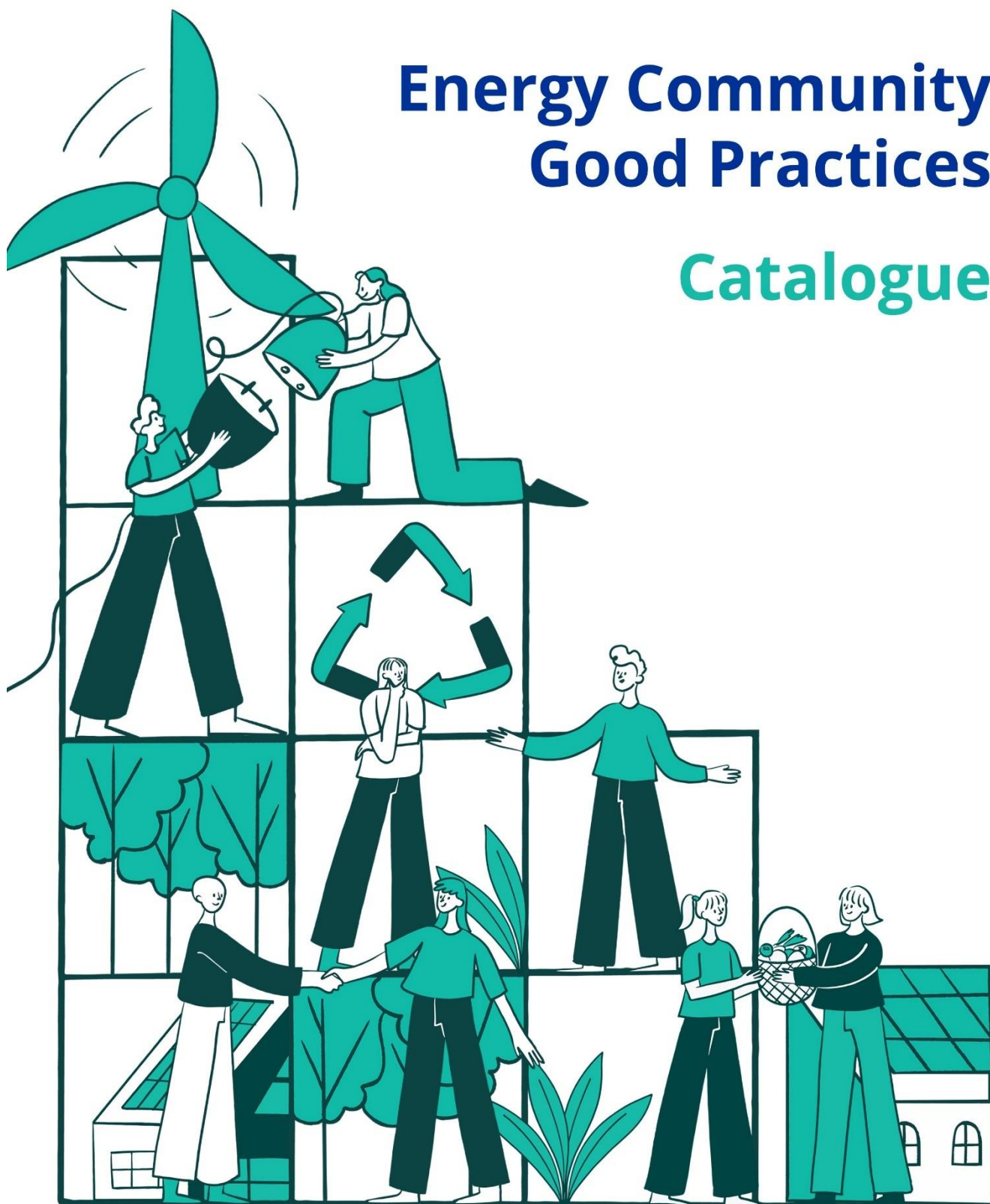


# Energy Community Good Practices

## Catalogue





# Case Studies Catalogue of Energy Community Good Practices

PP12- NEK accepted the invitation of the PP-OER guarantor within the activity A.T.2.5 to develop a joint tool for the purpose of raising public awareness and this document is a contribution to the future created Catalogue of Energy Community Success Stories D.2.5.1 for Slovakia.

Each success story should provide an easy-to-understand overview of effective energy communities with an explanation of what they wanted to achieve, how they did it and what they achieved. These stories should also draw attention to important people involved, such as residents, local government officials and service providers.

Such a story is also the establishment of a new energy community TEEK in the Trenčín region in the 2nd period of 2024 with details in the following text.

It also contains information on how the community was planned and built, what technologies were mastered for use and how financing is being prepared. It presents the problem of establishment and organizational security, as well as criteria for future sustainability.

## Study case title

Building a municipal energy community TEEK Trenčín Energy Environmental Cluster

## General coordinates

Year of foundation:	<b>2024</b>
Area:	Trenčín Region, Slovakia
Specifics:	Energy Community
Technology:	CES + RES (conventional energy source and renewable energy source)
Average annual electricity consumption:	undefined
Initiative:	PP12 – NEK, Bratislava + TEEK Trenčín
Contact details:	Opatovce nad Nitrou 367, 97202 Opatovce nad Nitrou
Website:	<a href="http://www.teek.one">www.teek.one</a>

## 1. Overview (max. 1/4 page)

- Please provide a brief description of the good practice, including the reasons for establishing this Energy Community, the challenges it aimed to address (such as energy poverty, sustainability or grid independence) and the broader context (including local energy needs, regulatory environment and community dynamics). Additionally, outline the primary focus of the community (for example, renewable energy, energy efficiency etc.) and any other relevant details.
- Specific Goals: Outline the specific objectives the EC aimed to achieve (e.g., lowering energy costs, increasing energy autonomy, reducing carbon emissions).
- Expected Outcomes: What were the anticipated benefits for the community and stakeholders involved (e.g., environmental, economic, social)?

Case study title:

**Establishment of a local energy community in the municipality: Opatovce nad Nitrou 367,  
97202 Opatovce nad Nitrou**

Under the professional auspices of PP12-NEK, a new energy community was established and began training in the municipality of Opatovce nad Nitrou, at the initiative of the Trenčín Energy Environmental Cluster TEEK and through its regional center in Opatovce nad Nitrou.

During the months of September and October 2024, partners - community members met here in the environment of the municipal office (local government) and jointly ensured the preparation and launch of activities, mainly in the following steps:

1. Creation and contractual mutual arrangement of the membership and relationships  
and competencies in the composition: 4 businesses, 1 school, 1 municipality, 1 apartment building (apartment management)
2. Contractual relationships and determination of the input offer capacity of energy production and supply in the municipality for the prepared consumption points

3. Agreement on consumption points in the municipality and connection to the local distribution system, processing of legislative permits from the relevant state authorities
4. Preparation for the launch of operations in the second half of 2025
5. Provision of management, professional staff for management and monitoring of the EC system and the method of future administration.

To launch the activity, the already proven and jointly defined procedures in the NRGCOM project (from activities A.T.1.1. and A.T.1.2) were used in the matter of legislative bases, prescribed procedural and official acts of establishing and registering an energy community in state and local government bodies.

The establishment is based on the need to solve the stable production and distribution of energy in the given municipality and its surroundings for the founding members, but also for future other potential users, with the aim of overcoming the shortcomings of the central energy supply, sustainability and partial independence of the network and the broader context, including local energy and environmental needs, regulatory environment and appropriate dynamics of the energy community in the municipality of Opatovce nad Nitrou.

The expected benefits consist in the coordination and use of the local base of renewable energy sources (RES) and reducing dependence on supplies from central energy sources, dominantly based on conventional energy sources (CES).

## Success Factors (max. 1/2 page)

- Key Stakeholders: Identify the main actors involved (e.g., residents, local authorities, service providers, NGOs, technology providers).
- Community Engagement: Describe how the community was involved in the decision-making process and how stakeholders collaborated throughout the project (e.g., consultation, voting mechanisms, educational programs).
- Planning and Design: Detail the planning and design phases, including the decision-making process, technical aspects and any regulatory or financial considerations.
- Technology and Infrastructure: Address the technologies and infrastructure implemented (e.g., solar panels, wind turbines, energy storage systems, smart grids).
- Financing: Explain the financial model, including funding sources, investment strategies and cost-sharing mechanisms (e.g., grants, private investment, community contributions).
- Timeline: Provide an overview of the project timeline, from conception to implementation and beyond.

On November 5, 2024, the participants met at a joint founding meeting in Opatovce nad Nitrou in the local municipal Cultural House, also in the presence of professional guests from the Association of Construction Entrepreneurs of Slovakia (ZSPS) and the mayor of the village, Mrs. Melišková.

The founding members, namely companies operating directly in the given region:

ECOWA, a.s,

POH, s.r.o.;

MAVA plus s.r.o.;

BIC Consult.,

Municipal Office in Opatovce nad Nitrou,

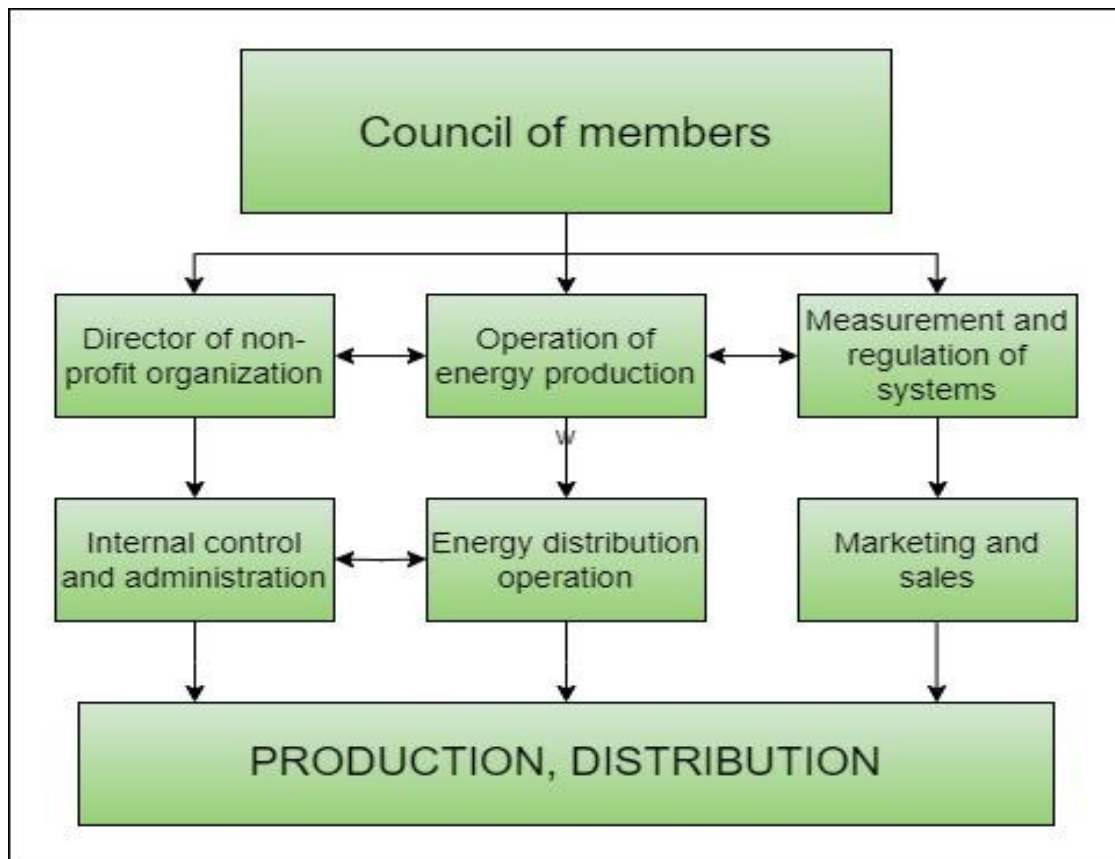
Primary School in Opatovce nad Nitrou

Administration of a multifunctional apartment building in the village

jointly solved several initial organizational, but mainly technical problems such as the energy audit of the village, energy management, waste management or possible power and distribution points in the village for the future functioning of the community.

Currently, legislative registration and obtaining the necessary official titles for the launch and functioning of the created energy community TEEK are underway.

The founding members of the energy community, under the patronage and professional leadership of PP12 – NEK, decided, in accordance with the regulations of the Slovak Republic, to create a single organizational structure as an interest association of legal entities and to apply the organizational chart:



Currently, the method of financing is applied during the establishment, both by creating a common internal financial fund from the resources of the founding members (contributions and loan deposits of community members), and from a short-term bridging loan from a bank and a promise from the Ministry of Economy to participate in the prepared grant scheme through cluster projects.

The technology and infrastructure are designed both for connection to the KZE and in proportion to the involvement of approximately 35% of the share of RES sources, namely photovoltaics, solar panels, ground pumps, biofuels and smart grids.



## 2. Outcomes and Impacts (max. 1/4 page)

- Please describe the social outcomes (e.g., community empowerment, job creation) and economic impacts (e.g., cost savings, local economic benefits).
- Please describe the Energy Performance outcomes (e.g., amount of renewable energy generated, reduction in energy bills).
- Highlight the environmental benefits (e.g., CO2 emissions avoided, reduction in fossil fuel dependency).

As part of presenting a case of good practice and an already proven procedure for preparing and establishing a specific energy community at this location, PP12- NEK in cooperation with TEEK Trenčín publishes brief data based on the published form from the project agenda and NRGCOM emails in the developed form:

Preparation and establishment of a local energy community with the involvement of the municipality:

- creation of a membership: 3 companies, 1 school, 1 municipality, 1 apartment building
- contractual relations and determination of the input offer capacity of energy production and supply
- agreement of consumption points in the municipality and connection to the local distribution system
- preparation for the launch of operation in the second half of 2025
- provision of professional staff for management and monitoring of the EK system.

The environmental benefits can be seen both in the reduction of total energy consumption and in the involvement of a significant (up to 35%) share of RES in the functioning of the local network and the balance of consumption, especially during the summer months.

This energy community plans to directly create the positions of 2 managers and 3 service and sales/customer services workers.

Due to the stage of the establishment of the energy community, no relevant data on the economic, energy or financial efficiency of operation and energy production can yet be reported.

Theoretical modeling of the energy production and distribution system from the energy community for own use and sale to other customers demonstrates an increase in efficiency and, above all, the stability of energy supplies in the range of an increase of approximately 15 - 20% compared to the current state, calculated by the sum of all previous energy consumption of the individual founding members of the energy community in practice.

### 3. Lessons for Others (max. 1/2 page)

- Obstacles Faced: Identify any challenges or obstacles encountered during the project (e.g., technical issues, regulatory hurdles, funding difficulties).
- Solutions: describe how these challenges were addressed or overcome.
- Key Lessons: Share insights that could help others replicate or adapt the project (e.g., best practices, innovative approaches, necessary conditions for success).

During the preparation and establishment of the TEEK energy community, the following significant problems arose, which may be a good lesson for other communities and partners of the NRGCOM project, namely:

**Problem No. 1:** Determining the competencies and adopting the Statutes of the TEEK energy community (as an interest association of legal entities according to Slovak legislation) and the subsequent relatively lengthy assessment and criticism of the internal rules of joint work, participation in financing and subsequent division of financial results, determining the processes of energy production and distribution, all of which required lengthy mutual consultation.

**The output must be consistently set founding and operational documents, with the determination of competencies, rights and obligations, joint**

**resolution of conflicts and sanctions.**

**Problem No 2:** Setting the idea of the future sustainability of the functioning of the TEEK energy community. Here, internal regulations on assumptions, future production plan and expected sales and of course the needs and expectations of not only members, but also customers - consumers of energy production from the TEEK community must be enshrined in writing. Presenting the idea of the energy community must appear in business policy, public relations and promotion of the community in the public in the long term.

**The output must be the processed and adhered to Code of Ethics of the energy community, Rules of Business Policy and detailed procedures of**

### **Sales Techniques.**

**Problem No 3:** Search and sufficiently dynamic motivation and determination of claims for management and operational personnel with the application of mentoring methods, professional training and rules of future career progression to ensure the stability of the energy community personnel for a long period.

**The output are documents - training techniques, detailed verification of professional knowledge and skills of persons and the establishment of internal regulations for their personal and functional application and motivation.**

## 4. Conclusion (max. 1/4 page)

- Recommendations: Provide recommendations based on the case study for other Energy Communities.

Please attach one relevant picture for this good practice example.

**Recommendations based on the implemented case study of the establishment and preparation of a new energy community TEEK** in the municipality of Opatovce nad Nitrou are as follows:

- Subordinate the establishment and initiatives to a suitably selected place (locality) for the establishment of the energy community
- Patiently monitor and evaluate objective data in the long term (also based on the results obtained in past economic accounting periods and the implemented subscriptions of potential participants - community members) for good planning and determination of the starting points of the project for the establishment of the energy community
- Very precisely specify the operating model and the powers and obligations of community members (including co-financing rules and sanctions for possible non-compliance)
- Search for and professionally prepare in advance a truly capable management not only for the operation of the energy community, but also for the social and professional representation and representation of this community in the public.

### **Illustrative image of a proven approach to organizing an energy community in practice:**

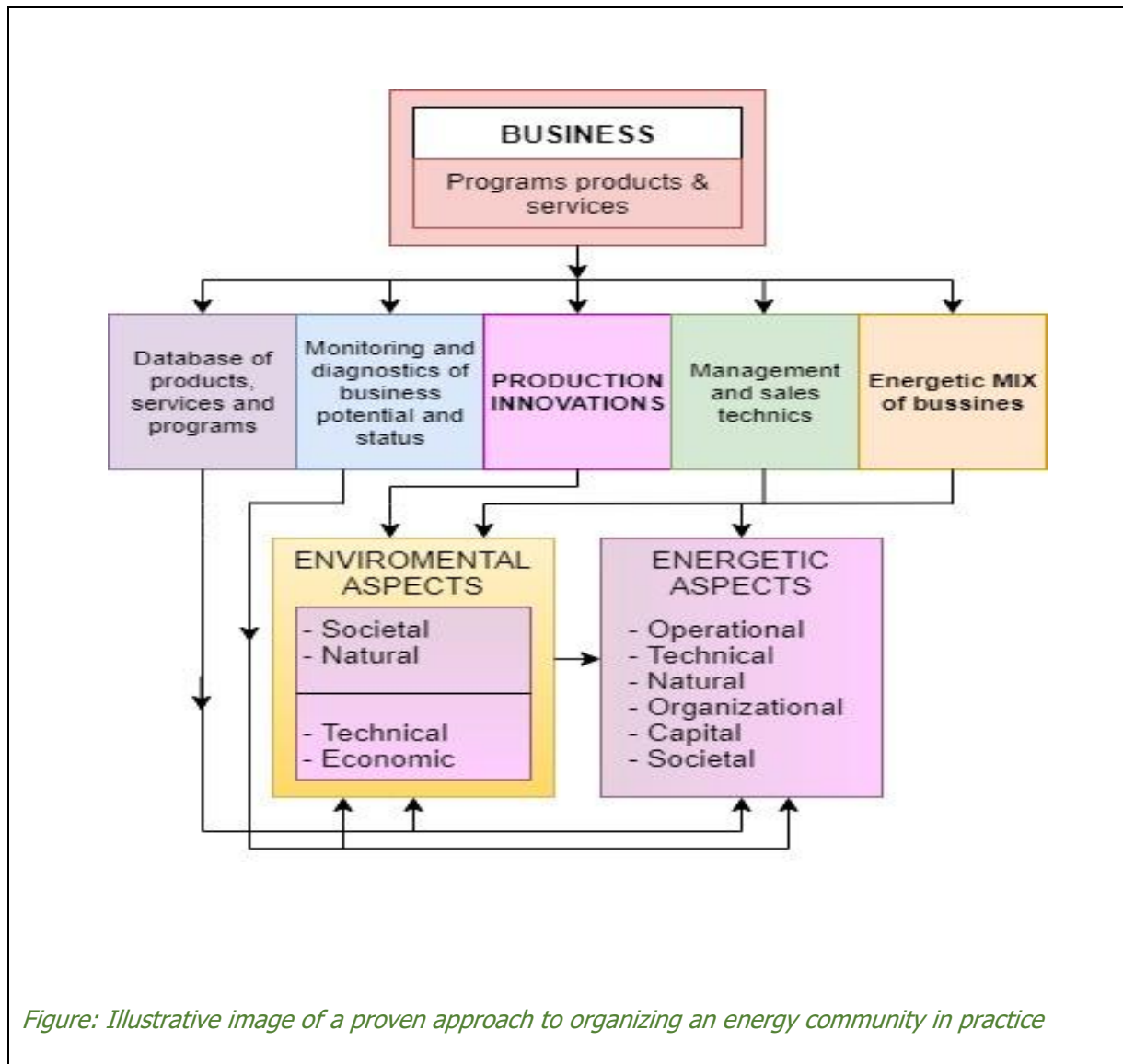
The image presents a model of the planned functioning of the energy management of the TEEK energy community in the synergy of energy and environmental aspects in member organizations and industrial enterprises and their joint innovation potential as a contribution to the development of energy in the municipality and its catchment area.

This is an important understanding of the industrial behavior of the energy community, the main goal of which is and will be to produce goods (energy) and services (distribution and service) with the highest possible economic effect (i.e. the lowest production and operating costs with the highest sales at a given time and coverage area).

However, the need to pay attention to energy and environmental aspects in energy production is actually an unfavorable circumstance and limitation, paradoxically also an indispensable need for the growth of the innovation potential and sales success of this energy community.

One of the most effective changes, according to these principles, appears to be the fundamental management of corporate production, management, distribution and operational processes in the energy community.

To understand the basic connections of this synergy, the founders of the TEEK energy community, under the professional auspices of PP12-NEK, created their own working model in the picture, which has been and will be the object of deeper research in the field of modern energy sources for industry.



**Project completion date:01/2024-06/2026 Project 2st period completion date: 07-12/2024**  
 Kontakt/Contact:: [www.nek.sk](http://www.nek.sk), [info@nek.sk](mailto:info@nek.sk), [projekty.nek@gmail.com](mailto:projekty.nek@gmail.com), tel.: [+421 910 961 141](tel:+421910961141)