

Abstract

The aim of this doctoral dissertation is presentation of the relationship between energy management and sustainable development in cities with district rights in the Silesian Voivodeship

Environmental issues become more and more important presently. Continuous economic development significantly facilitates and improves the functioning and life of current societies. Unfortunately, this process still has a negative impact on the environment. Degradation of nature and air pollution have already reached critical level. Therefore all actions and initiatives aimed at improving the condition of the natural environment are really important.

Appropriate energy management plays a special role in this area. It is a complex and long process that requires commitment and exact preparation, implementation and supervision of all stages. Energy management includes key areas: are energy planning and energy security. Energy planning allows for efficient implementation of all energy related processes in the city and for improving energy efficiency in a particular area. Energy security is one of the crucial aim of proper energy policy implemented in cities. Assertion of constant level of energy security means permanent availability of various forms of energy contemporaneous at the same time consideration of rational and reasonable costs. Currently, energy security is part of the security of the state, which confirms that energy has become an inseparable element of the foundations of contemporary economy. Maintenance of energy security at an appropriate level also prevents the emergence of a very negative phenomenon called energy poverty. Energy poverty is the lack of access to energy defined as electricity, heat and gas.

Ecology and energy are elements which affect the competitiveness of cities. Contemporary local governments compete with one another in many areas, the most important for them is keeping residents on their territory and make their areas stand out positively from other municipalities. All ecoinnovations and ecological initiatives implemented in local governments are very positively perceived by internal and external stakeholders, they also are very important element of promotion. Self-governments just as enterprises and non-profit institutions, constantly have to shape their positive image and realize properly prepared marketing activities. More and more often popular concept is the social responsibility of local governments, which is more a duty than an additional form of public relations.

All these aspects are aimed at shaping and keeping sustainable development in cities, which contains three areas: ecological, economic and social. Sustainable development requires cooperation of entities representing various fields. It is also the involvement of local government authorities, enterprises, non-profit institutions, but also all residents. Education and forming conscious and pro-ecological attitudes are very important here. Caring for the environment must take place at all levels from the smallest to the most developed, this approach will also allow the observation of economic and social benefits.

The smart city is another very important issue. This concept defines the city as modern and intelligent, which considers assumptions of sustainable development. The functioning of the city is based on detailed processes using modern technology. The aim of this idea is improvement and increase of security in cities in different areas. The key role here is played by all innovations that significantly increase the quality and speed of implemented processes in cities

The analyzed literature and the detailed theoretical part of the doctoral dissertation allowed to examine 19 cities with district rights in Silesian Voivodeship. Each city filled the questionnaire, which included questions necessary to checking the hypotheses contained in the doctoral thesis. All hypotheses were confirmed and the inseparable connection between the energy economy and sustainable access in cities also was confirmed. Very helpful in this study was also a case study for the city of Częstochowa, which incredibly accurately approximated the entire process of implementing energy activities in the city.

The most important thing of doctoral dissertation is following conclusion: only properly planned, implemented and constantly controlled and modernized energy economy allows for efficient implementation of sustainable development principles in cities.

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