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## **UPSCALING ENERGY EFFICIENCY VIA ENERGY COMMUNITIES**

### **Abstract:**

The European Union promotes the concept of energy communities as a tool for achieving ambitious goals in decarbonisation of the European economy. Potentially, energy communities can bring multiple benefits; they are seen as a way for more efficient power sharing and decentralization and decarbonisation of energy generation as well as increasing locally produced renewable energy.

The aim of the article is to examine establishing and operation of energy communities in the context of the Czech Republic. The article explores current and upcoming legislation on energy communities, the first of its kind that would set the regulatory framework for energy communities for a foreseeable future.

The article describes case studies of energy communities with regard to their implementation in the conditions of the Czech Republic. Case studies focus on technical solutions for modern and renewable energy sources suitable for operation in energy communities.

The article concludes with a summary of barriers, e.g. in the field of property rights and their possible solutions, and benefits of energy communities implementation, such as better distribution of investment costs and the possibility of implementing larger projects, subsequent savings in energy costs, facilitation of renewable energy sources and decentralization of energy production. The article also discusses the necessary steps for removing the barriers, which would subsequently accelerate the implementation of energy communities.

### **Keywords:**

Energy community; Energy production; Energy generation; Energy Decentralization; Decarbonisation

**JEL Classification:** D00, Q42, Q43