

SYNOPSIS REPORT

A.T.1.2 Analysis of the business models and stakeholder management of renewable energy communities

D1.2.1 Catalog of the best operating models for managing energy communities

Project NRGCOM:

Creating appropriate operational conditions for renewable energy communities in the Danube Region

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Document Content

1	Baseline data on task performance	2
2	D1.2.1 Catalog of the best operating models for managing energy communities	6
3	SUMMARY	27
4	SOURCES	34

1. Baseline data on task performance

Organizer and guarantor of task processing:

PP12 NEK - Slovakia

Objective of the activity:

Creation of a database of analytical data on possible and existing models and management and governance of stakeholders in the form of a document of the best operating models of RECs and future guidance and recommendations in energy communities based on the application of renewable energy sources.

Description of the task content:

Involved PP partners:

LP STRIA - Hungary

PP2 IMRO-DDKK

PP3 JAIP – Czech Republic

PP4 FORSCHUNG Burgerland - Austria

PP5 IRENA - Croatia

PP6 KSSENA - Slovenia

PP8 REDASP - Serbia

PP9 OER – Romania

PP11 DIT – Germany

PP12 NEK - Slovakia





The PPs carried out extensive theoretical research and mapping of the development and current situation in their countries and organized their workshops to exchange knowledge. They mainly investigated management methods with a focus on technical details, ownership structures, financing mechanisms, revenue models, production, distribution and division of tasks, energy storage and consumption, equipment and business models designed and applied in current practice. Participating partners and their data serve as case studies for in-depth analysis during in-house research and workshops. In terms of content, PPs are focused on the functioning and building of energy communities based on renewable energy sources. Individual national documents containing experience, recommendations, proposals and possible solutions for the future were processed and already functional best practices for overcoming problems, risks and obstacles related to regulatory frameworks, legislative starting points, possible financial obstacles and acceptance of given EC energy communities in the given country were described.

The fulfillment of the A.T.1.2 task was ensured by experienced domestic experts and experts of the given country and provided their best and most important information for the fulfillment of the task based on their capacities and geographical location as well as related domestic specifics.

Partners defined in the description of the assignment: LP-STRA, PP2-IMRO, PP3-JAIP, PP5-IRENA, PP6 KSSENA, PP11-DITa PP12-NEK, but also voluntarily involved other partners PP4-FORSCHUNG, PP8-REDASP and PP9-OER they processed their documents very responsibly and subsequently added additional details and data as needed within the framework of joint e-mail communication with the guarantor of the task, within the realistically set deadlines and scope.

Methodology of task processing A.T.1.2

The guarantor of task A.T.1.2 – PP12 NEK chose the following approach for processing the task:

- 1. Detailed analysis of the starting points, the expected goal and the possibility of unifying the collected data and the opinions of individual partners in the task
- 2. Prepared a consultation table (Annex to this report) with markings

"Appendix to task A.T.1.2 Table: Overview of business models and management of EC energy communities - A.T.1.2"

which assigned 10 questions and a final summarization with additional data and recommended information and publication sources to be developed for individual partners.

- 3. The partners uniformly filled in their fields in the table and answered the defined question for the reasons of ensuring the possible compatibility of the obtained data and expressions for mutual comparison and subsequent evaluation of the task.
- 4. Realization of domestic national workshops, respectively consultations on the topic with partners.
- 5. Organization of the 2nd NEK National Workshop with a meeting of Slovak experts and foreign consultants on the topic 25-26 April 2024.



- 5. Realization of a joint international online workshop on 10/05/2024 under the leadership of NEK with presentations of outputs and results of individual project partners for the task and subsequent summary of other tasks.
- 6. Elaboration of the Catalog of the best operating models of RECs based on specifying the management and organizational structure recommended for energy communities throughout the scope of the NRGCOM project with recommendations for domestic countries, but also for the entire EC network in the European Union.

This Catalog D.1.2.1 is part of a separate documentation within the A.T.1.2 analysis of business models and management in energy communities based on RES.

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Keywords:

Energy, ecology, energy process management, energy efficiency, energy management, energy mix, environmental studies, renewable energy source – RES

Explanation of terms used in the analysis:

<u>Energy</u> - its use, quality, intensity and efficiency of conversion, is a key factor in human history. Flows and conversion of energy maintain and determine the life of all organisms and macro-organisms – societies and civilizations.

<u>Ecology</u> - Scientific discipline about the mutual relations of living organisms and the environment in which living organisms reproduce. It belongs to the biological sciences, but the subject of its investigation and methods are also connected with other natural and social sciences. Currently, it represents the theoretical basis for many applied disciplines that deal with the human environment



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and its changes. At the same time, it is also an independent biological discipline, which can also be partially considered a social science discipline.

<u>Energy</u> - Energy is a scientific field that deals with the economic use of all energy sources and reserves, as well as the industry supplying energy. The task of the energy industry is to solve technical, economic and ecological problems accompanying the acquisition of energy from natural sources and its transformation into usable forms, including energy transport and storage.

<u>The energy concept</u> - in terms of the principles of sustainable development, is based on the assessment of energy production and consumption not only on a quantitative, but above all on a qualitative basis, i.e. elimination of the degradation of the energy level of energies and fuels with the aim of maintaining the highest possible level of conversion potential" (58)

<u>Environmental studies</u> – Scientific field dealing with the protection and creation of the environment, as well as the influence of this environment on the formation of personality and the relationship of people to the environment. The concepts of ecology, environmental science and the environment are synergistic, interconnected and inseparable expressions whose understanding and solution are existentially important for people.

<u>Conventional energy source (CZE)</u> - also called non-renewable energy sources are standard (traditional) - natural gas, coal, oil, which are the pillars of primary energy sources. The vast majority of electricity is produced from coal and natural gas. An alternative to traditional non-renewable sources is a nuclear power plant. Nowadays, for example, peat, which was burned in the past, but not on a large scale, is starting to become an alternative source. Similarly, we can think about heat recovery.

A renewable energy source (RES) is a source whose energy potential is constantly renewed by natural processes or human activity and is characterized by a total potential, which is the energy of a renewable source that can be transformed into other forms of energy per year and its capacity is given by the conditions of nature . In essence, it is an immutable factor from a short- and medium-term point of view, it also contains a technical potential, i.e. a part of the total potential that can be used after the introduction of available technology, and then it is also a usable potential that can be explained as a technical potential reduced due to barriers in legislation and undeveloped infrastructure. "If you want to have solar panels, you need a surface to put them on. If you want to grow grain, you again need an area," says the author. and cites renowned expert Jared Diamond from the book Collapse who found that while many factors contributed to the collapse of civilizations, the common denominator of all would be that the population density was too high.

<u>Primary energy consumption (PES)</u> – it is gross consumption without non-energy use, so it includes the total energy need in the country, including consumption of the energy sector itself or losses during distribution.



2. D1.2.1 Catalog of the best operating models for managing energy communities

The catalog of the best operating models of the management of energy communities was created based on the collection and processing of the statements of individual partners who participated in the solution of the activity A.T.1.2.

For the sake of clarity, the catalog presents 4 proposals of existing and at the same time also in the future for the development of the organizational structure and management system of energy communities of suitable schemes.

Each draft operating model for the possibility of mutual comparison contains a brief description, a categorization of the characteristic legal form, a basic diagram of the organizational structure, typical elements of EC operation management and an internal decision-making system, as well as a customer care system and considerations about the advantages and risks of applying the given model.

- 1. Energy community as a non-profit organization based on association
- 2. Energy community as a cooperative form
- 3. The energy community as a business company
- 4. Energy community as an association with connection and participation of citizens.

Catalog sheet no.

ENERGY COMMUNITY AS ORGANIZATION BASED ON INTEREST ASSOCIATION

1.	
Specification	: Contents:
Categorization Categislation	I WINCH ALE TECHNALED IN VALIOUS COCCUMENTS CANALYZED IN DETAIL AS DALL OF THE
	The specifics are the regulations that regulate the particularity of the establishment and management of energy communities as legal forms in the given country of the partner, for example, they are different: - Commercial Codes, - Economic laws, - Tax and accounting regulations - Regulations on registration obligations with a special description of the rules for cooperatives, business companies, non-profit organizations and associations with a civil component of membership.
	The form of an energy community based on an interest association of legal entities is governed by the regulations on the establishment of non-profit organizations, contributory organizations according to the economic laws of the given country, and its characteristic feature is that the members of the association participate in its functioning exclusively on the basis of member voting rights, either dependent or independent / equal to the size of the EC member's organization, and according to this, the redistribution of the EC's management share is determined in the founding and administrative documents. According to EU legislation, the association is perceived as a specific form of non-profit organization and does not generate accounting profit, but only the so-called economic growth to support one's own development. For any business procedure in the activity of the association beyond its definition of the energy community, it is necessary in all countries, in addition to registration, to establish a separate trade certificate/permit and to report such management independently. Details are in the next description of this catalog sheet.
Brief description	An association is a legal form of organization of business and related non-business activities in general as a system of functioning based on contractually involved members of the association based on their registration in the association and acceptance of binding documents (Statutes, Articles of Incorporation, etc.). The rules of operation are determined by the documents created during the registration of the association and other internal operating documents, always

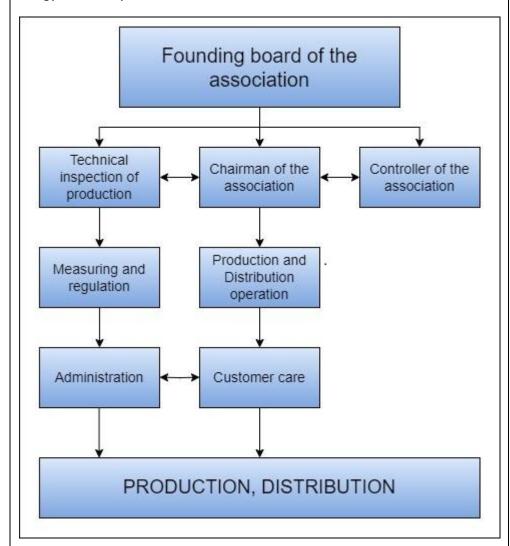




approved by the highest administrative body of the association. In addition, if the association operates in the field of so-called licensed activities such as energy management, it is necessary to obtain special certificates and certificates (differently marked in the given country of jurisdiction) for the operation of such activities.

A sample chart of the organizational structure

The presented organizational chart clearly specifies the individual components and links of the functioning of the bodies and organizational sections of the energy community as an interest association:



In other parts, individual bodies and components of the operating model of this type of energy community are described.

Typical elements of operation management

A typical EC organizational structure in the Czech Republic comprises the following components:

• Founders and Participants: Individuals or entities responsible for initiating and participating in the energy community.



- Management Board: Oversees the strategic direction and decision-making process of the energy community, including allocation methods and investment strategies.
- Technical Team: Responsible for managing the technical aspects of energy production, distribution, and storage within the community.
- Financial Team: Handles financial matters, including budgeting, accounting, and securing funding or investment subsidies for community projects.
- Legal and Regulatory Compliance Team: Ensures compliance with relevant laws, regulations, and administrative procedures governing energy community operations.
- Community Officer: Facilitates communication and engagement with community members, stakeholders, and relevant authorities.

EC management and authorities

The scheme of the proposed operating model of the energy community of interest association type is composed of three levels of management, namely the top level represented by the Founding Council of the association, and the executive level, where the competences for the Controller, the President of the association and the technical inspection department, ensuring technical expert supervision of the production itself, are located and energy distribution.

The so-called a series component of the scheme, which consists of the Measurement and Regulation, Administration, Customer Care teams, production technology operations themselves, energy sources (also on the basis of RES) and all these components/levels of management act directly or indirectly on the actual production and Distribution of the energy community on the energy market.

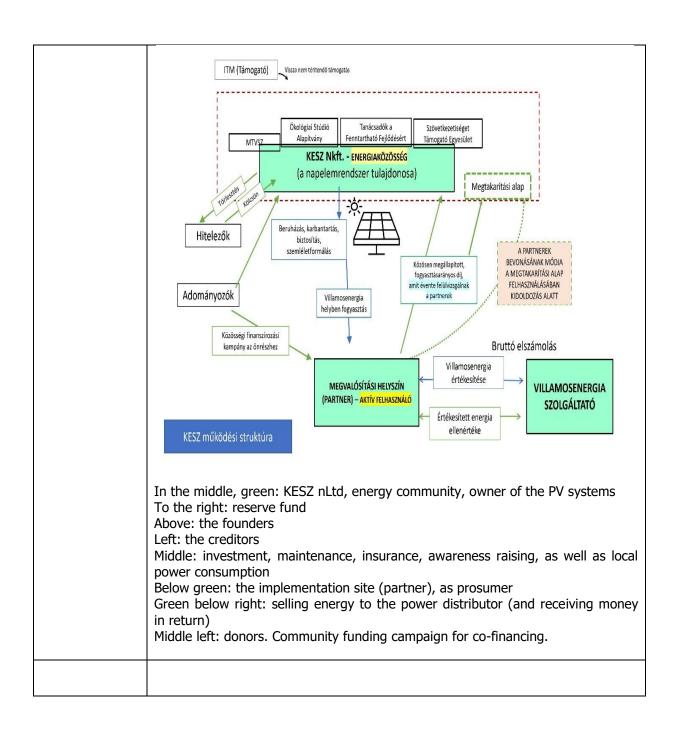
Possibilities of applicationthe model

According to the example of the partner PP6-KSSENA, consumers participate in the self-supply of the community on the basis of a contract in accordance with the rules of the law of obligations, while it is interesting that they function as members of the EC and at the same time are its customers and consumers in the system of so-called self-supply of electricity.

In the second case, the most common form is the energy community, RES community or civil energy community defined as a legal entity, which is also the simplest and most effective form of legal form for community self-supply situations. If a third party is also involved in the project, which owns or operates an electricity production facility in accordance with the regulations, the end customers are generally connected to the community self-supply network based on the contract. This is a very original form of caring for one's own customers and a form of ensuring the stability of the energy community.

To illustrate the topic in practice, we present an example of a sample proposed scheme of the organizational structure of a non-profit company - energy community represented by PP2 - IMRO-DDKK as:





Catalog sheet no.

ENERGY COMMUNITY AS A COOPERATIVE FORM

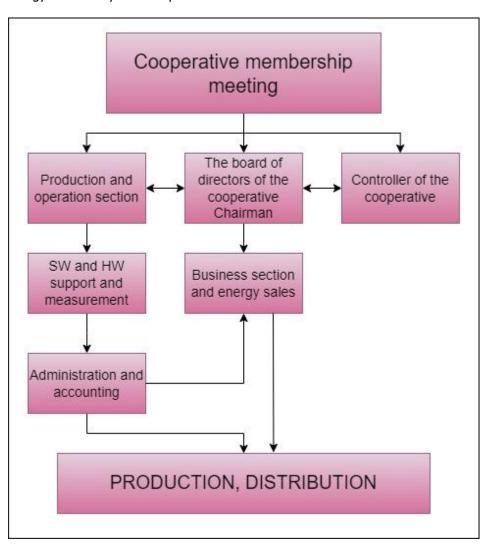
2.	
Specification:	Contents:
Categorization of legal form Legislation	Legislation and related legal regulations and internal documents for the establishment and functioning of energy communities are, according to the carried out mapping of the state and possibilities in which we are the partners of the NRGCOM project, dependent both on general regulations on energy communities in the European Union and at the same time on national regulations, which are regulated in various documents (analyzed in detail as part of the project's task A.T.1.1) on energy, energy-efficient organization, production, distribution and consumption reduction, as well as environmental and social impacts and limitations. The specifics are the regulations that regulate the particularity of the establishment and management of energy communities as legal forms in the given country of the partner, for example, they are different: - Commercial Codes, - Economic laws, - Tax and accounting regulations - Regulations on registration obligations with a special description of the rules for cooperatives, business companies, non-profit organizations and associations with a civil component of membership. The cooperative form of the energy community is governed by the regulations on the constitution of cooperatives according to the economic laws of the given country and is a typical characteristic, when the members of the cooperative participate in its functioning on the basis of property or non-property relations and contributions, and a share in the results and successes of the cooperative corresponds to this. Details are in the next description of this catalog sheet.
Brief description	The establishment of a cooperative requires at least three founding members, the deed of foundation and the cooperative rules (Statute) adopted at the first general meeting of the cooperative. A cooperative is formed when the founding members sign and certify the deeds of incorporation before a notary. They then open a business account to which the members pay their compulsory shares. The articles of association are then filed with the court (commercial register) and the rest of the members are admitted. All members are admitted. All members of the cooperative form a General Assembly, which usually meets once a year and elects a Board of Directors and a President to run the cooperative. The general assembly also appoints the supervisory board and other cooperative bodies and adopts the cooperative's rules (Statute). In the operation of a cooperative, the production-sharing key, which gives



members the right to receive a share of production, is also the basis for determining members' obligations to the cooperative. When the cooperative takes out a loan to make an investment, and when the cooperative receives a request from the bank for payment of the annuity, it pre-invoices the members according to the production-sharing key, and does the same for other operating, maintenance, insurance, etc. costs.

The members of the cooperative may therefore have different levels of compulsory and voluntary contributions and, consequently, different numbers of votes in the General Assembly, which is made up of all the members of the cooperative and must meet at least once a year. The General Assembly elects the Board of Directors and the President, who is in charge of the Cooperative.

The presented organizational chart clearly specifies the individual components and links of the functioning of the bodies and organizational sections of the energy community as a cooperative form:



A sample chart of the organizational structure In other parts, individual bodies and components of the operating model of this type of energy community are described.

The general rule for the internal structure of cooperatives according to the PP11-DIT description is a dualistic model: the board of directors and the supervisory board plus the general assembly or, in large cooperatives: the assembly of delegates. The delegate assembly was introduced in 1973 to allow large cooperatives (with more than 1,500 members) to hold a member meeting despite the rule prohibiting proxy voting.

The general assembly of members or the assembly of delegates is the highest body in the cooperative. Delegates are not representatives of those who elected them, but have an independent function. Even if an assembly of delegates is established, some basic rights of the general assembly of members remain guaranteed, e.g. Mr. to vote on the dismissal of the assembly of delegates, for which there have been very detailed regulations since 1973.

The general assembly of members / assembly of delegates decides on all important matters related to the operation and existence of the cooperative: changes to the articles of association, election of members of the supervisory committee, decisions on the annual income and distribution of the annual surplus, merger; conversion and termination.

The general assembly of members appoints the supervisory board of the cooperative. The analysis of the articles of association shows that it is the supervisory board that appoints and dismisses the board of directors. In rare cases, external parties such as cooperative banks or municipal energy companies appoint the majority of directors.

The members of the board of directors and the supervisory board are members of the cooperative and natural persons. If legal entities or commercial companies joined the cooperative, members of the board of directors or the supervisory board are also persons authorized to represent them.

Special rules introduced a monistic model for small cooperatives (up to 20 members): Small cooperatives can choose a simplified structure, work only with a board of directors, even as a one-member board of directors and without a supervisory board.

A layered governance structure may not exist or may not be suitable for civil partnerships (small energy communities). This means that members are responsible for their own property and decisions must be made unanimously. In this way, at least formally, they guarantee broad active participation, while cooperatives only guarantee active participation in the distribution of benefits and the selection of management or supervisory bodies.

Typical elements management

The typical organizational structure of the EC in the Czech Republic consists of the following components (proposal PP3 – JAIP):

- Founders and Participants: Individuals or entities responsible for initiating and participating in the energy community.
- Management Board: Oversees the strategic direction and decision-

of operation

- making process of the energy community, including allocation methods and investment strategies.
- Technical Team: Responsible for managing the technical aspects of energy production, distribution, and storage within the community.
- Financial Team: Handles financial matters, including budgeting, accounting, and securing funding or investment subsidies for community projects.
- Legal and Regulatory Compliance Team: Ensures compliance with relevant laws, regulations, and administrative procedures governing energy community operations.
- Community Officer: Facilitates communication and engagement with community members, stakeholders, and relevant authorities.

The scheme of the proposed operational model of the cooperative energy community is, like associations, composed of three levels of management, namely the top level represented by the Cooperative Member Council, then the executive level, where the competences for the Controller of the cooperative, the Board of Directors of the cooperative and the Chairman himself are found, and then there is the Production and Operational a section that comprehensively ensures planning, management, organization and monitoring of processes over the production and distribution of energy itself.

The so-called the serial component of the scheme, which consists of the SW and HW teams and production measurements, Administration and accounting, the Commercial Department and energy sales. All these components/levels of management act directly or indirectly on the very production and Distribution of the energy community on the energy market.

EC management and authorities

The structures of an association, community or a cooperation (ECs) are best suited to the idea of citizen participation. Associations have lower financial hurdles when it comes to founding and running costs, members are not personally liable in the event of insolvency, while co-operative members are at least liable for their share.

Cooperatives have more economic leeway, e.g. in terms of financing arrangements, but also more administrative work. Associations appear (generally speaking) to be the legal form of choice for smaller ECs. Cooperatives appear to be well suited for ECs above a certain basic size.

The internal structure of an EC can be discussed and finalized at the general meeting of the EC. It is made up of the members/cooperative members and is the cooperative's supreme body decides annually on the report of the Executive Board for the past financial year on the appropriation of profits and the discharge of the Executive Board (and the Supervisory Board) According to the association actc, to be convened at least every five years - shorter intervals (e.g. annually) can, however, be regulated in the specific statutes (and recommended on the basis of the purpose of the association). One tenth of the members can request the management body / association board to convene an extraordinary general meeting. The management body / board is obliged to provide information on the activities and financial management of the association at the general meeting; auditors must be involved. If at least one tenth of the members request this, stating reasons, the management body must also provide the members concerned with such information within four weeks.

Duties and responsibilities:

Executive Board: Managing body represents the cooperative externally within the scope of its powers as resolved by the General Meeting conducts the business of the cooperative in compliance with legal and statutory requirements and provisions

Supervisory Board:

Controlling body is mandatory for 40 or more employees is composed of at least 3 members monitors the activities of the Executive Board.

Participants general meeting:

Also known as the General Assembly or General Annual Meeting - must be convened regularly, at least every five years, serves to form a common will, consists of all members of the association, each of whom has one vote.

Management body (executive board or presidium) It must consist of at least two people. The management body manages the association's business. Socalled organisational representatives are authorised to sign externally.

A supervisory body consisting of at least three natural persons can be appointed. The appointment is made by the general meeting.

There also have to be two auditors appointed by the general meeting of an EC as association - maximum term of office timeframe are 5 years.

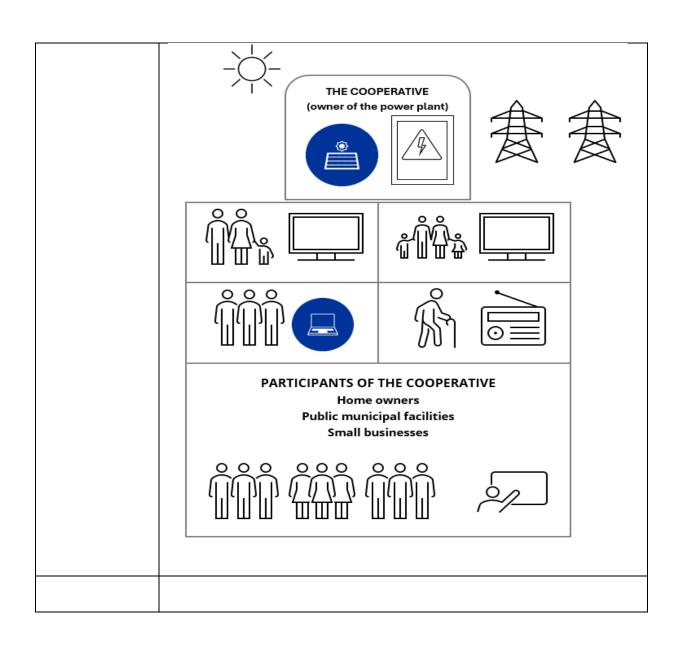
They have to check the accounts and report to the supervisory body if necessary and they must not be members of the association and must not belong to any body (other than the general meeting) whose activities are the subject of the audit.

PP11-DIT predstavil návrh samostatného interného modelu riadenia energetických komunítdružstiev zriadených právnou formou drustva ako:

Possibilities of application the model

According to the processed data for illustration on the topic from PP6 – KSSENA, a typical organizational model of the energy community based on renewable energy sources can be displayed as follows:





Catalog sheet no.

THE ENERGY COMMUNITY AS A BUSINESS COMPANY

3.

3.	
Specification:	Contents:
	Legislation and related legal regulations and internal documents for the establishment and functioning of energy communities are, according to the carried out mapping of the state and possibilities in which we are the partners of the NRGCOM project, dependent both on general regulations on energy communities in the European Union and at the same time on national regulations, which are regulated in various documents (analyzed in detail as part of the project's task A.T.1.1) on energy, energy-efficient organization, production, distribution and consumption reduction, as well as environmental and social impacts and limitations.
Categorization legal form Legislation	The specifics are the regulations that regulate the particularity of the establishment and management of energy communities as legal forms in the given country of the partner, for example, they are different: - Commercial Codes, - Economic laws, - Tax and accounting regulations - Regulations on registration obligations with a special description of the rules for cooperatives, business companies, non-profit organizations and associations with a civil component of membership.
	A commercial company as a form of energy community is governed by the regulations on the constitution of commercial business entities according to the economic laws of the given country, and its typical characteristic is that the members of the company participate in its functioning on the basis of business shares or shareholder letters with all related restrictions, obligations, but also powers depending on the amount of property or non-property contributions, and the share in the results and successes of the energy community as a commercial company corresponds to this. Details are in the next description of this catalog sheet.
Brief descriptio	Partner PP9 – OER devoted particular detail to the specification of business companies as energy communities with a special approach to creation and profit possibilities. Here, the opinion of the partners is quite contradictory, as many countries do not allow the generation of profit to be indicated in energy communities and speak only of some kind of internal economic result, which can only be used (for example, in the case of associations) for the further development of this community. Forms such as a limited liability company and a joint-stock company are implemented in the work.



1. Limited liability company

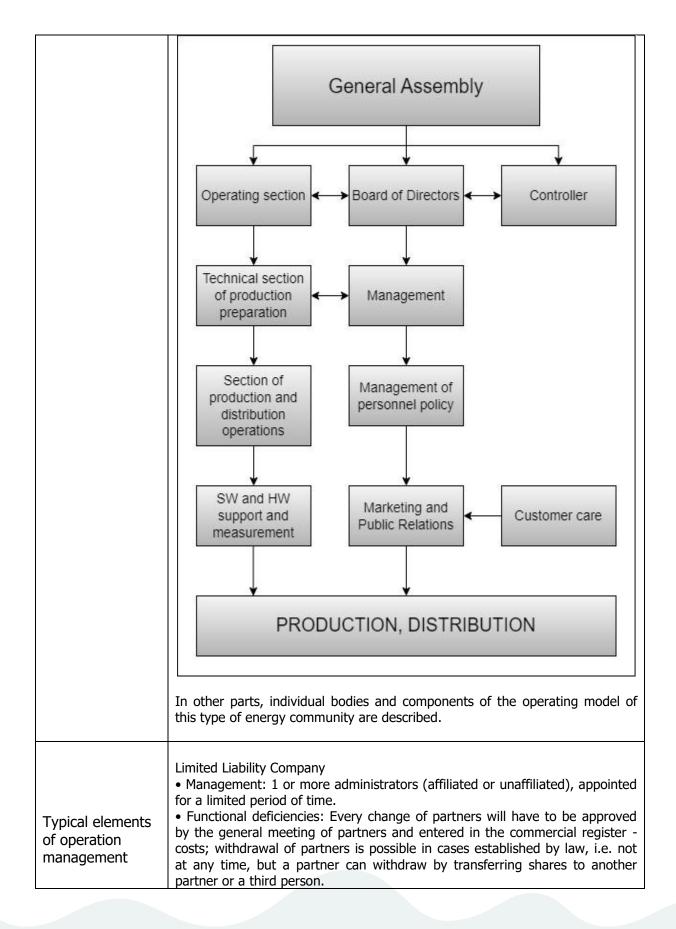
- Minimum 1 and maximum 50 natural persons (minimum 18 years old), legal entities (companies SMEs, associations, foundations, local councils), who decide on the company's activities through the general meeting of shareholders.
- There is no minimum requirement for the share capital, and depending on the amount of the shareholder's share in the share capital, he will have the number of shares corresponding to the number of votes and the percentage share in the share capital. Also, each shareholder will only guarantee up to the amount of the subscribed share capital.

2. Joint stock company

- Shareholders: At least 2 natural persons (at least 18 years old), legal entities (companies SMEs, associations, foundations, local councils), who decide on the company's activities through a general meeting of shareholders.
- Share capital: prescribed in the relevant national legislation. Depending on the amount of the shareholder's share in the share capital, he has votes and a % share in the share capital. Each shareholder will also be liable only up to the amount of the subscribed share capital.
- Management: 1 or more directors organized in the board of directors, initially appointed for a 2-year term, subsequently for a 4-year term.
- Functional deficiencies: The appearance of shareholders is possible in cases established by law, i.e. not at any time, but a shareholder may withdraw by transferring shares to another shareholder or a third party, while share transfers do not have to be registered in the commercial register but only in the shareholders' register.
- Conditions for being an energy community through this type of entity: The condition of member control must be ensured, which is quite difficult to achieve when there are multiple shareholders with different stakes, as power poles may arise. As for the condition that its purpose should not be profit for shareholders, this condition can be fulfilled if the company becomes a social enterprise.

A sample chart of the organizational structure

The presented organizational chart clearly specifies the individual components and links of the functioning of the bodies and organizational sections of the energy community as a business company:



• Conditions to be an energy community through this type of entity: The condition of member control must be ensured, which is quite difficult to achieve when there are several partners with different stakes, as electric poles could arise. As for the condition that its purpose should not be to make a profit for the members, this condition can be met if the company becomes a social enterprise.

Joint stock company

- Management: 1 or more directors organized in the board of directors, initially appointed for a 2-year term, subsequently for a 4-year term.
- Functional deficiencies: The appearance of shareholders is possible in cases established by law, i.e. not at any time, but a shareholder may withdraw by transferring shares to another shareholder or a third party, while share transfers do not have to be registered in the commercial register but only in the shareholders' register.
- Conditions for being an energy community through this type of entity: The condition of member control must be ensured, which is quite difficult to achieve when there are multiple shareholders with different stakes, as power poles may arise. As for the condition that its purpose should not be profit for shareholders, this condition can be fulfilled if the company becomes a social enterprise.

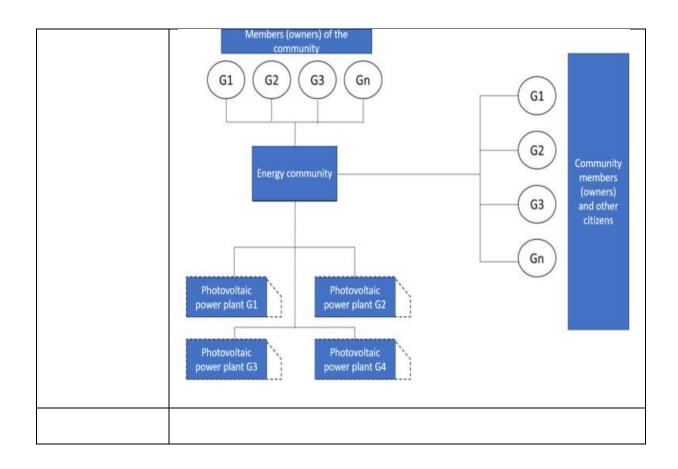
EC management and authorities

The scheme of the proposed operating model of the energy community of the type of commercial company (as a limited liability company or joint-stock company) is, like other operating models of other legal types of energy communities, composed of three levels of management, namely the top level represented by the General Assembly, and the executive level, where competences are found for the Controller, the Board of Directors of the energy community and, further, it is the Operations Department comprehensively ensuring the planning, management, organization and monitoring of processes over the production and distribution of energy itself.

The so-called the series component of the scheme, which consists of departments such as Technical preparation of production and distribution, then Energy production and distribution/technological background and production operation itself. Then there are the SW and HW support and production measurement teams, Management of economy and finances, Management of EC personnel policy and Marketing and Public relations itself with the purpose of promoting EC production. A separate meaning is the Customer Care team (sellers). All these components/levels of management act directly or indirectly on the very production and Distribution of the energy community on the energy market.

Possibilities of application the model

A special example of the functioning model of the energy community as a commercial company can also be shown as a proposal by the partner PP5-IRENA based on the general organization of relations between subjects (members, customers and other external entities) within and outside the energy community within one structure:



Catalog sheet no.

4.

ENERGY COMMUNITY AS ASSOCIATION WITH CONNECTION AND PARTICIPATION OF CITIZENS

Specification:	Contents:
	Legislation and related legal regulations and internal documents for the establishment and functioning of energy communities are, according to the carried out mapping of the state and possibilities in which we are the partners of the NRGCOM project, dependent both on general regulations on energy communities in the European Union and at the same time on national regulations, which are regulated in various documents (analyzed in detail as part of the project's task A.T.1.1) on energy, energy-efficient organization, production, distribution and consumption reduction, as well as environmental and social impacts and limitations.
Categorization of legal form Legislation	The specifics are the regulations that regulate the particularity of the establishment and management of energy communities as legal forms in the given country of the partner, for example, they are different: - Commercial Codes, - Economic laws, - Tax and accounting regulations - Regulations on registration obligations with a special description of the rules for cooperatives, business companies, non-profit organizations and associations with a civil component of membership.
	The form of an energy community based on a non-profit organization is governed by the regulations on the constitution of non-profit organizations, foundations and contributory organizations according to the economic laws of the country in question, and is characterized by the fact that the members of the non-profit organization or association participate in its functioning exclusively on the basis of member voting rights (either dependent or independent/equal to the size of the EC member's organization, and according to this, the redistribution of the EC's management share is determined in the documents. Details are in the next description of this catalog sheet.
Brief description	An association is a legal form of organization of business and related non-business activities in general as a system of functioning on the basis of contractually involved members of the association based on their registration in the association and acceptance of binding documents (Statutes, Articles of Incorporation, etc.). The rules of operation are determined by the documents created during the registration of the association and other internal operating documents, always approved by the highest administrative body of the association. In addition, if the association operates in the field of so-called licensed activities such as energy management, it is necessary to obtain special certificates and certificates (differently marked in the given country of jurisdiction) for the operation of such



activities. The presented organizational chart clearly specifies the individual components A sample chart and links of the functioning of the bodies and organizational sections of the of the energy community as a non-profit organization with the participation of citizens: organizational structure Council of members Measurement and Director of non-Operation of regulation of profit organization energy production systems Internal control Energy distribution Marketing and and administration operation sales PRODUCTION, DISTRIBUTION V ďalších častiach sú popísané jednotlivé orgány a zložky prevádzkového modelu tohto typu energetickej komunity. According to the analyzes of PP4 FORSCHUNG Burgerland Community structures built on the basis of association with a special character of Typical elements connection to group or individual civic structures as EC members or cooperation of operation (EC) best correspond to the idea of civic participation. Associations have lower management financial obstacles in terms of founding and operating costs, members are not personally liable in case of insolvency, while for example associations, trading companies or cooperatives guarantee at least their share. The scheme of the proposed operating model of the energy community of the EC management type of non-profit association with the participation of citizens is, like other legal and authorities forms of the EC, composed of three levels of management, namely the top level represented by the Council of EC members, and the executive level, where the competencies for the Director of the non-profit organization, the operation of energy production are located and technical control of the quality and quantity

of production through measurement and regulation of the system.

The so-called the regular component of the scheme, which consists of the Internal Control and Administration teams of the EC, the operation of energy distribution to networks and finally Marketing and sales ensuring important communication and care for customers - consumers of energy.

All these components/levels of management act directly or indirectly on the very production and Distribution of the energy community on the energy market.

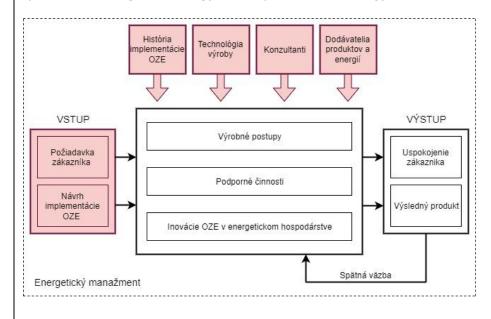
A significant contribution of the operational model of energy management in the industrial energy community pretending on the basis of a non-profit association of SME enterprises is the following representation of the functioning system.

The model mainly enables the assessment of the situation on the spot and is actually a measure of how effectively the inputs are used to create the desired outputs.

Possibilities of application the model

Production facilities for energy production in the specific conditions of this type of organization are always based on a typical and prevailing model for the business activities of energy distribution and production (after all, in all legal forms and EC cases, it is always the sale of energy). With regard to their capabilities, real technical and technological equipment and financial and operational background, the model presented for illustration from PP12-NEk focuses on the use of machinery and its downtimes, while analyzing the energy consumed and the machine modes that affect them.

The evaluation of the time consumption for EC production is important not only for the expression of labor costs, but also for the balancing of individual operations with regard to energy consumption, i.e. the energy demand of EC.



Although this model is characteristic of this type of energy community, it can

NECCOM

also be very effectively applied to other forms such as associations, cooperatives and trading companies - businesses under the condition of subtle organizational corrections while preserving the system of relations and functions of the scheme.

3. SUMMARY

Brief summary of content

The analysis and presented results of task A.T.1.2 contain an overview of the current development of energy communities with regard to the application of renewable energy sources in their local and regional operations.

At the same time, they point to the available organizational structures of the individual partners in the individual countries of the implemented sphere of this NRGCOM project.

The analysis includes an analysis of 10 questions created specifically by the guarantor of the task to ensure an overview of the issue, as well as summarizing and opinions of individual partners on the knowledge being addressed.

The following was found - a brief summary of the essential findings:

- 1. EC energy communities and EC communities are relatively uniformly based on valid EU legislation, and national legislation is also adapted to this.
- 2. ECs usually have the legal form of associations, cooperatives, or other non-business, but also business companies.
- 3. Everywhere, they are always registered as legal entities with related tax and accounting obligations
- 4. ECs are perceived as non-profit organizations only to the extent that they produce and distribute energy in a given area of activity for the purpose of an economic and environmentally and energetically efficient result, but fundamentally not for the creation of profit, regardless of whether they are cooperatives, commercial companies, corporations or foundations.
- 5. Energy communities based on the application of renewable energy sources in all monitored partner countries can be said to be legal entities that are:
- based on open and voluntary participation, independent and effectively controlled by partners or members in the vicinity of renewable energy projects owned and developed by this legal entity;
- whose partners or members are legal or natural persons other than legal persons performing economic activity and who are not SMEs;
- whose primary objective is to provide environmental, economic and social benefits to its partners or members or the local areas in which it operates, rather than financial gain.
- 6. The analysis also provides basic explanations of the technical terms used and a description of the solution methodology according to the task processors.
- 7. ECs function in practice, depending on how relations between members are regulated in the relevant founding document, regardless of the country

- of operation, and how the goals of the community are chosen. In general, each member of the EC's highest body has the same weight of vote, which is enshrined in the statutes of the concerned EC or EC.
- 8. The mission after the establishment and creation of the EC or ES in terms of the internal organizational structure is ensured by other, lower governing elected bodies of the community. Their internal operation, such as the status and weight of the right to vote or a specific way of functioning, are precisely defined by the internal regulations approved by the above-mentioned highest authority, for example the Statutes of the EC.
- 9. From the analysis, there is a fairly clear consensus that ECs can obtain subsidies and support financing (according to the possibilities, programs and challenges of individual domestic countries), they also have the opportunity to use private and European projects and lead the majority (due to the legal status in the legislation). double-entry bookkeeping and, at certain more significant financial turnover limits, they are also obliged to submit to an accounting audit.
- 10. The analysis also confirmed the prevailing fact and that. where EK and ES already exist and are involved in energy production and distribution, it is possible to infer only a minimal (a few percent approx. 1.5 to 2.5%), but already a growing importance and share in the domestic energy mix, especially when influencing the change in energy ratios based on renewable sources.
- 11. A significant finding from the statements of the project partners is that, although in a minimal current ratio, the emerging and established EC energy communities and EC communities are actively involved mainly in the field of implementation of renewable energy sources in distribution, storage and initial production itself, and the constantly changing and developing legislation in that country gradually makes it possible.
- 12. From the analysis, the rule can be stated that in practice you can correct your energy supplies depending on changes in consumption, while ES and EC can adjust their energy supplies by adjusting the participation factor or changing the membership status of their association/organization.
- The participation factor indicates the percentage of a member's consumption or production in the EC that it contributes to the community. It determines the maximum percentage of generated electricity that can be supplied to the energy community, or the maximum percentage of electricity consumption covered by the energy community. Participation in several energy communities makes it possible to increase the share of excess electricity sold or purchased from energy communities. It is a very suitable innovative factor for managing the energy economy not only of the given community but also of the managed region or locality.
- 13. Active consumers in several partner countries have the right to act on the market directly or through aggregation, the right to sell electricity from their own production, including on the basis of power purchase agreements, and the right to participate in flexibility and energy efficiency programs. If active customers want to act directly on the electricity markets, i.e. j. sell to other system users or buy from other system users on the basis of an open contract and conclude closed contracts, active customers must be required

to join the balancing system, except in the case of exchanges between active customers belonging to the same member of the balancing system and in the case of an open contract with the supplier.

- 14. In their documents, the partners presented the information and the fact that the existence of a wide range of activities, state and private organizations, funds and associations to support energy communities and the energy policy itself in that partner country within the NRGCOM project, as well as information on the overview of research and professional activities, possibly publications and newly created information databases.
- 15. The analysis also mentions the advantages of the open organizational form of functioning of the EC, consisting in the fact that, in addition to the members themselves business entities, municipalities and institutions, all citizens can be involved (independently of investments). Furthermore, the citizens of the municipalities make local and democratic decisions regarding the supply and distribution of energy in the region. This increases the real-life acceptance of renewable energy sources and offers the possibility for citizens to benefit financially from the gains of the energy system.

At the level of municipalities, they benefit from the fact that they can cooperate, share the bureaucratic and administrative burden and transfer knowledge.

It also allows electricity prices to be determined at the municipal level.

Evaluation of goal and activity fulfillment A.1.2

Objective of the task, defined in part 1. Baseline data on the fulfillment of the task of this document, namely the creation of a database of analytical data on possible and existing models and management and governance of stakeholders in the form of a document of the best REC operating models and future guidance and recommendations in the energy communities based on the application of renewable energy sources, in the opinion of the processor and the guarantor, the task was fulfilled in its entirety.

The solution to task A.T.1.2 was managed by fulfilling partial tasks set by the processor PP12 – NEK, namely:

- 1. survey of the issue and mapping of the current state of the topic in terms of EU countries and policies.
- 2. Extensive theoretical research and mapping of the situation in individual countries participating in the project, based on internal information from individual PP partners in the form of an overview table with a questionnaire of 10 questions.
- 3. Elaboration of the professional output of the task A.T.1.2 and that D1.2.1 Catalog of the best operating models for managing energy communities.

These sub-tasks were fulfilled in the document.

Despite the fact that the building of energy communities and societies, especially with an emphasis on the implementation of renewable energy sources in their production and distribution to the final customers and the

community members themselves, is generally only in the beginning, it is clear that a high degree of professional organizational activity already prevails for the successful development of this issue.

It is possible to state responsibly that today the energy market and the industry itself are developing in a sophisticated, generalized, global and especially at a dizzying speed and with considerable turbulence.

This development brings with it an increase in the complexity of problems and the identification of new effects of the functioning of operational and management systems in which managers and project teams find it increasingly difficult to navigate. However, various management tools come to their aid in the fight against this complexity.

Looking at any well-known methodology or management tool, if even the most sophisticated operating model of the organization is analyzed, there are still perceptions and feelings, as if something is missing. The knowledge contained in this analysis not only gives a partial philosophical framework to the previous visions and ideas, but also materializes it into a specific project-oriented and set proposal of a new generation concept of modeling operational organizational systems for energy communities and communities whose key mission is to create an energetically and economically efficient environment of their own activity of members and customers in the given energy community.

As the authors of this analytical work within the framework of the processing of task A.T.1.2 of the NRGCOM project, but especially of our long-term professional research, business and consulting activities in connection with our own comprehensive research, we see prospective areas of scope and development of this topic of operational models of energy communities in the future as:

- 1. Research of models of organizational systems and structures based on the innovative and inventive capacity of enterprises and organizations, mainly from the SME environment, specifically in the field of designing and applying RES to an appropriate degree in the production and the energy economy of energy communities and the production and distribution of energy within their scope.
- 2. The creation of inspection and management databases and subsequently also expert systems for the identification and quantification of innovative and product qualities in the energy operating system of enterprises in energy communities.

According to the findings so far, this is a vast area that is still insufficiently and only relatively weakly researched and verified in theory and practice of system concepts with considerable potential especially for the issue of SMEs in connection with RES, in which we see another perspective for research and the design of energetically successful and environmentally friendly solutions and projects for businesses within energy communities.

Recommendations and suggestions

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Several partners are only at the beginning of building EC and therefore do not have the possibility of obtaining external financial support, which is a relatively negative situation.

It is only possible to draw specific and tied funds (for example, for

photovoltaics, building insulation, etc.), which, although it supports production in the given EC, does not allow the initial professional start-up and stabilization of the given community on the energy market.

To ensure effective and sustainable development of community energy, the following steps can be defined:

Financial incentives:

Adequate financial incentives for EC and EC participants and founders to optimize production facilities and effectively prepare for project operation.

Flexibility in connection:

Connecting production plants in such a way as to reflect the actual required reserve power of the network, to avoid oversizing and to ensure efficient energy distribution.

Quality Assurance:

Emphasis on the competence and quality of installation and consulting companies involved in the preparation and creation of energy communities in order to ensure reliable and efficient operation.

The participation factor indicates the percentage of a member's consumption or production in the EC that it contributes to the community. It determines the maximum percentage of generated electricity that can be supplied to the energy community, or the maximum percentage of electricity consumption covered by the energy community. Participation in several energy communities makes it possible to increase the share of excess electricity sold or purchased from energy communities. It is a very suitable innovative factor for managing the energy economy not only of the given community but also of the managed region or locality.

Adjusting the participation factor within the energy community can help limit high consumption, making dynamic allocation more attractive. Participation in multiple energy communities allows members to better manage electricity supplies and promote the use of renewable energy.

Flexibility aggregators are a solution to reduce consumers' electricity costs and carbon footprint at the same time. They can optimize and manage the operation of flexible devices of both consumers and manufacturers in real time. The task of the aggregator will be to aggregate non-necessary electricity from consumers and smaller providers and then provide it to the transmission system. As an example, we can cite municipal heating plants, which produce electricity as well, which is a tremendous opportunity for the establishment of the relevant ES or EK and the gradual introduction and transition to renewable energy sources in the given local or regional energy mix.

A manifestation of the high level of development of the management of energy communities is also the system applied in Germany known as virtual (energy) communities, implemented by the Bavarian company "regionalwerke". It is based on the idea that several municipalities have established a public agency that would jointly carry out economic activities in various areas, including but not limited to the supply and operation of energy

and electricity networks. For each of these areas, the municipalities have established an operating subsidiary as a joint public agency, and electricity generation and energy distribution are thus organized as subsidiaries.

Recommendation 1:

To complete and repeatedly assess the synergy of the results of tasks A.T.1.1, A.T.1.2 and A.T.1.3, because their focus creates synergy for the possibility of professionally accurately describing the current state and development, but especially the future of EC and ES in the European space.

Recommendation 2:

In more detail, in the next step of the NRGCOM project, analyze the internal methodology for creating organizational structures and EC management and focus on the modern method of process and project management of these ECs in practice.

Recommendation 3.

Familiarize all project partners LP, PP and \check{z} PP13 in detail with the content of this task and ensure promotion for the professional public by creating a publication on the topic "Analysis of the business models and stakeholder management of renewable energy communities". Suitable form - international conference and promotion on social networks and so on.

Contribution to the sustainability of project results

The recommended overall procedure for the creation of EC and EC at the local or regional level can be determined from the overall documentation of task A.T.1.2 as:

- Mapping of energy consumption at a defined location.
- Mapping of local energy potential.
- Start of preparations for the construction of new energy sources in the vicinity of the site

in order to cover the consumption of the entire defined area.

- Maximum use of subsidy programs for building resources and the necessary infrastructure.
- Creation of a suitable environment and provision of capacities for community energy.
- Preparation for the creation of an energy community in the given location.
- Ensuring significant aid and financing for energy development communities
- Creation of an internal organizational system and sales technique in EC
- Methodology for taking care of EK customers and for solving crises and problems
- Audit of the internal energy economy of individual ECs in production and energy distribution based on RES.

A significant contribution to the sustainability of energy systems based on RES under the application of EC and ES activities is the knowledge and summary of model models and the system of management and control of energy communities and the application of relatively universal business models of the management of these communities.

At the same time, it is essential to know that the overall assessment of the quality of the management and the functioning system is also dependent on

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the	the synergy of the results of the NRGCOM project within the fulfillment of the tasks A.T.1.1, A.T.1.3, mainly for defining and comparing the connections and differences of the appropriate legal and legislative		
op me	environment and knowledge of public administration techniques and internal operating models to understand the motivations and expectations of members of the energy community.		
ор	In conclusion, it is necessary to recommend for the development of EC operational systems the application of such proposed principles to support energy efficiency to ensure the success of EC.		
	ergy em		
	1.	Additional increase of energy efficiency in industry and industrial processes beyond modeled scenarios	
	2.	Introducing the circular economy and innovations into industrial processes, e.g. the use of hydrogen as an innovative technology (including the transition to hydrogen-based steel production in case of sufficient hydrogen supplies), including compliance with the Conclusions on BAT (best available techniques)	
	3.	To innovate energy- and material-intensive operations in the field of industry	
	4.	Transition to new, cleaner ways of producing energy and products, including through the use of energy sources without greenhouse gas emissions or by introducing the principles of a circular economy	
	5.	Reducing the use of fossil fuels in industry, on the condition that it is technically and economically efficient and this solution will bring a real saving in emissions	
	6.	Capturing and utilizing all waste heat from industrial and energy processes in a cost-effective manner	
	7.	Setting up financial support mechanisms from the EU and the Slovak Republic so that through them it is possible to finance as many decarbonization measures as possible and measures reducing energy intensity, including reducing the administrative burden when submitting projects	
	8.	Including the implementation of the Paris Agreement among the basic provisions in international trade agreements between the EU and third countries (the so-called "Paris clause")	
	9.	The transformation should not jeopardize the competitiveness of the industry. It is therefore necessary to introduce support measures both for importers of products from third countries to the EU, as well as for exporters of products from the EU to third countries. As a support measure for importers of products, the supports the introduction of customs duties for imports depending on the carbon footprint (so-called carbon border adjustment / tax), but at the same time it is necessary to complete measures to preserve the competitiveness of exporters	

4. Sources



Sources:

In this part, decisive information sources from individual partners are selected, which, along with the complete related text, can also be found in the descriptions of individual questions for the given partners in the Appendix - Table for task A.1.2

Agencija za energijo. 2022. Report on the energy situation in slovenia 2022. https://www.agen-rs.si/documents/54870/68629/Report-on-the-energy-situation-in-slovenia-2022/d72a2865-931f-441d-b8a3-0346eac0e59a

Goriška lokalna energetska agencija – GOLEA. 2023. Primeri dobrih praks za energetsko skupnost, ki je pravna oseba.

https://borzen.si/Portals/0/To%C4%8Dka%20OVE/Gradiva/%C5%A1tudija%20primerov%20dobrih%20praks%20skupnostne%20samooskrbe%20ki%20je%20pravna%20oseba%202.pdf?ver=spO0EjAHo3AoskhkdRIOvw%3d%3d

Goriška lokalna energetska agencija – GOLEA. 2023. Primeri dobrih praks za skupnostno samooskrbo (Skupnosti oblikovane na podlagi pogodbe).

https://borzen.si/Portals/0/To%C4%8Dka%20OVE/Gradiva/%C5%A0tudija%20Primeri%20dobrih%20praks%20za%20skupnostno%20samooskrbo%201.pdf?ver=NoJF6DYW2oCOIVtSubLqA%3d%3d

Sistemska obratovalna navodila za distribucijski sistem električne energije. 2020. *Uradni list RS, št. 7/21 in 41/22.*

https://pisrs.si/pregledPredpisa?id=AKT 1188

Uredba o samooskrbi z električno energijo iz obnovljivih virov energije. 2022. *Uradni list RS, št. 43/22.*

https://pisrs.si/pregledPredpisa?id=URED8432

Zakon o oskrbi z električno energijo (ZOEE). 2021. *Uradni list RS, št. 172/21*. https://pisrs.si/pregledPredpisa?id=ZAKO8141

Zakon o spodbujanju rabe obnovljivih virov energije (ZSROVE). 2021. *Uradni list RS, št. 121/21, 189/21 in 121/22 – ZUOKPOE.*

https://pisrs.si/pregledPredpisa?id=ZAKO8236

Zakon o zadrugah (ZZad). 1992. *Uradni list RS, št. 97/09 – uradno prečiščeno besedilo in 121/21.*

https://pisrs.si/pregledPredpisa?id=ZAKO217

https://www.gov.si/zbirke/javne-objave/javni-razpis-za-sofinanciranje-izgradnje-

novih-naprav-za-proizvodnjo-elektricne-energije-iz-soncne-energije-na-javnih-

stavbah-in-parkiriscih-za-obdobje-2024-do-2026-noo-se-ove-2024/

https://borzen.si/sl-si/

https://kt-ove.si/

https://www.ekosklad.si/english

https://www.gov.si/teme/obnovljivi-viri-energije/

https://www.gov.si/zbirke/projekti-in-programi/nacionalni-energetski-in-podnebni-

nacrt/

Pannon Energy Community: Telephone interview with Mr. István Gulyás. Bábolna Energy Community: Telephone interview with Mr. József Bacsárdi. KESZ Energy Community: Telephone interview with Mrs. Ágnes Szalkai Lőrincz.

Examples of good practice for the energy community as a legal entity Primeri dobrih praks za energetsko skupnost, ki je pravna oseba, Goriška lokalna energetska agencija – GOLEA, December 2023

https://borzen.si/Portals/0/To%C4%8Dka%20OVE/Gradiva/%C5%A1tudija%20primerov%20dobrih%20praks%20skupnostne%20samooskrbe%20ki%20je%20pravna%20oseba%202.pdf?ver=spO0EjAHo3AoskhkdRIOvw%3d%3d

Examples of good practice for community self-supply (Communities formed on the basis of a contract)

Primeri dobrih praks za skupnostno samooskrbo (Skupnosti oblikovane na podlagi pogodbe) Goriška lokalna energetska agencija – GOLEA, December 2023 https://borzen.si/Portals/0/To%C4%8Dka%20OVE/Gradiva/%C5%A0tudija%20Primeri%20dobrih%20praks%20za%20skupnostno%20samooskrbo%201.pdf?ver=NoJF6DYW2oCOIVtSub LqA%3d%3d

Further information: https://regionalwerke-cham.de/aktuelles/
Further information e.g.

https://www.energiezukunft.eu/buergerenergie/energieautark-bis-2030-mit-windkraft-und-sektorenkopplung/

Energy communities in Romania: From aspiration to reality. Resources for citizens and public authorities.

https://www.greenpeace.org/static/planet4-romania-stateless/2024/03/21d2dcb5-comunitatile-de-energie-in-romania-de-la-aspiratie-la-realitate.pdf

Energy communities. An analysis of legal forms of organisation and operation. https://www.greenpeace.org/static/planet4-romania-stateless/2023/03/9bfaa5ea-analiza-a-formelor-de-organizare.pdf
Cooperativa de Energie

https://cooperativadeenergie.ro/despre-ce/

Examples of good practice for the energy community as a legal entity Primeri dobrih praks za energetsko skupnost, ki je pravna oseba, Goriška lokalna energetska agencija – GOLEA, December 2023

https://borzen.si/Portals/0/To%C4%8Dka%20OVE/Gradiva/%C5%A1tudija%20primerov%20dobrih%20praks%20skupnostne%20samooskrbe%20ki%20je%20pravna%20oseba%202.pdf?ver=spO0EiAHo3AoskhkdRIOvw%3d%3d

Examples of good practice for community self-supply (Communities formed on the basis of a contract)

Primeri dobrih praks za skupnostno samooskrbo (Skupnosti oblikovane na podlagi pogodbe) Goriška lokalna energetska agencija – GOLEA, December 2023 https://borzen.si/Portals/0/To%C4%8Dka%20OVE/Gradiva/%C5%A0tudija%20Primeri%20dobrih%20praks%20za%20skupnostno%20samooskrbo%201.pdf?ver=NoJF6
https://borzen.si/Portals/0/To%C4%8Dka%20OVE/Gradiva/%C5%A0tudija%20Primeri%20dobrih%20praks%20za%20skupnostno%20samooskrbo%201.pdf?ver=NoJF6
<a href="https://borzen.si/Portals/0/To%C4%8Dka%20OVE/Gradiva/%C5%A0tudija%20Primeri%20dobrih%20praks%20za%20skupnostno%20samooskrbo%201.pdf?ver=NoJF6
https://borzen.si/Portals/0/To%C4%8Dka%20OVE/Gradiva/%C5%A0tudija%20Primeri%20dobrih%20praks%20za%20skupnostno%20samooskrbo%201.pdf?ver=NoJF6
Dttps://borzen.si/Portals/0/To%C4%8Dka%20
https://borzen.si/Portals/0/To%C4%8Dka%20
https://borzen

l inks:

<u>Good Practice – Energiegemeinschaften, Home - EEG-LECHTAL | Erneuerbare</u>

<u>Energiegemeinschaft Lechtal, Graetzl Power Solution (graetzlenergie.wien)</u>
Listing them would break the mould of this study, but one may check them out here (incl. Contact data):

https://www.energiegenossenschaften-gruenden.de/energiegenossenschaften-und-projektentwickler-suchen.html

https://www.unendlich-viel-energie.de/projekte/energie-kommunen/alle-energie-kommunen-auf-einen-blick

https://www.energiegenossenschaften-gruenden.de/energiegenossenschaften-und-projektentwickler-suchen.html

https://www.unendlich-viel-energie.de/projekte/energie-kommunen/alle-energie-kommunen-auf-einen-blick

https://www.greenpeace.org/static/planet4-romania-stateless/2024/03/21d2dcb5-comunitatile-de-energie-in-romania-de-la-aspiratie-la-realitate.pdf

Souce:

https://www.mzp.cz/cz/news 20240205 Obce-i-sdruzeni-maji-o%20komunitni-energetiku-enormni-zajem-do-vyzvy-se-prihlasilo-pres-80-zajemcu

https://www.greenpeace.org/static/planet4-romania-stateless/2024/03/21d2dcb5-comunitatile-de-energie-in-romania-de-la-aspiratie-la-realitate.pdf

https://www.mpo.cz/assets/cz/energetika/strategicke-a-koncepcni-dokumenty/narodni-akcni-plan-pro-chytre-site/2021/10/1 Zdrojova zakladna.pdf

https://www.energetika-portal.si/javne-objave/arhiv-energetika/javni-razpisi/r/javni-razpis-za-sofinanciranje-izgradnje-novih-naprav-za-proizvodnjo-elektricne-energije-iz-soncne-energije-na-javnih-stavbah-in-parkiriscih-za-obdobje-2024-do-2026-noo-se-ove-2024-1355/

https://www.uradni-list.si/glasilo-uradni-list-rs/vsebina/2023010900019/javni-poziv-jp-ove-01-za-dodeljevanje-pomoci-v-obliki-neposrednih-nepovratnih-sredstev-za-investicije-v-nove-proizvodne-naprave-iz-obnovljivih-virov-energije-za-proizvodnjo-elektricne-energije-in-toplote-ter-za-hranilnike-elektricne-energije-in-toplote-v-kombinaciji-s-proizvodnjo-energije-st--izhod-491-1146-ob-327623.

1. Energetické komunity a ich perspektíva na Slovensku. Energy communities and their perspective in Slovakia. Posted on:

Energetické komunity a ich perspektíva na Slovensku - Green Deal 4 Buildings

- 2. Ďalšie detaily k Energetickým spoločenstvám a Energetickým komunitám. More details about Energy Communities and Energy Associations.

 Posted on: Ďalšie detaily k energetickým spoločenstvám EnergiaWeb.sk
- 3. Energetické spoločenstvo a komunita vyrábajúca energiu z obnoviteľných zdrojov. Energy Associations and Renewable Energy Community.

Posted on: Energeticke-spolocenstvo-a-komunity.pdf (siea.sk)

4. Komunitná energetika. Community energy.



Posted on: Komunitná encyklopédia – Wikipédia (wikipedia.org)

5. Energetické spoločenstvá a komunity v slovenskej právnej úprave. Energy communities and associations in Slovak legislation.

Posted on: <u>Energetické spoločenstvá a komunity v slovenskej právnej úprave -</u> <u>Poláček & Partners (polacekpartners.sk)</u>

6. Medzinárodný projekt REC4EU zmapoval príležitosti a obmedzenia pre energetické komunity v zahraničí a na Slovensku. The international project REC4EU mapped the opportunities and constraints for energy communities abroad and in Slovakia.

Posted on: <u>Medzinárodný projekt REC4EU zmapoval príležitosti a obmedzenia pre</u> energetické komunity v zahraničí a na Slovensku - SIEA

7. SIEA- Program Slovensko 2021 – 2027 Podpora pre energetické spoločenstvá. SIEA- Programme Slovakia 2021-2027 Support for energy associations. Posted on:

Program Slovensko 2021 – 2027 Podpora pre energetické spoločestvá (siea.sk)

8. Slovensko nevyužíva potenciál komunitnej energetiky. Slovakia does not use the potential of community energy.

Posted on:

Marián Parkányi: Slovensko nevyužíva potenciál komunitnej energetiky | Články | ENERGOKLUB

9. Ako dosiahnuť, aby sa energetické komunity/spoločenstvá stali atraktívnym riešením pre spotrebiteľov? How to make energy communities/communities an attractive solution for consumers?

Posted on:

Ako dosiahnuť, aby sa energetické komunity/spoločenstvá stali atraktívnym riešením pre spotrebiteľov? - Spoločnosť ochrany spotrebiteľov (sospotrebitelov.sk)

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