SUMMARY OF THESIS

Legal, Economic and Engineering Aspects of Climate Protection and Energy Efficiency in Buildings: An Analysis of Energy Poverty in Hungarian Residential Building

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ABSTRACT

Energy poverty refers to the state in which a household does not have adequate access to essential energy services within their residence, such as heating, cooling, lighting, and the usage of appliances. Energy poverty is a widespread issue affecting not only Hungary, but also Europe and the rest of the world. This problem arises from a combination of insufficient energy efficiency and ongoing climate change. This report provides an overview of the vulnerability of residential structures in Hungary to energy poverty, including the underlying causes, strategies for mitigation, and future possibilities. The income level has a substantial influence on the extent of energy poverty experienced by households, which in turn greatly affects their health conditions. The thesis investigates the relationship between housing expenses, quality of life, and the composition of building stock in order to gain insights into the issue of energy poverty in residential structures in Hungary. Additionally, it analyzes policy and legal matters, emphasizing the difficulties associated with energy preservation. The study examines the expenses and benefits associated with various energy conservation techniques and their impact on household spending, in order to evaluate Hungary's economic outlook and challenges. The thesis also assesses the construction materials and technologies used to enhance the energy efficiency of Hungarian dwellings. Additionally, it provides case studies illustrating the role of engineering in enhancing the energy efficiency of dwellings in Hungary. The paper additionally assesses the physical and societal ramifications of energy poverty and proposes remedies to enhance the well-being of all individuals. The report provides Hungary with evidence-based policy suggestions aimed at reducing energy poverty and promoting the adoption of sustainable building practices. Ultimately, the thesis highlights the specific focus of the study on tackling energy poverty in residential buildings in Hungary. Additionally, it suggests research and policy alternatives.

The research analyzes different strategies for addressing the energy problem in Hungary. These thoughts emerge as a result of the intrinsic intricacy of the problem.

The examination of the survey results indicates a clear necessity for financial alleviation among individuals to effectively manage the increasing energy expenses. Widespread distribution of information on energy efficiency and proper energy usage is crucial, reaching all areas through individual or cooperative endeavors. The government ought to implement regulations and ensure their mandatory adherence in every household. Another potential avenue to explore is the implementation of technologies related to energy efficiency and illumination.

Authorities should develop and offer specific financial aid to low-income households to meet their energy requirements. These initiatives may encompass financial assistance for energy-efficient home renovations, discounted energy services, and financing to improve energy resilience among low-income households.

Since economic inequality leads directly to energy poverty, it is crucial to push for a fair distribution of wealth. To mitigate energy costs for those with low financial resources, it is crucial to acknowledge and resolve these unfair circumstances.

One can get knowledge about energy conservation, environmentally friendly behaviors, and energy-efficient items by engaging in workshops, community education programs, and outreach projects. Progress in science and technology offers incentives and subsidies to individuals who employ energy-efficient devices. We ought to give priority to the adoption of energy-efficient products, advocate for the utilization of renewable energy sources, and provide incentives for consumers to acquire energy-saving home appliances.