implemented in recent years. In particular, efficiency and renewable energy measures have been implemented. Fewer measures have been implemented in the areas of heating and cooling, building renovation or social measures such as stakeholder engagement. In terms of final energy savings, the project has resulted in approximately 19 GWh/a saved annually, with the majority of savings and measures implemented in the electricity and transport sectors. Notably, a few renewable energy and heating and cooling measures have been found to generate significant savings.

Conclusions

In sum, it can be observed that the LMN approach implemented in the five networks of the PATH2LC project has facilitated the municipalities' pursuit of emission reduction targets. It contributed to the implementation of energy efficiency measures with most of the measures implemented belonging to the efficiency or renewable energy category. In particular, measures in the area of efficiency, renewables and heating and cooling did help to generate large savings. Going forward, potential future implementation of an organised networking approach in municipal networks necessitates careful planning and consideration of the unique characteristics and needs of the participating municipalities to overcome potential barriers. Furthermore, enhancing networking opportunities between municipalities across Europe can further support peer-to-peer learning and best practice sharing, promoting greater success in transitioning towards a low-carbon society.

References

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