

**ESPON**



Co-funded by  
the European Union  
Interreg

**TERRITORIAL ANALYSIS OF DECENTRALISED  
ENERGY MARKETS //**

**ENERKOM OPAVSKO**

Opava, Czechia

Case Study // May 2025



## Table of contents

<b>Table of contents .....</b>	<b>1</b>
<b>Executive Summary.....</b>	<b>2</b>
<b>1. Key characteristics and context.....</b>	<b>2</b>
1.1. Location and geographical scope.....	2
1.2. Foundation & history .....	2
1.3. National/regional enabling frameworks and policies .....	3
<b>2. Governance and internal organisation .....</b>	<b>3</b>
2.1. Governance model .....	3
2.2. Key actors and stakeholders .....	4
2.3. Business model .....	4
2.4. Grid connection .....	5
2.5. Access to finance .....	5
<b>3. Impact and Analysis.....</b>	<b>5</b>
3.1. Social, environmental, and economic impacts .....	5
3.2. Innovativeness .....	6
3.3. Inclusiveness.....	6
3.4. Key drivers for success.....	6
3.5. Replicability and transferability.....	7
3.6. Main takeaways and recommendations .....	7

## ENERKOM OPAVSKO, Opava (CZ)

### Relevant Local Practice: Fostering territorial development via an integrated approach

This local practice refers to the use of integrated territorial approaches that support the creation, growth, and sustainability of energy communities through a combination of social, environmental, and economic interventions. This practice often involves leveraging funding from sources like the European Regional Development Fund (ERDF), the European Social Fund (ESF), or the European Structural and Investment Funds (ESIF) to ensure that energy communities are aligned with broader regional development goals. By incorporating these funds, energy communities can address various aspects of territorial development, from improving energy access in vulnerable groups to providing educational programs and skills trainings that empower local populations. This integrated approach not only supports the initial establishment of energy communities but also aids in their long-term maintenance and resilience, ensuring that the social and economic benefits are widely distributed, thereby fostering inclusive growth and territorial cohesion.

### Relevant Local Practice: Municipal-led energy sharing

Municipal-led energy sharing is a local practice where a municipality leads a project to generate and consume energy locally within the community. Unlike traditional energy communities defined by EU directives, these projects do not require citizens to join as members or adhere to specific organisational criteria such as the effective control by citizens. Instead, the municipality itself, as well as residents and other entities (like local SMEs) collectively self-consume the locally produced energy benefiting from some of the advantages of energy communities without the need for full compliance with EU or national definitions. This approach can be particularly useful in situations where establishing a full energy community is impractical due to financial or organisational constraints, offering a viable alternative to achieve similar positive impacts.

## Executive Summary

ENERKOM OPAVSKO stands as a pioneering example of a municipal-led energy community in Czechia, demonstrating how integrated territorial approaches can drive both sustainable energy transformation and local development. Rooted in the Opava region, a coal transition area with a population nearing 150,000, the initiative unites municipalities, small and medium-sized enterprises (SMEs), non-governmental organisations (NGOs), and citizens in a collaborative effort to reduce fossil fuel dependency, tackle energy poverty, and stimulate socio-economic resilience. Through transparent governance, innovative business models, and a strong focus on local resource utilisation, ENERKOM OPAVSKO has become a benchmark for replication in other regions, illustrating the power of local practices in achieving national and European energy goals. The experience demonstrates that local practices—particularly municipal-led energy sharing and integrated development—are essential for achieving a just, sustainable, and inclusive energy transition.

### 1. Key characteristics and context

The following section will provide an overview of the geographical characteristics of the ENERKOM OPAVSKO energy community as well as providing an overview of the key milestones in the history of the energy community.

#### 1.1. Location and geographical scope

The Opava region, situated in Moravian-Silesian Czechia, has a legacy of coal mining and heavy industry. By the early 2000s, the area faced significant economic decline, high unemployment, and acute air pollution. Recognising the need for a new development model, local authorities began to focus on energy efficiency and renewable energy sources (RES) as early as 2008. Initial efforts were fragmented, with individual municipalities launching small-scale projects in solar photovoltaics (PV), biomass heating, and building retrofits.

#### 1.2. Foundation & history

The origins of ENERKOM OPAVSKO can be traced back to 2008, when strategic planning efforts in the Opava region began to focus on energy savings, renewable energy sources (RES), and sustainable transport. Over a decade, these fragmented initiatives evolved into a more cohesive vision, culminating in the adoption of a comprehensive community energy concept in 2019. By 2017, inspired by European initiatives such as REScoop.eu, the Local Action Group (LAG) Opava began facilitating regional dialogue. The region's status as a coal transition area enabled access to the Just Transition Fund, motivating local actors to pursue a collective, sustainable path. In 2019, the Opava region adopted a

comprehensive community energy concept, unifying local efforts under a shared vision. ENERKOM OPAVSKO was formally established with 17 founding members, representing a balance of public, private, and civil society interests. The association's statutes ensured participatory governance, transparent decision-making, and the reinvestment of profits into community benefit.

#### Key milestones of the project:

- **2008–2012:** Initial municipal energy projects (solar, biomass, efficiency)
- **2013–2018:** LAG Opava fosters regional dialogue; pilot projects in smart grids and community heating
- **2019:** Community energy concept adopted; ENERKOM OPAVSKO founded
- **2020–2022:** First round of EU and national funding secured; expansion of RES installations; new members join
- **2023–2025:** Integration of smart grid pilots, expanded citizen engagement, and regional replication

### 1.3. National/regional enabling frameworks and policies

The development of ENERKOM OPAVSKO has been closely aligned with both national and European policy frameworks that encourage decentralised energy production, just transition, and community-led initiatives. The Czech National Recovery Plan and the Just Transition Fund provided essential preparatory funding, while the Ministry of Finance and the EU Modernisation Fund have been instrumental in supporting investment and operational phases. The Opava region's status as a coal transition area has made it eligible for targeted support, facilitating the shift from fossil fuels to renewables and ensuring that vulnerable groups are not left behind. The legal framework for energy communities in Czechia, shaped by the EU Clean Energy Package, underpins the association's participatory governance and operational model.

#### Key enabling policies and funding sources include:

- **National Recovery Plan:** Provided initial grants for preparatory studies and capacity building
- **Just Transition Fund (JTF):** Supported regions in phasing out coal, with dedicated funding for community energy
- **EU Modernisation Fund:** Targeted at large-scale RES and grid modernisation projects
- **Operational Programmes (OP Environment, OP Technology and Applications for Competitiveness):** Offered additional co-financing for RES, efficiency, and innovation

The Moravian-Silesian regional government has prioritised energy transition in its development strategy, aligning with national and EU goals. Municipalities in Opavsko have adopted local energy action plans, setting ambitious targets for RES deployment and energy savings. LAG Opava played a critical role in accessing EU rural development funds, supporting project design, and ensuring that community energy remained a priority in local development plans.

## 2. Governance and internal organisation

The following section outlines how the governance model adopted by ENERKOM OPAVSKO works showcasing the key roles, figures and typology of stakeholders included. Finally, the chapter how the decision-making process works.

### 2.1. Governance model

ENERKOM OPAVSKO is governed by an association structure that embodies democratic principles, transparency, and inclusivity. Leadership is provided by a chairman and a committee representing the public, private, and NGO sectors. The general assembly, where each member has one vote regardless of financial contribution or sector, serves as the highest decision-making body. Statutes are designed to prevent any single stakeholder group – public or private – from exceeding 50% representation, thereby ensuring balanced participation and preventing dominance of a single actor. Profits generated by the community are reinvested in further development, technology upgrades, and social projects, reinforcing the long-term, non-profit orientation of the initiative. Then a board of Directors elected by the general assembly is responsible for strategic direction and oversight, the board of Directors appoints a chairperson that

represents the associations and ensures the implementation of its actions. Finally, the supervisory committee monitors compliance, finances and ethical standards.

### Decision-making

Key decisions, such as investment priorities, project selection, and profit allocation, are made democratically. Working groups focus on specific topics (e.g., technical innovation, social inclusion, communication), enabling broad participation and expertise sharing. The association maintains regular communication with members through assemblies, newsletters, and public events. Transparency is further ensured by publishing annual reports and financial statements. Disputes are resolved through mediation committees, with escalation to external arbitration if necessary. The governance model is reviewed periodically, allowing adaptation to new challenges and member needs. The key actors of ENERKOM OPAVSKO are the following:

- **Municipalities:** the backbone of ENERKOM OPAVSKO, providing leadership, legitimacy, and local knowledge. They contribute assets (e.g., land, rooftops), co-finance projects, and champion energy transition in their communities. The mayors' active involvement has been instrumental in building trust and mobilising citizens.
- **SMEs:** participate as technology providers, renewable energy producers, and service suppliers (e.g., installers, maintenance, energy auditors). Their motivations include access to affordable, green energy, new business opportunities, and enhanced corporate social responsibility.
- **NGOs and LAG Opava:** serve as project promoters, facilitators, and innovation brokers. They provide expertise in funding applications, stakeholder engagement, and capacity building. Their neutral position helps bridge interests between public and private actors.
- **Citizens and community groups:** both beneficiaries and co-creators. They participate in decision-making, invest in community projects, and benefit from lower energy costs and improved services. Special efforts target vulnerable groups (e.g., low-income households, elderly), ensuring inclusivity.
- **Regional and national partners:** Regional authorities, universities, and national agencies provide technical support, policy guidance, and research collaboration. Partnerships with REScoop.eu and other European networks enable knowledge exchange and advocacy.

## 2.2. Key actors and stakeholders

Municipalities are at the heart of ENERKOM OPAVSKO, providing leadership, resources, and legitimacy. SMEs contribute as technology providers, renewable energy producers, and service suppliers, motivated by access to affordable, sustainable energy and enhanced corporate social responsibility. NGOs, particularly through the LAG model, act as regional coordinators, project promoters, and innovation facilitators. Citizens are both beneficiaries and active participants, whose engagement is essential for the uptake and legitimacy of the community. As the initiative expands, regional institutions such as healthcare and educational organisations are expected to join, further broadening the impact.

## 2.3. Business model

The business model of ENERKOM OPAVSKO is characterised by a blend of public grants, member investments, and operational surcharges on shared energy. The initial phase relied heavily on public subsidies from the National Recovery Plan and the Just Transition Fund, while subsequent investment phases have been supported by bank loans and member contributions. Operational costs are covered by a modest surcharge on the price of shared energy, which remains below market rates and delivers direct benefits to members. Importantly, profits are not distributed among members but are reinvested in new renewable energy projects, community services, and social initiatives, such as affordable clean transport for vulnerable groups.

## 2.4. Grid connection

The community operates a diverse portfolio of renewable energy installations, including solar photovoltaic (PV), wind, biomass, and biogas cogeneration units. These assets are connected to both private and public buildings, with smart grid technologies and pilot projects – such as the WAVE combined heat and power (CHP) unit and the SMART GRID initiative in Budišov nad Budišovkou – enhancing integration and flexibility. ENERKOM OPAVSKO operates a diverse portfolio of renewable installations:

- **Solar PV:** Installed on municipal buildings, schools, and SMEs

- **Wind turbines:** Located on suitable municipal land
- **Biomass and biogas CHP:** Utilised for district heating and electricity
- **Smart grids:** Piloted in Budišov nad Budišovkou and other towns, integrating multiple sources and enabling real-time energy management

By prioritising local generation and consumption, ENERKOM OPAVSKO reduces reliance on long-distance energy transfers and strengthens the resilience of the regional grid. Furthermore, the grid connection agreements were negotiated with regional distribution system operators (DSOs), ensuring priority access for community-generated electricity.

## 2.5. Access to finance

Securing adequate finance has been a persistent challenge, particularly for large-scale investments. The community's ability to leverage grants from both national and European sources, combined with private investment from members, has been crucial to its success. The expertise of the LAG in funding acquisition and project management has played a significant role in navigating complex application processes and ensuring financial sustainability. Ongoing efforts are focused on accessing the EU Modernisation Fund and other financial instruments to support further expansion and innovation. A key principle is that no profits are distributed to members; instead, all surplus is reinvested for community benefit. This ensures long-term sustainability and continuous improvement. The association maintains a reserve fund for risk management and future investments. Financial transparency and regular audits build trust amongst members and funders.

Leveraging these funding opportunities required navigating complex application processes and demonstrating financial viability. The LAG's experience in project management and funding acquisition was instrumental in overcoming different obstacles.

As such, ENERKOM OPAVSKO had to face different hurdles came with a series of obstacles for OPAVSKO. The energy community had to overcome the following:

- Requirements for upfront capital investments
- Matching funding obligations
- Long payback periods for some RES technologies

The different solutions deployed by ENERKOM OPAVSKO encompassed pooling resources from different organisations and members of the community, leveraging the creditworthiness of the municipality involved in the project (thereby enhancing its reputation and solid financial background), phasing of investments to align with available funding.

Finally, ongoing efforts are focused on securing additional EU funds, exploring the opportunity of using green bonds, and developing innovative financing models (i.e. energy performance contracting).

## 3. Impact and Analysis

Beyond financial returns, the business model emphasises social and environmental impacts: reducing energy poverty, supporting local jobs, and improving the environment. The section below describes these different aspects.

### 3.1. Social, environmental, and economic impacts

The impacts of ENERKOM OPAVSKO are multifaceted. Environmentally, the community has achieved significant reductions in CO<sub>2</sub> emissions and increased the share of renewables in the regional energy mix, aiming for a 50% RES share by 2030. Integrated biomass and water retention strategies have also contributed to improved landscape management. Economically, the initiative has created jobs in high-skill sectors such as digitisation and automation, enhanced regional competitiveness, and ensured the efficient use of local capital. Socially, ENERKOM OPAVSKO has strengthened community cohesion, reduced energy poverty, and improved the region's image. Targeted support for vulnerable groups, such as affordable clean transport, exemplifies the inclusive nature of the initiative.

#### Social impacts

ENERKOM OPAVSKO has reduced energy poverty by offering affordable tariffs and targeted support for vulnerable groups. Community cohesion has strengthened through participatory decision-making and shared ownership of assets. Educational programmes and public events have raised awareness and built local capacity.

Case studies highlight the positive impact on low-income households, who report improved comfort and lower bills, and on schools, which use solar installations for STEM education.

### **Environmental impacts**

ENERKOM OPAVSKO has achieved measurable reductions in greenhouse gas emissions, with an estimated annual CO<sub>2</sub> savings of over 10,000 tonnes. The share of renewables in the regional energy mix has increased to 35 per cent, with a target of 50 per cent by 2030. Integrated land management (biomass, water retention) has improved biodiversity and soil quality.

### **Economic impacts**

The initiative has created over 120 direct and indirect jobs in installation, maintenance, and administration. Local SMEs have benefited from new contracts and business opportunities. Energy cost savings for municipalities and citizens are estimated at 15–20 per cent compared to conventional suppliers.

The community's activities have also enhanced regional competitiveness, attracted further investment and improved the area's image.

## **3.2. Innovativeness**

What sets ENERKOM OPAVSKO apart is its integrated, municipal-led approach to energy sharing and territorial development. The balanced governance model, participatory decision-making processes, and reinvestment of profits are all innovative features that distinguish the community from more traditional energy initiatives. The use of LAGs as incubators for community energy, combined with active engagement in European networks such as [REScoop.eu](https://rescoop.eu), positions ENERKOM OPAVSKO at the forefront of energy transition innovation in Central and Eastern Europe.

The association's municipal-led, multi-stakeholder governance is unique in Czechia, ensuring both legitimacy and broad participation. The use of LAGs as incubators for community energy is a novel approach, leveraging existing rural development structures. Smart grid pilots, digital monitoring, and peer-to-peer energy sharing place ENERKOM OPAVSKO at the forefront of technical innovation. The integration of multiple RES technologies and flexible demand management further enhances system resilience.

## **3.3. Inclusiveness**

The focus on inclusivity – ensuring that vulnerable groups benefit from the transition – sets a new standard for community energy. The reinvestment of profits into social and educational programmes amplifies the initiative's impact for a diverse set of residents.

## **3.4. Key drivers for success**

The success of ENERKOM OPAVSKO can be attributed to several key factors. Strong municipal leadership and effective public-private partnerships have provided a solid foundation. The balanced and inclusive governance structure has ensured broad participation and trust among stakeholders. Strategic use of integrated territorial funding and the expertise of the LAG have facilitated access to resources and accelerated project implementation. Engagement with European best practices and innovation networks has enabled continuous learning and adaptation. Finally, the focus on local resource utilisation and resilience has anchored the community's long-term sustainability.

## **3.5. Replicability and transferability**

The model developed by ENERKOM OPAVSKO is highly transferable, particularly to regions with populations between 10,000 and 200,000. Key elements that can be replicated include the use of LAGs as facilitators, balanced membership structures, participatory governance, and the strategic reinvestment of profits. The initiative has already inspired the creation of at least 17 similar communities in Czechia and is being considered as a model in other European countries. The adaptability of the approach to different regional contexts underscores its potential for widespread impact.

## **3.6. Main takeaways and recommendations**

The experience of ENERKOM OPAVSKO demonstrates that the local practices of municipal-led energy sharing and integrated territorial approaches can be highly effective for the success of community energy initiatives. Ensuring a balance of power among stakeholders and fostering inclusive participation are critical for building trust and legitimacy. Leveraging existing networks such as LAGs and European innovation platforms accelerates learning and access to

funding. Planning for inclusivity, with targeted support for vulnerable groups and reinvestment of profits into social projects, enhances the community's impact and acceptance. Finally, continued policy support at both national and European levels is necessary to sustain and scale these efforts, with a focus on integrated funding, capacity building, and legal clarity for energy communities.

### Takeaways and recommendations on the local practice of Municipal-led energy sharing

Strong municipal leadership is fundamental for the legitimacy, trust, and mobilisation of resources in community energy projects. Democratic and inclusive governance structures, where municipalities play a leading but not exclusive role, ensure balanced decision-making and long-term commitment. Municipalities are well-placed to leverage public assets (such as rooftops and land), coordinate local actors, and act as guarantors for financing. Transparent communication and participatory processes, led by local authorities, foster citizen engagement and acceptance. Municipalities can act as credible intermediaries between citizens, SMEs, and higher levels of government, facilitating access to funding and regulatory support.

- **Local authorities should take an active leadership** role in initiating and coordinating energy sharing initiatives, while ensuring inclusivity and shared ownership.
- **Municipalities should invest in capacity building** for staff and elected officials to better understand and manage community energy projects.
- Encourage the **adoption of clear, transparent governance** models that prevent dominance by any single group and ensure fair representation.
- Develop **local communication strategies to engage citizens**, address concerns, and build broad-based support for energy sharing.
- Advocate for **supportive national policies** that recognise and empower municipal-led energy communities.

### Takeaways and recommendations on the local practice of Fostering territorial development via an integrated approach

Integrated territorial development—linking energy, economic, social, and environmental objectives - maximises the impact and sustainability of community energy initiatives. Collaboration across municipalities, SMEs, NGOs, and citizens enables pooling of resources, knowledge, and skills, and ensures that projects align with broader regional priorities. Leveraging existing structures such as Local Action Groups (LAGs) enhances project management, funding access, and stakeholder engagement. Integrated approaches facilitate the targeting of vulnerable groups and the reinvestment of benefits into local development, education, and social inclusion. Continuous learning, innovation, and adaptation are essential to respond to changing regional needs and opportunities.

- Design **community energy projects** as part of broader **local and regional development strategies**, ensuring alignment with economic, social, and environmental goals.
- Foster **strong partnerships between municipalities, businesses, NGOs, and citizens**, using platforms like LAGs to coordinate efforts and share best practice.
- **Prioritise inclusivity** by developing mechanisms to ensure vulnerable groups benefit from territorial development and energy transition.
- **Invest in innovation**—both technological (e.g., smart grids) and organisational (e.g., participatory planning)—to enhance **adaptability and resilience**.
- Encourage **policymakers to streamline funding**, reduce administrative barriers, and provide technical assistance for integrated territorial initiatives.

### Other takeaways and recommendations

#### For policymakers:

- Simplify regulatory and funding frameworks for community energy.
- Support capacity building and technical assistance for municipalities and LAGs.
- Prioritise social inclusion and just transition in energy policy.

#### For practitioners:

- Foster partnerships across sectors and scales.

- Invest in participatory processes and transparent communication.
- Embrace technological and business model innovation.

**For communities:**

- Build on local strengths and resources.
- Engage citizens from the outset.
- Reinforce the social mission alongside environmental and economic goals.

This case study was developed as part of the project Territorial Analysis of Decentralised Energy Markets conducted for ESPON EGTC. It is based on information that is publicly available online, on the energy community's own webpage, as well as on information collected through a semi-structured interview with representatives of the energy community. The reviewed documents include:

- **Interview with ENERKOM OPAVSKO representative**
- **RESCoop.eu success stories (<https://www.rescoop.eu>)**
- **ELARD Knowledge Hub (<https://elard.eu/elard-knowledge-hub/>)**
- **Czech National Recovery Plan (<https://www.planobnovy.cz/>)**
- **Just Transition Fund (EU) ([https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/finance-and-green-deal/just-transition-mechanism/just-transition-fund\\_en](https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/finance-and-green-deal/just-transition-mechanism/just-transition-fund_en))**
- **Ministry of Industry and Trade, Czech Republic (<https://www.mpo.cz>)**
- **Regional Development Agency Moravian-Silesian (<https://www.rra.cz>)**
- **Interview with LAG Opava**



# ESPON



Co-funded by  
the European Union  
Interreg

[espon.eu](https://espon.eu)



## **ESPON 2030**

ESPON EGTC  
11 Avenue John F. Kennedy  
L-1855 Luxembourg  
Grand Duchy of Luxembourg  
Phone: +352 20 600 280  
Email: [info@espon.eu](mailto:info@espon.eu)  
[www.espon.eu](http://www.espon.eu)

The ESPON EGTC is the Single Beneficiary of the ESPON 2030 Cooperation Programme. The Single Operation within the programme is implemented by the ESPON EGTC and co-financed by the European Regional Development Fund, the EU Member States and the Partner States, Iceland, Liechtenstein, Norway, and Switzerland.

### Disclaimer

This delivery does not necessarily reflect the opinion of the members of the ESPON 2030 Monitoring Committee.