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LIFE-BECKON

"How to" Technical Paper on the Development of Technical Assistance Offices for Public Authorities to Implement Energy Communities.

Focus in Bulgaria, Denmark, and Spain

Author: Climate Alliance

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List of acronyms

Project title

LIFE-BECKON - Boosting Energy Communities massive deployment by equipping local authorities with comprehensive technical assistance cookbook, integrated services and capacity building

Project partners

R2M	R2M Solution SL (Project Coordinator)
CA	Climate Alliance European Secretariat
ENoLL	European Network of Living Labs
WEG	WEglobal
KK	City of Copenhagen
SOF	Sofia Energy Agency (SOFENA)
DAV	Diputación de Ávila
TAMK	Tampere University of Applied Sciences

Commonly used terms

APEA	Agencia Provincial de la Energía de Ávila
BG	Bulgaria
CEC(s)	Citizen Energy Community(ies)
DK	Denmark
EC(s)	Energy Community(ies)
ERDF	European Regional Development Funding
ES	Spain
OSS	One-Stop-Shop (OSS)
PV	Photovoltaics
RE	Renewable Energy
REC(c)	Renewable Energy Community(ies)
RES	Renewable Energy Source
TA	Technical Assistance
TAO(s)	Technical Assistance Office(s)

Executive Summary

Energy communities (ECs) are transforming the energy landscape by empowering citizens, local businesses, and public institutions to collectively produce, manage, and consume renewable energy. This paradigm shift supports the decentralization of energy systems, enhances resilience and energy governance. Public authorities are uniquely positioned to catalyze this transition by enabling regulatory frameworks, deploying tools, providing technical support, and fostering civic engagement.

This guide offers a comprehensive roadmap for local and regional governments, climate and energy agencies to design and operate **supporting mechanisms through the establishment of dedicated Technical Assistance Offices (TAOs)** to promote or expand energy sharing through the development of energy communities. Drawing from LIFE-BECKON pilots, EU and national policy frameworks, this document outlines a guidance process to establish and successfully run TAOs at regional and local level.

The journey to set up and run a TAO requires adaptation to the local contexts and the evolving policy landscapes. Several components and steps are needed to properly establish and run a successful and impactful TAO.

First of all, the definition of goals, services and activities to be provided, together with a solid strategy on how to maintain and finance the TAO, and the identification of a dedicated team able to properly run the TAO. The team and target groups should be continuously updated and informed on energy community topics and evolutions through capacity building activities. Stakeholders involvement and effective communication are crucial components as well. Once the above mentioned conditions are met, the TAO is ready to start running and providing support to those interested in establishing energy communities.

For each step of establishing and running a TAO, a general overview is provided, including practical examples and country-specific sections for Bulgaria, Denmark and Spain. The image below summarizes the main components and steps suggested to set-up and run a TAO.

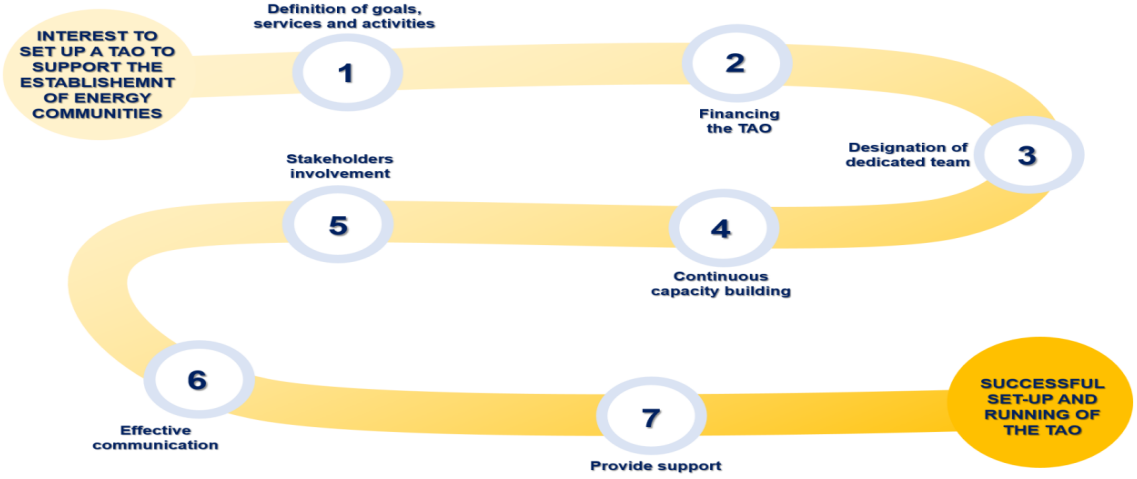


Figure: Main components and steps suggested to establish and run a Technical Assistance Office (TAO) to promote or expand energy sharing through the development of energy communities.

1. A few words on LIFE-BECKON

The LIFE-BECKON project (November 2022, April 2026) is **funded by the European Commission through the LIFE program**, which is one of the EU's financing instruments for environment and climate action. It belongs to the Life Clean Energy Transition sub-program.

LIFE-BECKON stimulates and boosts the **deployment of energy communities across Europe** by developing and delivering **comprehensive support mechanisms** for public authorities, promoters and Local Action Groups to better equip them to facilitate the creation of energy communities.

Figure: LIFE-BECKON partners.

LIFE-BECKON provides public authorities with the following support services, tested and validated in three **demonstration areas** such as **Copenhagen (Denmark)**, **Sofia (Bulgaria)**, and **Province of Ávila (Spain)**:

- ✓ **Technical Assistance cookbook**, to equip Technical Assistance Offices of public authorities and relevant stakeholders with knowledge and learning material covering all the steps for the development of energy communities (initiation, design, implementation, operation).
- ✓ **Capacity Building program**, developed via Train-the-Trainer approach.
- ✓ Integrated **One-Stop-Shop (OSS) web platform**, a digital platform designed to connect citizens, municipalities, and suppliers to support the creation and growth of local energy communities. Key functions include (i) information and guidance on how to form or join an energy community; (ii) knowledge sharing through training resources and community discussions; (iii) funding and financial opportunities for renewable energy and efficiency projects; (iv) supplier and expert matchmaking to connect demand and service providers.

Besides the three demonstration areas, LIFE-BECKON engaged a **community of 21 replicators**[1] – composed mainly by municipalities, cities, energy agencies and relevant actors – receiving capacity building and soft technical assistance to apply LIFE-BECKON approach, knowledge and tools at the local level.

[1] Report describing the support package offered to the LIFE-BECKON Community of Replicators and the development of the supporting mechanisms in their areas https://www.climatealliance.org/wp-content/uploads/2025/07/D5.3_Report_replicators_activities.pdf.

2. Introduction

2.1 Who is this paper for?

This document is targeted at entities wishing to set up supporting mechanisms to promote or expand energy sharing through the development of energy communities.

2.2 Definition of supporting mechanisms for energy communities

For the purpose of this document, a supporting mechanism for energy communities is defined as a **Technical Assistance Office (TAO) embedded in regional or local entities that provides a range of services to enable the establishment and running of energy communities**, helping to overcome barriers in the whole process of setting up and implement the energy community and/or the energy sharing project.

2.3 Context

Following the creation of the EU definitions for Renewable Energy Communities (RECs) and Citizen Energy Communities (CECs), national governments have been working on transposing the EU directives and putting in place enabling frameworks for energy communities. Technical Assistance Offices providing administrative, technical, capacity-building and/or financial assistance to energy communities in this context have emerged as an effective way to support the set up and development of energy community projects.

The set-up of mechanisms for the provision of technical, administrative and financial advice and assistance on energy efficiency is also an obligation as part of Article 22 (3) (a) of the recast Energy Efficiency Directive.

3. How to establish a Technical Assistance Office (TAO)

The establishment of enabling ecosystems for energy communities requires not only regulatory frameworks but also operational structures capable of supporting local actors throughout complex development processes. Technical Assistance Offices respond to this need by acting as intermediaries between policy, markets, and citizens. Their role extends beyond advisory functions, encompassing facilitation, coordination, and long-term accompaniment of projects.

The journey towards establishing a TAO is not linear but iterative, requiring adaptation to local contexts, institutional capacities, and evolving policy landscapes. Several components and steps are needed to properly establish and run a successful and impactful Technical Assistance Office. First of all, the definition of goals, services and activities to be provided, together with a solid strategy on how to maintain and finance the TAO, and the identification of a dedicated team able to properly run the TAO. The team and target groups should be continuously updated and informed on energy community topics and evolutions through capacity building activities. Stakeholders involvement and effective communication are crucial components as well. Once all above is well set, the TAO is ready to start running and providing support to those interested in establishing energy communities.

The figure below summarizes the main components and steps suggested to establish and run a TAO.

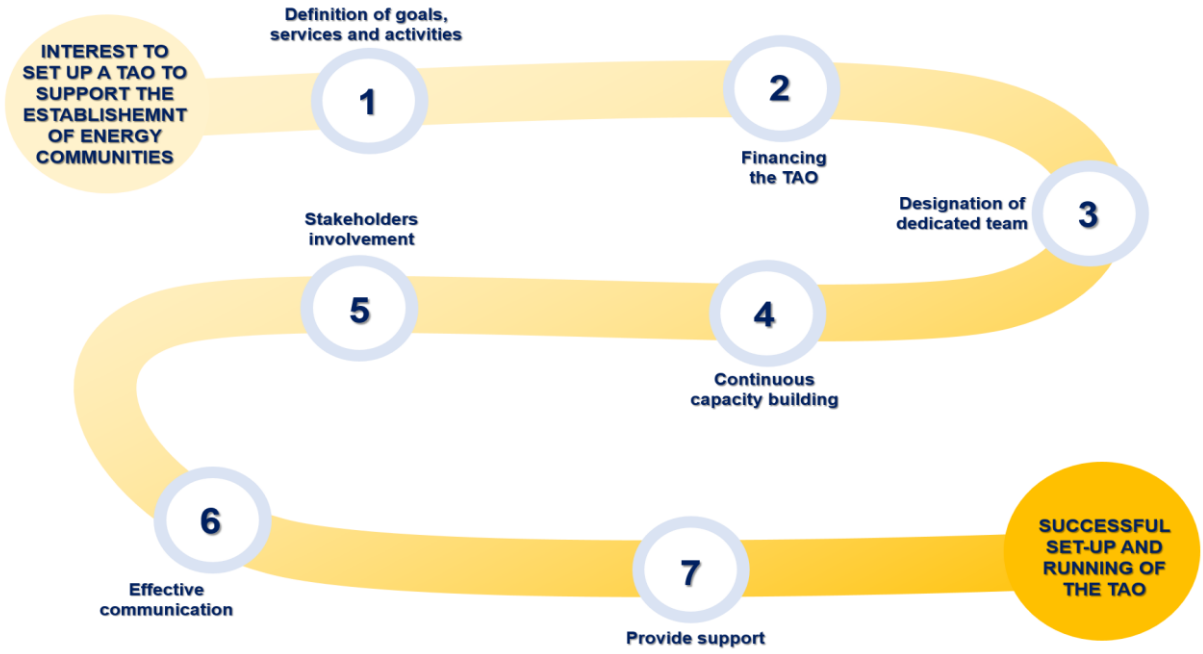


Figure: Main components and steps suggested to establish and run a Technical Assistance Office (TAO) to promote or expand energy sharing through the development of energy communities.

3.1 Definition of goals, services and activities

The initial phase in the establishment of a Technical Assistance Office (TAO) requires the articulation of a clear mission anchored in the national and regional energy transition and climate mitigation priorities. Defining goals requires translating high-level policy ambitions into concrete, measurable, and operational objectives. These goals typically fall into several interrelated domains:

- **Energy transition**: increasing renewable energy deployment, decentralisation, and flexibility.
- **Socio-economy**: fostering local economic development, job creation, and social inclusion.
- **Governance**: promoting citizen participation and democratic energy models.
- **Environment**: reducing greenhouse gas emissions and improving energy efficiency.

A robust strategy for TAO should include both **short-term outputs** (e.g. number of supported initiatives) and **long-term impacts** (e.g. contribution to regional decarbonisation).

The definition of services is intrinsically linked to the identification of barriers faced by target groups, including citizens, municipalities, SMEs, and cooperatives. Evidence from LIFE-BECKON demonstration areas demonstrates that stakeholders often encounter barriers such as regulatory complexity, limited access to financing, bankability challenges, lack of technical expertise, weak stakeholder coordination, and low awareness and trust. To address these issues, TAOs should implement **continuous needs assessment processes**, including surveys and stakeholder consultations, focus groups and participatory workshops, direct advisory interactions, feedback loops from ongoing projects.

Services and activities offered shall be based on the real needs of target groups and energy communities, identified through regular communications, direct interviews and surveys to properly understand the needs and barriers at the local, regional and national levels.

In operational terms, **the TAO functions as a One-Stop-Shop, providing a continuum of services from early-stage awareness raising to post-implementation support**. Activities shall be designed to accompany energy communities across four main phases: initiation, design, implementation, and operation. This lifecycle approach ensures continuity and reduces fragmentation in support provision.

These services can include:

- **Technical support** for feasibility studies, technology selection, grid integration guidance, energy system modelling.
- **Financial support** for business model development, financial planning and risk assessment, access to grants and loans, support with funding applications.
- **Legal and administrative support** on national and regional regulations, permitting procedures, governance structure design.
- **Social and organisational support** for community engagement strategies, cooperative development, conflict resolution mechanisms.

Furthermore, TAO operations should include **monitoring and evaluation**, as essential components providing evidence of effectiveness and informing continuous improvement.

A robust monitoring framework combines **quantitative indicators with qualitative assessments**, capturing outputs (e.g. number of supported projects), outcomes (e.g. installed capacity, investment mobilised), and impacts (e.g. emission reductions, social inclusion, local economic benefits). In addition to quantitative metrics, qualitative evaluation plays a crucial role in understanding less tangible effects, such as community empowerment, behavioural change, and governance innovation. Digital tools and platforms can streamline data collection and analysis, enabling real-time monitoring and more responsive decision-making. At the same time, regular feedback loops with stakeholders help validate findings and identify areas for improvement.

The TAO for Energy Communities in Sofia[2]

The Sofia Energy Agency (SOFENA) officially opened a Technical Assistance Office for energy communities in November 2023 within the LIFE-BECKON project (https://sofena.com/bg/energy-communities/).

The goal of the TAO is to consult all interested parties – local authorities, enterprises and citizens on how to create and operate an energy community. Information, training and consultation on technical, financial, management, regulatory and administrative issues will be made available to interested organizations and citizens.

The SOFENA Technical Assistance Office is the place where interested parties, citizens, organizations and businesses get advice and find all the information and services they need to create and manage an energy community project.

The TAO supports citizens and stakeholders in two main directions, energy poverty and energy communities.

Energy Poverty support

The office provides advice, information and services related to energy poverty alleviation. It is open to all citizens, regardless of whether they are energy poor or not. Services include:

- Simplifying processes for energy poor citizens by offering a single place where they can access expert advice and various services aimed at alleviating energy poverty, eliminating the need to navigate between multiple sources.
- Consolidating information and available resources for building energy audits and energy efficiency improvements, making it easier for users to find what they need.
- Providing up-to-date information and procedures, thus reducing the likelihood of receiving incorrect or contradictory information.
- Personalized one-on-one meetings with energy efficiency experts, providing users with more accurate and personalized information, etc.

[2] https://sofena.com/bg/energy-communities/.

Energy Communities support

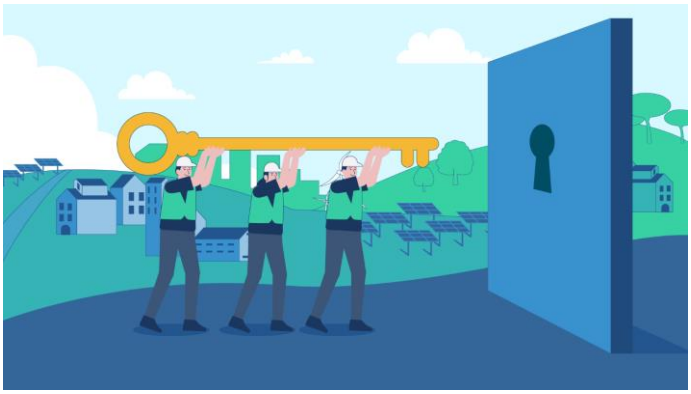
The office aims to make the energy sector more accessible through activities and tools for innovation, public engagement and participation, knowledge sharing and best practices to promote and support the creation of energy communities.

Covered topics are:

- Legislative framework for the creation of energy communities.
- Financial schemes to support these activities at local and national level.
- Technical issues and models and materials for construction.
- Good practices at national and European level.
- Installation of solar panels or other equipment for renewable energy production.
- Train-the-Trainer approaches to build capacity of different mechanisms for building energy communities.
- How to use the One-Stop-Shop platform to promote energy communities in Europe, etc.
- The office operates on a "one-stop shop" basis and aims to facilitate citizens, homeowners' associations and condominiums in the process of planning and implementing energy-efficient, renewable energy and sustainable projects.

Definition of goals, services and activities | Country-specific considerations		
Bulgaria	**Denmark**	**Spain**
• The energy community is still an emerging topic and awareness is low. • TAOs should prioritise **awareness raising and legal guidance**, as regulatory frameworks are relatively new and evolving. • Strong focus needed on **capacity building for municipalities**.	• Long tradition of energy cooperatives and high public acceptance. • TAOs can focus on **advanced services**, such as optimisation, sector coupling, and innovative business models. • Strong **integration with municipal climate planning** is recommended.	• Rapidly evolving regulatory framework with strong national support schemes. • TAOs should prioritise **administrative support and financing guidance**, as demand is high but complexity remains significant. • High potential for scaling through national and sub-national programmes.

3.2 Financing the TAO



The financial sustainability of a TAO is a critical determinant of its long-term effectiveness. While initial establishment is often supported through European funding programmes, such as LIFE, Horizon Europe, European Regional Development Funding (ERDF), reliance on short-term project funding is not sufficient for sustained operation, and **diversification of funding sources is needed**.

Public funding remains a cornerstone, particularly in the early stages, as it ensures neutrality and accessibility. However, reliance solely on grants may limit scalability and continuity. For this reason, **TAOs increasingly adopt blended financing models combining public funding with revenue-generating activities**.

In practice, these may include the provision of advanced consultancy services, the introduction of membership schemes for municipalities or community organisations, and the application of success-based fees linked to project financing outcomes.

Public (e.g. municipal) support combined with cooperative financing mechanisms can create stable ecosystems for TAOs, particularly when aligned with strong local energy traditions.

On the other hand, when TAOs support citizens and / or other actors interested in the development of energy communities in **financing specific energy community projects**, a clear distinction should be made between:

1. **Energy community** as a legal entity which comprises statutes, advisory, management of the EC, financial costs, etc.
2. **Energy projects** such as PV, wind, DHC installations, shared mobility projects etc., which require an initial investment, operation and management costs, and financial costs.

A citizen (or company, municipality) can participate exclusively in the legal entity (e.g. being part of the cooperative), exclusively in the projects (e.g. being a consumer in a solar self-consumption installation) or in both. However, ECs and energy projects might have different funding sources and schemes, timings, and partners. Therefore **a clear distinction should be made between financing an EC (legal entity) and a RE project**.

Financing is one of the biggest challenges for ECs and energy projects. Financial aids exist primarily at the national level. ECs are frequently financed by citizens or by crowdfunding directly from their community. Bank loans can also be used for this, but access to loans usually requires guarantees which are sometimes difficult to get.

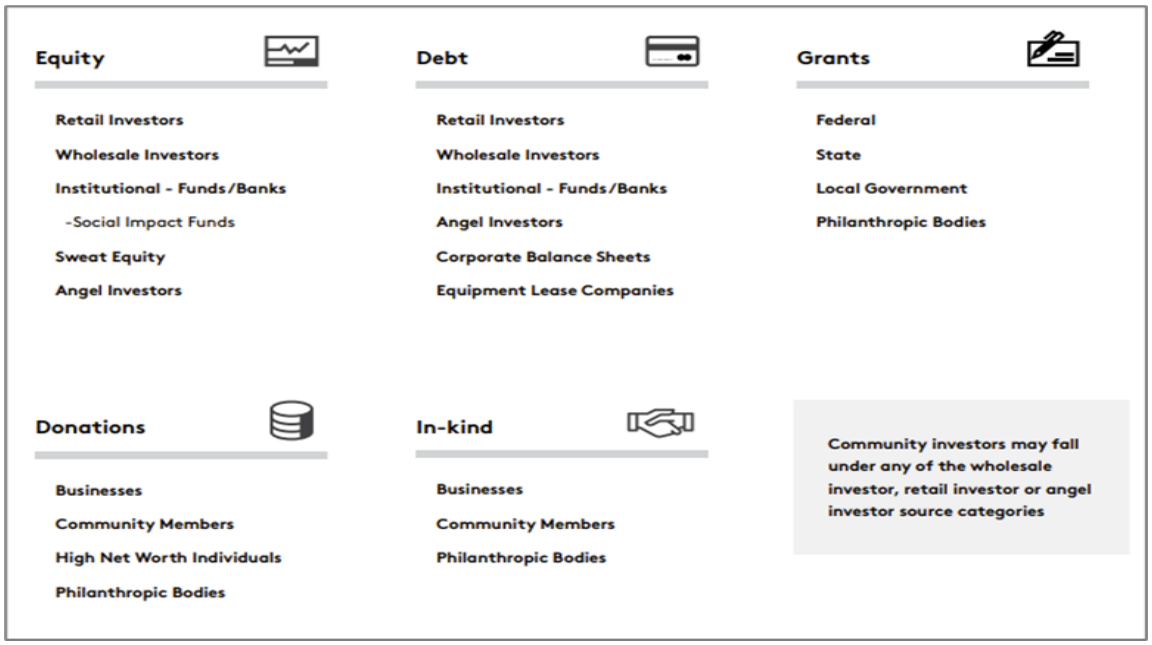


Figure: Overview of financing instruments[3].

TAO and municipalities can stimulate the (financial) development of ECs and take on the following roles:

Technical / development support

- Technical assistance and capacity-building.
- Helping to facilitate partnerships and networks.
- Local energy planning and policy support.
- Partnering with local authorities and stakeholders for project development.
- Providing public spaces for installations.

Financial support

- Guidance on financial planning.
- Assistance in infrastructure investment.
- Provision of finances and resources (initial seed funding etc.).

Across Europe, the **most common forms of financing ECs and energy projects** are:

- Self-financing: active participation of members as both investors and decision-makers.
- Subsidies and grants: at local, national, European level / Next Generation European funds.
- Bank Financing: difficult to obtain, provides up to 80% of financing / Green loans (European Investment Bank).
- Crowdfunding: (a small amount of) funding through online platforms.
- Crowdlending: a form of private financing conducted between companies.
- Financial Lease: Leasing (no direct acquisition), renting (does not include purchase option).

[3] Based on the following sources: https://c4ce.net.au/wp-content/uploads/2020/05/Funding-Basics-Guidebook.pdf https://www.rescoop.eu/toolbox/financial-handbook-for-rescoops

- Selling self-consumption surpluses: RECs selling surpluses to the grid.
- Cooperative fund: support ECs especially in their initial stages / invest in RE projects.

Combining different levels of funding support in Bulgaria

The Sofia Energy Agency (SOFENA) is financing their TAO activities through a combination of EU funding and their own resources.

The establishment of the TAO in Sofia was co-financed by two EU projects - Powerpoor (Horizon 2020 program) and LIFE-BECKON (Life program) and by own resources.

The TAO will continue its operation within the framework of the Sofia Energy Agency. In the future, different national programs under the Recovery and Resilience Plan will represent crucial opportunities for developing and improving the activities of the TA.

The TAO in Sofia is a continuation of the Assistance office for energy poor people, established several years earlier. The activities in the office are covered by the constant staff of the agency and if it is necessary an additional staff is hired for currently opened national campaigns for example. The office is opened every working day from 9.00 h a.m. to 17.30 h. p.m. but citizens and stakeholders can reach it 24/7 via the following e-mail: taobeckon@sofena.com.

The Community Transformation Offices in Spain

In Spain, the Ministry for Ecological Transition and Demographic Challenge (MITECO), through the Institute for Diversification and Energy Saving (Instituto para la Diversificación y el Ahorro de la Energía, IDAE[4]) has developed a funding programme to set up energy community transition offices (Community Transformation Offices - Oficinas de Transformación Comunitaria, OTCs). The programme was set up thanks to the Next Generation EU programme, as part of the national recovery plan on the back of the COVID-19 crisis.

The programme will allocate €20 million for the implementation of projects to establish and operate 'Community Transformation Offices', as well as the adaptation of existing offices into community one-stop-shops, to promote and set up energy communities.

[4] The E.P.E. Institute for the Diversification and Saving of Energy (IDAE), M.P., is a body assigned to the Ministry for the Ecological Transition through the Secretary of State for Energy, to which it reports: https://www.idae.es/en/about-us/who-we-are.

The grants will be provided through a non-repayable subsidy, which will be distributed to the beneficiaries upon project execution verification and investment certification. To facilitate project financing, IDAE offers the option to disburse 80% of the granted aid to the beneficiary in advance. The funding will cover a period of up to 3 years.

The program seeks to facilitate the creation of new energy communities of all kinds (citizens, business, industry…) with dissemination, advice and accompaniment measures that pave the way and extend the general knowledge about this cooperative formula of production and consumption of renewable energy, as well as promoting measures of energy efficiency, demand management and sustainable mobility.

The constitution of the OTC will have a direct impact on employment, associated with the professionals who will provide the services in the office, but it will also generate a tractor effect of the economy associated with energy services in their areas of influence, by activating the constitution of energy communities.

In addition, OTCs will contribute to a more inclusive ecological transition through three lines of action:

- Empowerment of new actors in the energy sector, accompanying them, among other issues, in the activation and dynamization of energy communities.
- Expert advice on projects for the construction and operation of energy communities: technical, administrative, financial or legal, but also social, facilitating the debate and participation processes that characterize these cooperative formulas for the production and consumption of renewable energy.
- Formation and dissemination of energy communities, to extend knowledge about this formula, maximizing the opportunities they offer in the democratization of energy generation and consumption.

Financing the TAO | Country-specific considerations		
 **Bulgaria**	 **Denmark**	 **Spain**
• Limited public budget available. • Strong reliance on **external funding** (e.g. EU grants). • TAOs may need to operate with **fully subsidised services** in early stages.	• Strong municipal finances and cooperative culture enable **co-financing models**. • Membership-based funding schemes are highly viable. • Opportunities for **market-based services** are well developed.	• Significant national and regional funding programmes available. • TAOs can **combine public funding with service-based revenue**. • Recovery and Resilience Facility funds provide strong opportunities.

3.3 Designation of dedicated team

The operational effectiveness of a TAO is largely dependent on the composition and coordination of its team. Given the multidimensional nature of energy community development, a **multidisciplinary approach** is required, integrating expertise in engineering, finance, law, and social engagement.

Rather than functioning as isolated experts, team members must operate within a collaborative framework that enables cross-disciplinary problem solving. This is particularly important when addressing complex project challenges that span technical feasibility, regulatory compliance, and community acceptance.

A TAO team should collectively cover the following expertise:

- **Technical**, on renewable energy, grids, efficiency.
- **Financial**, for investment analysis and funding mechanisms.
- **Legal**, on energy law and regulations, cooperative structures.
- **Social**, for community engagement and facilitation.

The inclusion of external experts through partnerships and service agreements further enhances the TAO’s capabilities. This hybrid model allows for scalability while maintaining a lean core structure.

Organisationally, TAOs may be **embedded within public administrations or structured as semi-independent entities**. Each model presents advantages and trade-offs. Embedded structures benefit from institutional legitimacy and access to policy processes, while independent entities may offer greater flexibility and innovation capacity.

How the City of Copenhagen works

In Copenhagen, the Technical Assistance Office has been embedded into existing organizational structures. The core team is based in the Building Renewal Department, which supports the refurbishment of the existing building stock using urban renewal funds.

As part of the Climate Taskforce, a cross-departmental collaboration, the Building Renewal Department works closely with local integrated urban renewal secretariats, bringing technical assistance closer to Copenhageners.

How the Sofia Energy Agency (SOFENA) works

One example for a successfully operating and well-staffed TAO is the one coordinated by Sofia Energy Agency (SOFENA). According to its statute SOFENA has been working for public benefit providing information, consultation and training in the field of energy saving, renovation of buildings and use of RES for public authorities, businesses and citizens.

Its permanent staff includes 2 experts with engineering expertise, and 1 - with humanitarian expertise and Master degree in energy markets and services. SOFENA staff has the responsibility of providing TA support for ECs and offering information and advice for the deployment of ECs to the interested citizens, SMEs and stakeholders, and of answering to inquiries by phone and email during the working time of the Agency.

Two persons of SOFENA's staff give consultation in person when asked within 2 hours per working day.

The collaboration between the Diputación de Ávila and the Provincial Energy Agency

The Provincial Energy Agency (APEA) as a part of Diputación de Avila (Provincial Administration Body) has provided information and assessed the Provincial Council's capacity to assist the TAO in organising meetings and seminars.

Diputación de Avila has been offering to the APEA and TAO team not only the office premises structure but also multimedia and press resources so that public information is permanently supported. Provincial managers and provincial leaders have supported projects and official acts including TAO public presentations and seminars and other events organized by TAO.

Designation of dedicated team | Country-specific considerations		
Bulgaria	**Denmark**	**Spain**
• Limited local expertise requires **capacity building within the team**. • External experts and international partnerships are crucial.	• High level of expertise available locally. • TAOs can operate with **specialised teams** and focus on innovation.	• Diverse regional contexts require **flexible and decentralised teams**. • Strong need for coordination across administrative levels.

3.4 Continuous capacity building

Capacity building is not a one-off activity but a continuous process that underpins the effectiveness of TAOs. Rapid technological advancements, evolving regulatory frameworks, and emerging financial instruments require constant updating of knowledge and skills.

The LIFE-BECKON approach demonstrates the value of **structured training programmes combined with experiential learning**. The integration of digital training platforms with interactive workshops and peer-learning mechanisms creates a dynamic learning ecosystem.

The **Training Hub within the** **LIFE-BECKON One-Stop-Shop Platform** serves as a centralised resource hub, offering a diverse array of learning experiences and tools for stakeholders involved in energy communities development. Designed with user-centric principles in mind, the Training Hub provides intuitive navigation and seamless access to a wealth of resources. Stakeholders can explore thematic videos, written materials, interactive tools, and engage in collaborative discussions within a dynamic learning environment. The Training Hub not only facilitates knowledge acquisition but also promotes engagement, collaboration, and knowledge exchange among stakeholders, fostering a culture of continuous learning and innovation.

The **"Train the Trainers" approach** can be a crucial component in the capacity building programme, ensuring sustainable knowledge transfer and capacity development. This approach recognizes the significance of cultivating a network of skilled facilitators who can proficiently disseminate knowledge, facilitate learning experiences, and spearhead capacity building initiatives at the local, regional, and national levels.

The Energy Academy in Copenhagen

One of the core tasks of TAOs is capacity building for their stakeholders. In Copenhagen, an Energy Academy was established which focuses on education and knowledge exchange: Training professionals, city staff, and stakeholders, sharing best practices in energy efficiency and smart energy systems, and learning from pilot projects and real-world experiments. This reflects Copenhagen’s broader approach of fostering collaboration across sectors, to coordinate action across the energy system and to help create scalable solutions for the whole city, particularly in energy efficiency, building retrofit, PV projects and also energy communities.

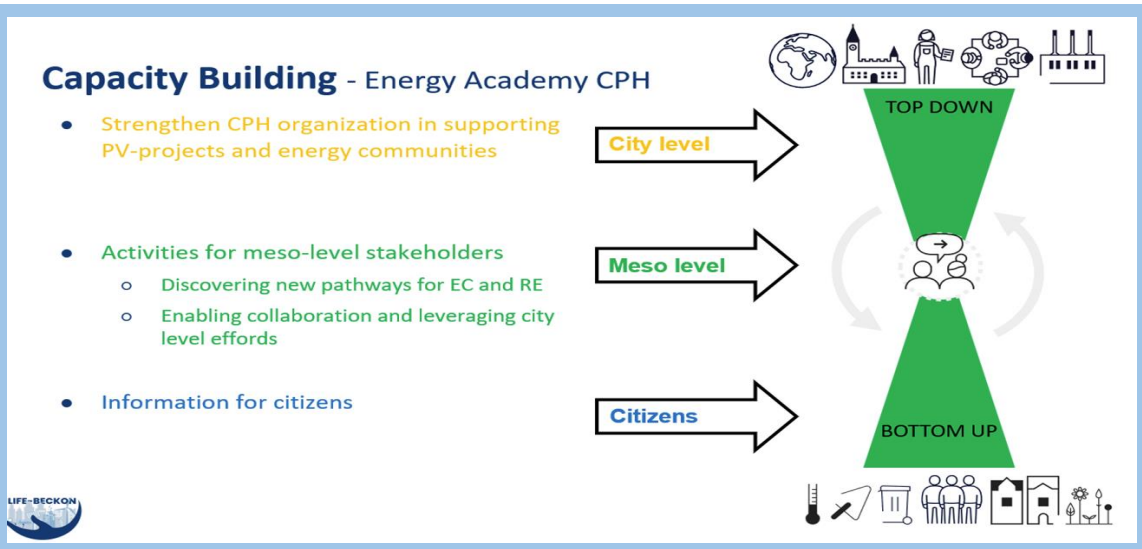


Figure: Capacity building for PV projects and ECs by the Energy Academy of the City of Copenhagen.

The idea of the Energy Academy is to act as a bridge between the small-scale micro level (individuals, citizens) and large-scale macro level (public authorities, entities, private companies and even researchers). The primary goals of this academy are to discover new pathways for the expansion of renewable energies and for the development of ECs in Copenhagen. In addition, collaboration between local governments and citizens shall be stimulated to leverage efforts on all levels of actors in the city. This also raises the overall awareness in the City for the potential of local renewable energy production and energy communities and contributes to the acceptance of energy transition in Copenhagen.

The LIFE-BECKON Capacity Building Programme

The Capacity Building Programme within the LIFE-BECKON project - coordinated by the European Network of Living Labs (ENoLL) - was crafted with the aim of providing stakeholders engaged in energy communities development with a robust framework of training and mentoring opportunities.

Recognizing the diverse needs and challenges faced by stakeholders across different sectors and regions, the Capacity Building Programme was designed to offer a comprehensive array of learning opportunities tailored to address specific skill gaps and knowledge requirements.

These opportunities aimed to foster not only the acquisition of technical expertise but also the development of collaborative problem-solving skills and the cultivation of a culture of continuous learning and innovation. Through these carefully curated opportunities, the programme sought to

empower stakeholders with the tools, resources, and support needed to drive positive change and sustainable development in their respective communities.

Within this framework, the Capacity Building Programme offered a comprehensive series of training modules, designed to address the multifaceted aspects of energy communities development, including thematic video lessons, Open Innovation Journey Workshops, interactive webinars, open debate, scale up challenge.

All training materials used within the Capacity Building programme are available in the LIFE-BECKON One-Stop-Shop (OSS) Platform: https://oss-energy-community.eu/.

Continuous capacity building | Country-specific considerations		
 **Bulgaria**	 **Denmark**	 **Spain**
• Strong need for **basic awareness and foundational training**. • Train-the-Trainers approach is critical for scaling.	• Focus on **advanced and specialised training**. • Peer learning and innovation networks are highly effective.	• High demand for training across all levels. • Digital platforms can significantly enhance reach.

3.5 Stakeholders involvement

The success of energy communities depends fundamentally on the active involvement of different stakeholders. TAOs play a central role in facilitating this involvement, acting as neutral intermediaries that foster trust and collaboration.

Stakeholder engagement begins with **systematic mapping and analysis of interests, capacities, and potential contributions**. This analytical phase informs the design of engagement processes that are inclusive, transparent, and adaptive.

In practice, co-creation methodologies have proven particularly effective. These approaches move beyond consultation towards active participation, enabling stakeholders to shape project design and governance structures. This not only enhances project quality but also strengthens ownership and long-term commitment.

Stakeholders are individuals, entities or organizations that are:

- Involved and/or interested in a particular energy sharing project or action.
- Affected in some way by an EC project.

They are people or organizations involved in any of the stages of an EC(e.g., initiation, design, implementation and operation). Their input can provide a direct impact on the project’s upshot.

Stakeholders in an EC can be divided in 2 categories:

- **Insiders**: actors who are already engaged in some EC initiatives. They have a high level of awareness and / or knowledge about the topics of EC, self-consumption and bottom-up energy social energy initiatives, e.g. professionals in the energy sector, proactive and operative municipalities, already existing energy communities, SMEs operative in EC projects.
- **Outsiders:** potentially interested actors that are not yet engaged in energy communities. Their engagement can be direct (part of the EC) or indirect (support structure). These actors are concerned about climate change and want to be part of the energy transition. However, they are mostly not fully equipped with the level of knowledge required, e.g. citizens, municipalities, associations (e.g., neighbourhoods), investors, distribution system operators (DSO), service providers, financing bodies.

All these actors collaborate and interact within the EC framework, each contributing their expertise, resources, and support to achieve the community's goals of sustainable and locally-driven energy initiatives. These actors can be a part of the EC, or they can be a service provider to an EC. A stakeholder engagement plan should be tailored to each type of stakeholder, and at making outsiders into insiders.

One of the key stakeholders of ECs are citizens. They constitute an essential stakeholder when setting up energy communities, impacting the success and effectiveness of community energy projects. Energy communities hugely benefit from them because citizens:

- Develop a sense of ownership of the community.
- Create social acceptance and may ensure long-term support.
- Align the community projects with real local needs.
- May receive economic benefits (e.g., reduced electricity prices, job creation).
- Bring fresh ideas and solutions into the community.
- Demand transparency and accountability in decision-making and operations.

It is important to understand from the very beginning who are the relevant stakeholders for the energy community, defining what is the added value for them to be part of this community, and what is the role they should have in the different activities. In addition, it is important to understand the level of involvement expected from the stakeholders to be able to design a communication strategy aligned with the expectations.

Along the four main phases of developing an energy community, different kinds of stakeholders have to be considered and engaged in the specific steps:

- **Initiation**
  Key stakeholders: Founding members of the energy community, potential local partners, and individuals or groups interested in the project's objectives.
  Actions: Provide input to shape the community’s vision and align its objectives with real needs and expectations.
- **Design**
  Key stakeholders: Local authorities, potential investors, suppliers, and community members.
  Actions: Involve them in the development of the business plan and the project design.
- **Implementation**
  Key stakeholders: Local authorities, regulatory bodies, community members, contractors, and technology providers.
  Actions: Engaging with local authorities and regulatory for obtaining necessary permits and approvals, and training for community members regarding the energy community's constitution.
- **Operation**
  Key stakeholders: Community members, local authorities, and relevant partners or suppliers.
  Actions: Ongoing engagement for the establishment of a proper organizational and management structure and the identification of new growth opportunities and expansion strategies.

To summarize this section, it is important to manage the specific expectations of stakeholders and consider their needs and requirements. If stakeholders are not open or positive to the idea of an energy community or a specific energy project, it should be explained what the benefits and added value are for them to be part of this community. The project’s scope and limitations should be communicated from the very beginning and in their language. Technical terminologies are difficult to understand for most people, therefore it is recommended to use simple words and concrete examples to convince them. In addition, it is very important to engage stakeholders in the right moments, and to avoid overloading them with information that might decrease their willingness to become a part of the community.

The Climate Taskforce in Copenhagen to engage with stakeholders

An interesting and also innovative way of stakeholder engagement has successfully been practiced in Copenhagen by combining a bottom up and top down approach. A Climate Taskforce was established there as a part of the roadmap 2021-2025 to promote the local Climate Plan’s efforts at the local level and help disseminate best practice from local projects to all of Copenhagen. The Climate Taskforce coordinates and develops efforts by linking the Climate Office efforts at the strategic level with the concrete implementation locally – including drawing experiences from local cooperation with Copenhagen people into the upcoming new climate plan. Another goal is connecting the local with the strategic level and to develop new initiatives, e.g. the creation of Energy Communities.

Figure: Role of Copenhagen’s TAO in the municipal ecosystem and in stakeholder engagement.

The taskforce stimulates collaboration and integration across departments, e.g. between the climate secretariat, public housing, building renewal, integrated urban renewal. The TAO functions as an interface between municipal stakeholders, but also to citizens and other actors in the city. To connect the local with the strategic level, specific meetings and workshops are offered, e.g to topics such as “What are the potentials (and regulation on) sharing RE from PV for chargers for electrical cars?” The TAO also collaborates on the development of information material and supports local engagement. This is done by engaging and activating local structures through e.g. local councils and networks with the goal that green and just (energy) transition needs to be accessible for everyone to achieve broader acceptance. These contacts to local communities shall also provide guidance on what topics are locally relevant, particularly connected with building renewal, photovoltaics and energy communities.

Stakeholders involvement | Country-specific considerations		
 **Bulgaria**	 **Denmark**	 **Spain**
• Trust-building is essential due to limited experience. • TAOs should act as **facilitators and mediators**.	• Strong culture of participation supports **co-creation approaches**.	• High interest but diverse stakeholders require **structured engagement frameworks**.

3.6 Effective communication

Communication is a strategic function within TAOs, extending beyond information dissemination to include awareness raising, behavioural change, and trust building.

Effective communication strategies are **tailored to diverse audiences**, ranging from technical experts to citizens with limited prior knowledge of energy systems.

Digital tools, including online platforms and social media, provide scalable channels for outreach, while **face-to-face interactions** remain essential for building trust and addressing complex issues. The integration of these channels ensures both reach and depth of engagement.

Consistency in messaging and visual identity contributes to the credibility of the TAO, reinforcing its role as a reliable and authoritative source of information. A comprehensive approach to communication is needed, taking into account the different needs and expectations of the different target audiences.

When building a communication strategy, it is important to define and consider the following points:

- **Communication objectives**: The goals to be achieved with and for your audience should be clear, realistic and planned step-by-step because objectives and goals might change over time
- **Capacities and resources**: Available knowledge and expertise in communication should be considered, and resources (human, budget) needed to deliver your strategies be evaluated
- **Target groups**: Different stakeholders might need different approaches when communicating with them, therefore a specific communication approach for each group is recommended

Based on objectives, resources, and target groups, the types of activities which can be performed (workshops, public consultations, webinars, info days, open discussions etc.) should be assessed. Different target groups might need different types of activities, frequency for communication and modalities for the activities (online, face-to-face, hybrid). Above all, the core idea and vision of the EC and the key benefits of the EC and the value of participating in it should be provided.

To summarize this section, here some key recommendations for successfully reaching your target audiences:

- Flexibility is key: Be prepared to adapt your communication strategies as the project progresses and as your target groups needs change.
- Make communication accessible: Take into account potential language barriers and disabilities, ensuring to develop inclusive strategies. Everyone should be able participate in the dialogue.
- Be open and honest: Transparency builds trust and fosters positive relationships with stakeholders. Share both successes and setbacks with them.

- Aim for two-way communication: Establish mechanisms for feedback and input from your target audiences. Be present, actively listening to their concerns, questions, and suggestions, and responding promptly to them.

Effective communication | Country-specific considerations		
 **Bulgaria**	 **Denmark**	 **Spain**
• Focus on **awareness raising and trust building**.	• Communication can focus on **innovation and optimisation**.	• Strong need for **clear guidance and simplification of information**.

3.7 Provide support

The core function of a TAO lies in the provision of structured and continuous support to energy communities, simplifying complex processes and reducing administrative and technical barriers. This support should be designed as an **integrated service offering that accompanies projects throughout their entire lifecycle, from initial idea generation to implementation and operation**.

In **early stages**, TAOs typically support awareness raising, group formation, and preliminary feasibility assessments. **As projects evolve**, support becomes more specialised, including technical design, business model development, legal structuring, and access to financing. In **later stages**, TAOs may assist with procurement, project management, and operational optimisation.

Furthermore, rather than offering fragmented services, TAOs may adopt integrated **support pathways that combine technical, financial, legal, and organisational assistance**, reducing transaction costs and enhancing project viability.

Additionally, **digitalisation** plays an increasingly important role in service delivery, enabling remote access to tools, resources, and advisory services. However, digital solutions must be complemented by personalised support, particularly for complex or large-scale projects.

In some countries and regions, Technical Assistance Offices – such as Energie Samen[5] or the Sustainable Energy Authority Ireland[6] – have gone as far as developing **grant programmes for energy communities**[7].

Technical assistance is key to help citizens and local actors to start any initiatives which may lead to initiating and implementing energy communities. All those interested in ECs need advice and access to experts who answer technical, organizational, regulatory and financial questions related to ECs and assistance in the specific phases of setting up and implementing ECs. Technical assistance is also important to reduce possible barriers for actors, who start thinking of an EC project, and to motivate them to proceed towards the initiation phase of an EC.

Another key support mechanism is **capacity building**. Firstly, it can raise awareness on energy communities and their benefits among citizens, municipalities, local businesses etc. and provide general information on the setting-up and running of ECs. Secondly, project-specific capacity building gives EC actors security and confidence for their activities related to ECs. Thirdly, capacity building facilitates communications across several systems (energy experts, local/regional authorities, communities, citizens

[5] https://energiesamen.nu/.
[6] https://www.seai.ie/.
[7] More details about the Irish community grant scheme in the guidance document ''Setting up community energy One-Stop-Shops'', authored by the Energy Communities Repository: https://build-up.ec.europa.eu/en/resources-and-tools/publications/digital-tools-guide-one-stop-shops.

and providers, etc.), stimulates partnerships and creates synergies among actors which is key for a successful implementation of ECs.

To summarize this section, TAOs can play an important role in the expansion of energy communities by raising general awareness for the potential of ECs, providing information, guidance and capacity building, stimulating exchange and synergies between actors (municipalities, citizens, private businesses, investors etc.), giving technical, organizational, regulatory and financial advice and assistance to EC projects in the initial phase - and as far as possible even in the implementation phase.

Capacity building by Sofia Energy Agency (SOFENA)

SOFENA, the energy agency of the Greater Sofia Metropolitan Area, created a TAO to support potential ECs in their region and also in the rest of the country. For them, a TAO is a physical and / or virtual place or **comprehensive platform for advice, information and services** where interested parties, citizens, organisations and businesses, etc. can find everything they need to create and operate a project for energy community implementation and where specific energy community needs can be discussed. It was built on and further developed using the Sofia Energy Poverty Office.

The business model of SOFENA's TAO is explicitly based on **free of charge advice** for all parties interested in ECs to reduce possible barriers for actors, who start thinking of an EC project, and to motivate them to proceed towards the initiation phase of an EC.

The comprehensive offering for actors interested in ECs comprises the following elements:

- **To build general-capacity**: to raise the awareness on energy communities benefits; to provide general information on the optimal solution.
- **To build project-specific capacity**: to give advice at the 'orientation stage; to support the set-up and implementation of an energy community.
- **To facilitate communications across several systems** (energy experts, local/regional authorities, communities, citizens and providers, etc.), to provide a list of technology providers and investors, etc.
- I**nformation, training and consultation** on technical, financial, management, regulatory and administrative issues, etc.

This offering is based on the specific resources the TAO provides:

- **One Stop Shop platform** to provide integrated services.
- **Comprehensive database**, e.g. list of technology providers and investors, relevant documents and templates, list of trainers and training materials.

Technical assistance by Ávila Provincial Energy Agency (A.P.E.A.)

The TAO in Ávila is integrated in the Ávila Provincial Energy Agency (A.P.E.A) which has been promoting and supporting renewable energies in the province for the last 25 years. A.P.E.A. has implemented a Community Transformation Office (O.T.C.) partially financed by the government of Spain that complements the TAO effort when facing energy projects in the province. Both offices join efforts in order to facilitate and promote the creation of ECs within the province of Ávila, which consists of 247 municipalities (most of them smaller ones.) The TAO provides technical assistance to these municipalities, but also to associations, local businesses and individuals.

Ávila TAO offers a range of services from training (courses, seminars, workshops), guidance promotion (improvement of stakeholders knowledge, also by using the BECKON OSS) and advice by answering technical, organizational, regulatory and financial questions related to ECs. In addition, the TAO in Avila offers all types of assistance requests from municipalities, local businesses, associations and individuals, supports the implementation of new ECs in the province, disseminates the potential and the benefits of ECs to municipalities, local authorities and local development agents and finally and support the collaboration between small municipalities and important actors who support and assist the implementation of ECs.

Provide support | Country-specific considerations		
Bulgaria	**Denmark**	**Spain**
• Strong need for **hands-on and continuous support**.	• Focus on **high-value advisory services**.	• High demand requires **scalable support systems**.

Boosting Energy Communities massive deployment by equipping local authorities with comprehensive technical assistance cookbook, integrated services and capacity building

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