## Regional factor: role of regional renewables for decrease national energy intensity

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**Keywords:** energy intensity, renewable integration, sustainable energy community

## **Abstract**

In Latvia are supported regions and municipalities practically in every country (also in the developed ones). Support rendered to the economy of such regions is of great importance for the development of the energetic basis. It is fairly possible to promote in a complex way the economic and energetic development of the region based on optimal use of the renewable energy sources (RES).

Energy intensity is important indicator for recognizing supported region. By decreasing energy intensity these local regions will to improve national energy intensity indicators. Important role for developing backward regions has involved local RES. Research of the sustainable energy community (SEC) methodology shown that integration of renewables in the backward regions created additional efficiency in the national level.

The potential of the renewables depends on natural resources and the climate zone of the region. In such territories of northern Europe as Latvia, where the potential of solar and wind energy is not great, deeper research is made of bio fuel. The main natural resources in Latvia in the experimental supported region have forests (about 57%) and agricultural lands (about 30% of the territory). Integration of RES involving in the regional joint energy stock companies also production and processing different RES is of great important for developing of the backward regions.

A methodology of a SEC is being studied for the implementation of the renewables in developed supported regions and municipalities, as well as in underdeveloped countries. The first phase of the model is to create a SEC Board. The capacity building phase can be seen as continuous work that corresponds to the demands and needs arising in the area. They can be divided into two main categories: awareness and capabilities. The phase of the Sustainable Energy Action Plan (SEAP) starts with the accumulation of diverse project ideas, including the implementation of the renewables.

Introduction of the Methodology of a SEC has started in Latvia. The possibilities to develop sustainable energy supply there in accordance with the SEAP of the SEC, which provides for wide implementation of the renewables, allow purposeful formation of a SEC. On the basis of local natural resources introduction of the SEC Tool kit will raise the reliability of energy supplies.