

2nd Smart Villages Taskforce Meeting – Czech Republic

Purpose of the meeting

Community energy (energy communities) is a natural part of the development of rural areas and is currently a "hot issue" for the development of them. The development of RES is essential for local energy utilities, and the Czech Republic (similar to other EU countries) is changing its national energy system from a centralized to a combination of central and decentralized energy utilities. Local action groups in particular act as advisors in this.

As it was mentioned above, Energy communities (EC) represent currently a much-discussed topic in the CR, especially because of the energy independence and resilience of communities. At present an amendment to the Energy Act of the Czech Republic is being drafted which enables EC formation. National network of local action groups is supported to provide advice in this area. The creation of the EC is supported through cohesion policy and the national programme. The purpose of the meeting is to collect the first experiences of small municipalities with community energy and to give recommendations to the Ministry of Regional Development, Ministry of Industry and Trade and Ministry of the Environment) to further specify the conditions for development of the EC and for the dissemination of good practice in the regions.

Date of the meeting

September 26, 2023

Location

Museum of photography and modern visual media, Jindřichův Hradec

Participation

When selecting and inviting participants, we focused on balance in the QH environment, mainly participants from the South Bohemian municipalities and LAGs were invited. The meeting was attended by the representatives of the state administration (Energy Regulatory Office), research organizations, municipalities, LAGs, innovation centres, companies.

Our goal is to take a holistic view on the topic of energy resilience and decentralisation, esp. energy communities. The task force meeting was attended by 17 members, 4 of them online (see attend lists).

Main outcomes & lessons learnt (including deviations from initial plan)

Knowledge from the practice:

The issue of the energy communities (EC) was discussed from the point of view of the interests of municipal energy in particular. The greatest interest is focused on

photovoltaics and wind power plants, however, it was recalled that there are significantly more possibilities, especially when it comes to biomass, both field and forest biomass. Energy utilization of waste also offers a great opportunity. Due to the previous support of e.g. biogas stations, which are mainly owned by farmers, this type of renewable energy has spread a lot in the past, but it has a number of negative effects. The external negative phenomenon is mainly the frequent smell (despite all efforts, it is usually not possible to eliminate it), it is also still true that crops unsuitable for the soil, especially corn, are still grown for the needs of biogas stations. Heat from e.g. sewage treatment plants or manure pits is not used

Plans for the village of Brumovice and its surroundings were discussed in great detail, where a relatively extensive community energy system is being prepared. This was introduced by Mr. Ullmann. Practical experience from technical implementation and negotiations with representatives of the distribution system are very valuable, they are also used in the creation of legislation - in the upcoming amendment of Act 458/2000 Coll., according to RED III. It seems that a number of community energy companies will be established in southern Moravia, probably in the Highlands. Mr. Ullmann described in detail the use of FVE on fallow land, the use of biomass, for example, from the cultivation of vineyards, where a large amount of usable biomass is produced.

The situation is more complicated, for example, in the Ústí Region, where citizens and municipalities are used to a sufficient supply of energy from power plants (both electricity and heat) and are not very proactive. Coal companies, which see the installation of renewable energy as an opportunity to replace the existing business, show more initiative.

The city of Jindřichův Hradec also started thinking about renewable energy after a visit to a partner German city, which is also starting to create an energy community in part of its territory. In Jindřichův Hradec, the situation is a bit more complicated, because the "panel" construction is connected to the central heating network, which is not quite common in Germany.

The price calculation of potential energy communities was also discussed. Mr. Ullmann is intensively dealing with this, and this is also calculated as a model at the Czech Technical University. The theoretical models presented by Lukáš Janota are quite complex, but the calculated solutions are quite expensive. The real case of Brumovice and its surroundings is calculated and negotiated in such a way that the resulting energy community is not a technological burden for the distributor, there is no risk of formal "overrunning" of one participant by another/others (decision based on the share of voting rights) and this system of production and consumption is financially advantageous for the community and at the same time is not a financial burden on the distributor.

Recommendations

Conclusions and recommendations are formulated mainly based on experiences from Brumovice and the Ústí Region.

In addition, a few more details from Brumovice:

In Brumovice, a large company, a major local furniture manufacturer with a large volume of usable waste, is involved in the energy community. However, within the community, the firm does not have the rights to "dominate" the community. A big obstacle to the development of communities is the blocking of reserve power. There is often very inappropriate behavior, recently there are even people who block power at the distributor without considering its use, they just want to block community energy or have them pay for the removal of this block by those interested in community energy. After the first negative experiences, a provision of the Energy Act is being prepared, which will allow the Energy Regulatory Office, for example, to lift the blockade after half a year of inactivity.

In this sense, the Energy Regulatory Office is also working on new rules. Ing. Krčová invited the participants to share experiences, insights and comments on the development of legislation. In the past, energy in the Czech Republic was centralized to the maximum extent possible, which currently causes greater difficulties than elsewhere in the transformation of the energy system from a central to a central-decentralized one. In this context, the opportunity for small modular nuclear reactors and the perspective of their deployment in a ten-year horizon were also discussed.

In Brumovice, they decided to build an energy community in addition to the company's participation in the use of municipal property - the installation of energy sources on municipal property. Subsequently, other local businessmen and churches joined, and finally citizens can join. Only in this way is the community sufficiently stable and at the same time quick decision-making is possible.

It turns out that the prerequisite of community energy is community life - where there is already a community, it is possible to arrange an energy community as well. Even if it is primarily a rational and financially advantageous solution, the prerequisites are above all where a community-society already exists. Therefore, there are great prerequisites for community energy in South Moravia, it is much more difficult to create community energy in northwestern Bohemia (tried).

Recommendations to the Ministry of Regional Development and the Ministry of Industry and Trade:

The experiences of several municipalities in the Czech Republic, including Brumovice, are unique and it is very necessary to spread the knowledge gained (both positive and negative) from the creation of energy communities so that they are available to the widest possible range of municipalities. Interest in subsidies for the establishment of community energy is growing, but experience sharing is needed to avoid unnecessary losses.

It turns out that not only direct support for decentralized energy is needed, but also support for the creation and maintenance of community in

municipalities/smart villages. This is an incentive for the subsidy policy of the Ministry of Regional Development, or regions.

Details from the Ústí Region:

In addition to innovation centers, energy centers are also emerging in the regions of the Czech Republic - this is how the energy center of the Ústí Region was also created recently. Representatives of regional innovation and energy centers feel the state's slowness and insufficient ability to act in the field of new energy. Therefore, the representatives of the innovation and energy centers of the regions agreed to sign a memorandum on mutual cooperation - this should happen in November 2023 in Brno. They will strive to coordinate their activities between / among regions, without the participation of the state.

The Ústí Region currently has 133 regional contribution organizations - the goal is to use their potential for RES. It seems that the first energy communities can be established in the region through the cooperation of contribution organizations.

"Go to" zones are being prepared in the Czech Republic, similarly to other EU countries. However, the method of preparation is not suitable - they are created by mapping the existing restrictions and "go to" are only those zones that "do not hinder anything", which makes any construction of RES completely impossible. It is obvious, for example, that it would be possible to obtain a relatively large amount of energy from wind power plants in the Ore Mountains, however, for reasons of nature protection, a "go to" zone is not planned here.

Recommendations to the Ministry of Industry and Trade, the Ministry of the Environment and the Ministry of Regional Development:

Speed up and facilitate the implementation of "go to" zones. Experts in the field of decentralized energy warn against a lax approach to this issue. It is also recommended to keep atypical energy communities in mind when preparing legislation, such as communities of self-government's contribution organizations.

Conclusion

The meeting of the Czech Republic task force resulted in a number of recommendations for the state administration and the sharing of experience gained from the creation of the EC. All these recommendations will be addressed to the ministries and will be incorporated into the "cards" of the specification measures of the Implementation Plan for the Concept of Smart Cities - resilience through SMART solutions for municipalities, cities and regions. An update of the Implementation Plan is planned to be prepared by the Ministry of Regional Development till the end of 2023.

Next steps

The recommendations will be presented at the MoRD working group for smart cities, personally handed over to the nominated ministries and Energy Regulatory Office. They will also be published on the website of the Ateliér Česko and on social networks and submitted for publication on the website of the Smart Rural 27 project.

Supporting documents

Preparatory study for the event (attached) was sent to participants with conclusions, too.

Presentations from the meeting and photos are attached in the separated folders.

The event in pictures





Michal Kozár, Mayor of Jindřichův Hradec

