

Energy transition, a gradual transformation of energy system based on fossil fuels into system based on renewable sources, has already begun and will remain an important challenge for the next decades. It is also Poland policy and international obligation. However, the data shows that the current activities are not sufficient to meet set goals for renewable sources.

Grassroots socio-technical innovations offers different forms of generation and distribution of energy which may fasten the way to energy transition. They are studied in international debate in the fields of transition studies and (social studies of energy). According to literature, they can create a protected space for experimenting with both technology and the users' practices. Additionally, their new organizational forms create opportunities for democratization and wider participation in the energy sector.

The project contributes to the discussions on grassroots innovations, providing an in-depth analysis of Polish energy clusters: very diverse, locally emerging initiatives that aim at local generation and distribution of energy from various renewable sources. The description of Polish clusters will be based both on in-depth case studies and on a survey study among cluster participants. Supporting methods will include expert interviews, analysis of reports, and observations of industry events.

The project contributes to a better understanding of the potential of bottom-up socio-technological innovations in the energy sector. It proposes to develop transition theory by introducing the concepts from the actor-network theory (ANT), which emphasize the interaction of social, technological and natural actors. Additionally, it uses the concept of imagined future which explore the role of expectations in investment decisions.