



From policy to action: assessing the effectiveness of heating and cooling plans – a case study on heating and cooling plans of municipalities in Baden-Württemberg, Germany

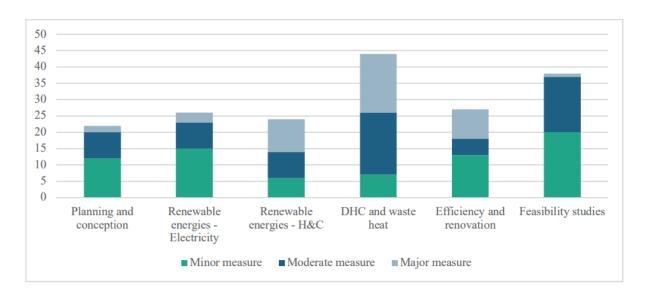
Strategic heating and cooling (H&C) planning has been recognized as an effective tool for driving the decarbonization of heating and cooling systems in urban areas. Consequently, the revised Energy Efficiency Directive (EED) now mandates municipal heating and cooling planning for municipalities with a population exceeding 45,000.

Similarly, in Baden-Württemberg, a federal state in Germany, a comparable law has been in effect since 2020, requiring the development of heating plans by the end of 2023. Approximately 100 municipalities in Baden-Württemberg are subject to this legislation. The main target of these heating and cooling plans is to devise action strategies and measures to enhance energy efficiency, as well as provide climate neutral heating supply. Notably, this law stipulates that at



least five measures must be specified in the heating plans, with implementation starting within five years after development of the heat plan at the latest.

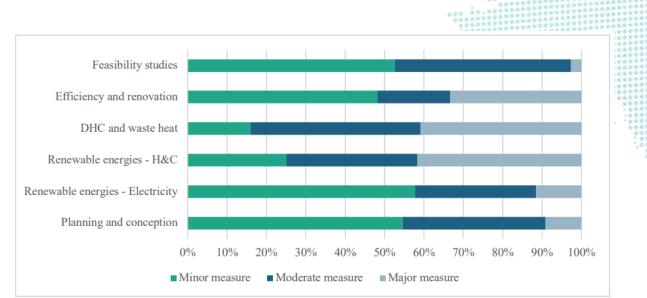
As part of the act!onheat project, existing heating plans were analysed and summarised. The paper examines the heating plans published in Baden-Württemberg up to December 2023, with a focus on the proposed implementation measures. The aim was to evaluate the effectiveness of these measures in reducing greenhouse gas emissions. To achieve this, we categorize the measures into six different areas of action and three levels of intensity.



Area of action of the measures (Source: Fritz et al. 2024)

The results indicate that the majority of measures are planned within the area of action District heating and cooling and waste heat, while the fewest measures are found in the area Planning and conception.





Levels of intensity of the measures (Source Fritz et al. 2024)

In the areas of action Increasing efficiency and renovating buildings and Feasibility studies, predominantly minor measures are employed, suggesting that the emphasis is not on improving energy efficiency and thus reducing heat demand.

The findings of this study can assist policymakers and stakeholders in developing effective heating and cooling plans, thereby facilitating the decarbonization of heating and cooling systems in urban areas.

Read the full paper here.

Fritz et al. (2024): From policy to action: assessing the effectiveness of heating and cooling plans - a case study on heating and cooling plans of municipalities in Baden-Württemberg, Germany