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HOCHSCHULE LUZERN



MASTER OF SCIENCE IN ENGINEERING

Technik & Architektur

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Master-Thesis Engineering, Fachgebiet Business Engineering and Production

Assessing the effectiveness of the Energiestadt Label







Analysis of the label's

impact

on a municipality



small municipalities and municipalities with more resources

Problemstellung

Rapid urbanization and the increasing environmental footprint of urban areas have resulted in recognising the importance of cities in achieving environmental targets. Certification schemes, such as the Energiestadt label, start becoming more common and provide guidance for local level action. Energiestadt specifically, certifies cities and municipalities which commit to a sustainable energy and climate policy. By now, the label is well-established and it currently counts more than 450 certified cities in Switzerland. Yet, the question remains: what is the added-value of these certification schemes and are the effective enough in supporting municipalities to achieve their energy and climate targets?

Lösungskonzept

The thesis investigates the overall structure of Energiestadt label and critically analyses the effectiveness of its indicators by assessing three areas: the design of the indicators' system and how this compares to other similar labels; the alignment of the indicators with the national strategy; and the performance of a municipality against certain Energiestadt indicators. The results suggest that the label's indicators are sufficiently aligned with the targets of the Swiss Energy Strategy, while more emphasis is required on indicators related to greenhouse gas emissions and climate change mitigation. The label consists of a large amount of indicators, as well as a high share of qualitative indicators in comparison to other certifications, which risks the label's simplicity, requiring more effort and competence for the certification process. The label is dominated by indicators which

evaluate the presence of plans and procedure, rather than the environmental performance of a municipality. In practice, this offers great support to smaller municipalities, which might not have the knowledge and resources to properly develop and monitor their energy and climate targets. However, for more advanced municipalities the added value of the label is low. Additionally, this could lead to a case where municipalities receive the certification without being truly sustainable. The thesis concludes with the recommendation of a set of indicators for the assessment of more advanced municipalities with emphasis on performance indicators. Ultimately, the decision for a municipality to acquire the label depends on the value it provides over the costs it creates. To be relevant for the local policy, Energiestadt needs to be continuously developed and act as a progressive force for the local environmental targets.

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