

# UP-STAIRS Second Workshop outcome report

Deliverable 5.5



Dissemination Level:	PU
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### List of acronyms

**BMF** Business Model Framework

**CCiC** Cork City Council

**CEC** Citizen Energy Community

**CRU** Commission for Regulation of Utilities

**DSO** Distribution System Operator

**EE** Energy Efficiency

**EPC** Energy Performance Contracting

**ESCO** Energy Service Company

**FAQ** Frequently Asked Questions

**GA** Grant Agreement

**GEA** Gemeinschaftlicher Erzeugungsanlage / PV community

**HEUGO** Home Energy UpGrade Office

IC Implementation Champion

**IERC** International Energy Research Centre

IGBC Irish Green Building Council

**LEC** Local Energy Community

**KAPE** The Polish National Energy Conservation Agency

MFB Multifamily buildings

NCE North Cork Electrical

OSS One-Stop-Shop

**PV** Photovoltaics

**RE** Renewable Energies

**REC** Renewable Energy Community

**RES** Renewable Energy Sources

**RESS** Renewable Energy Support Scheme

**SEAI** Sustainable Energy Authority of Ireland

**SEC** Sustainable Energy Communities

**SFB** Single Family Buildings

**SME** Small and Medium Enterprise



### 1. Introduction

A second WP5 workshop was conducted separately in each pilot region. OSS partners in the region organised workshops in the national languages and relevant stakeholders were invited.

The methodology of conducting these workshops differed from the first workshop organised under WP5. The partners decided that at the current stage of development of One Stop Shops, workshops with local stakeholders would be the most effective, which was only possible by conducting separate workshops in each pilot region. This enabled the participation of the most interested stakeholders and the dissemination of information about the OSS among local communities and local authorities.

Each workshop had a slightly different form, but the subject matter of the workshops in individual countries was similar and concerned, among others, the progress of OSS development, the challenges and barriers occurring during the set-up and running of the OSS, as well as ways to overcome them.

In order to ensure that the assumptions of the second workshop under WP5 are met, KAPE prepared a template of the agenda and report and made them available to Partners. This Deliverable presents reports from individual workshops prepared by the Partners conducting the workshops.



### 2. Cork City

### 2.1 Introduction

The second UP-STAIRS workshop was held in Cork City, in the Clayton Hotel on the 31<sup>st</sup> May 2023. The workshop was entitled "One Stop Shops for Enabling Energy Communities".

There were 13 people in attendance from organisations such as Irish Green Building Council, Sustainable Energy Authority of Ireland, Commission for Regulation of Utilities, NCE Insulation, IERC and Cork City Council.

The workshop was very successful and topics such as "How to overcome legal and regulatory barriers for Energy Communities in Ireland" and "Other challenges for the development of Energy Communities in Ireland" were discussed via a roundtable method.

### 2.2 Participants and Agenda

### 2.2.1 Participants

Name of participant	Organisation
Michael Canny	Cork City Council
Patricia Tobin	Cork City Council
David Lordan	Cork City Council
Damien Williams	Cork City Council
Brian Cassidy	Cork City Council
Fergus O'Toole	Commission for Regulation of Utilities
	Ireland
Anne Cunningham	Commission for Regulation of Utilities
	Ireland
Johanna Varghese	Irish Green Building Council
Avril Hickey	Sustainable Energy Authority of Ireland
Wayne O'Donnell	NCE Insulation
Eoin O'Leidhin	IERC
Padraig Lyons	IERC
Lorena Sánchez Relaño	IERC



### 2.2.2 Agenda

Time	Topic	Lead
10.00-10.30am	Tea/Coffee on arrival	
10.30-10.40am	Welcome	Brian Cassidy Social housing energy efficiency retrofit team lead and associated projects, CCiC
10.40-11.00am	Introduction to the UP- STAIRS project	Padraig Lyons Primary Project Coordinator UPSTAIRS / Head of Group, IERC
11.00-11.15am	Energy Communities in Ireland: Current status and regulatory framework for RECs and CECs	Lorena Sanchez-Relano UPSTAIRS Project Leader / Research Engineer UPSTAIRS
11.15-11.45am	Roundtable 1: How to overcome legal and regulatory barriers for Energy Communities in Ireland	All/Moderator: Padraig Lyons Primary Project Coordinator UPSTAIRS Head of Group, IERC
11.45-12.00pm	The physical was Stop Shop: HEUGO activities and results  CCiC	ad
12.00-12.15 pm	The virtual One Stop Shop: Digital Platform activities and results	Michael Canny UpStairs project lead CCiC
12.15-12.45pm	Roundtable 2: Other challenges for the development of Energy Communities in Ireland-Lessons learnt from the OSS	All/Moderator: Brian Cassidy Social housing energy efficiency retrofit team lead and associated projects, CCiC
12.45-1.00pm	Key takeaways and closing of the workshop	Padraig Lyons Primary Project Coordinator UPSTAIRS Head of Group, IERC
1.00-2.00pm	Lunch in restaurant	



### 2.3 Summary of delivered presentations of the OSS

#### **Presentation 1**

### Introduction to UP-STAIRS project -Padraig Lyons

Project overview, Objectives of UP-STAIRS project, UP-STAIRS key points, Pilot regions, UP-STAIRS description—Opportunity---Challenge—Solution, What is a One-Stop-Shop, UP-STAIRS Implementation Champions, How is UP-STAIRS different, What UP-STAIRS offers to citizens and Energy Communities, Where we are now with the project.

#### **Presentation 2**

### **Energy Communities in Ireland: Current status and regulatory framework** – Lorena Sanchez Relaño

Introduction, What is an Energy Community, Differences between RECs and CECs, Benefits of Energy Communities, Barriers in place for Energy Communities, Support schemes for Energy Communities in Ireland, New Renewable Energy Support Scheme (RESS), Activities developed by energy communities, Organisational forms of existing ECs, Ireland Case Studies for Energy Communities, Key takeaways.

#### **Presentation 3**

The physical One Stop Shop: HEUGO activities and results --- Patricia Tobin

UP-STAIRS Project Introduction, HEUGO Set-up, Services Offered, Results.

#### **Presentation 4**

The Virtual One Stop Shop: Digital Platform activities and results --- Michael Canny

Introduction to Platform Homepage, Home Page guide, Registration, Chat Room –Energy Community, SEAI links for Sustainable Energy Network, Chat Room- Retrofit, Link to Turnkey solutions, Results.



### 2.4 Group activity results

### 2.4.1 Round table discussion 1:

# How to overcome legal and regulatory barriers for Energy Communities in Ireland?

### **Ownership Issues**

- When setting up a community---Who owns it??
- Legislation states that owners must be in close proximity to the asset.
- Owners should be community-based organisations.
- Too many decision makers can be a hindrance to community establishment.
- · A professionally lead organisation, a good idea.
- Seeking professional paid help may be required when nobody wants to lead.
- The development of proper business model needed.

### Lack of proper legislation

- The term "local" is very broad and should be defined in more detail when talking about local initiatives and communities.
- Clarity on how to set a cooperative up is required: cooperatives need to be more accessible.
- A network of mentors should be established across Ireland to help citizens in the process of creating an energy community.
- More financial education is needed, not only for citizens, but also for banks and other institutions.
- More support for individuals when applying to grants is needed.
- Overall, the planning requirements for individuals to start energy communities or RES projects should be relaxed.

### Long and difficult process of dealing with DSOs

- Connection at distribution level
- Streamline process for quick turnaround
- Aging infrastructure slows process
- DSO have a better understanding of network, more engagement needed
- Paying for connectivity,
- Initial consultation process needs to be enhanced to support greater engagement with the DSO
- Not enough resources are assigned by the DSO to facilitate community energy



### 2.4.2 Round table discussion 2:

## Other challenges for the development of Energy Communities in Ireland

### Leadership

- The need for nominated paid leaders may be required for successful outcome.
- More information on the leadership process required.
- · Maybe financial incentive is required.
- · Community networking groups needed for setup.
- More advertised success stories may be a better incentive.

### **Barriers in Management**

- Training and education to manage energy communities could be put in place.
- Gaps between the planning and the implementation phase: suggestion of creating a roadmap with all the steps to follow when setting an energy community (community energy journey).
- Lack of awareness on the existing grants and financial schemes. Furthermore, grant
  information often changes in names and conditions, and this can be very confusing for
  citizens.
- · Lack of promotion of successful cases of energy communities in Ireland.
- Lack of a big scale strategy on community energy in Ireland.
- More relationships between communities and institutions are needed. SEAI is only an intermediary and there is a lack of further institutional representation in the different grants.
- Difficulties to balance management role of energy communities with private life: these citizens usually have jobs and their own personal circumstances to consider.

#### **Education**

- More information is needed about the benefits of Energy Communities/Retrofitting.
- More information about different types of Energy Communities should be freely available.
- SWOT analysis may be required for success.
- Pay back periods of financial investments could be explained better. Clear and concise information is needed.



### 2.5 Conclusions, recommendations, and further actions

Although there are already 750 Sustainable Energy Communities (SECs) setup in Ireland, there is still a lot of work to be done to aid in the establishment of more energy communities.

Solutions about how to overcome legal and regulatory barriers and other challenges for the development of Energy Communities in Ireland were discussed at this workshop. It is clear from the roundtable discussions that there is a lack of proper legislation when it comes to the establishment of energy communities in Ireland. Ownership issues, barriers to management and education in the development of energy communities need further discussion at government level in Ireland if more of these communities are to be established successfully.



### 3. Asenovgrad Municipality

### 3.1 Introduction

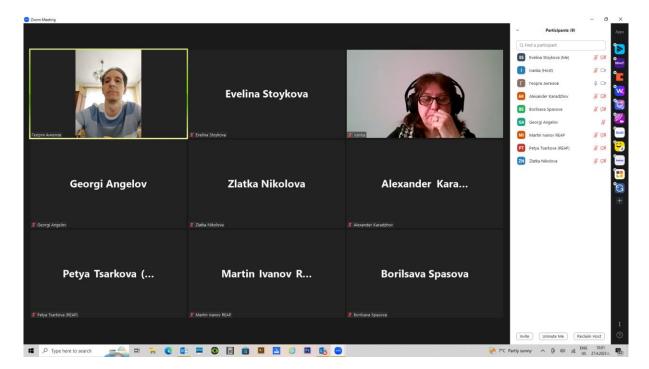
A workshop titled "Setting up One Stop Shops. First results, further challenges and plans for the development of energy communities" was held as part of activities under WP5, Task 5.3 "Conduct awareness/brainstorming workshops, meetings for regulators, policymakers, local authorities and other relevant stakeholders" with the main aim to interact with local, regional and national decision makers by presenting current development, successes and identified barriers of organisational and regulatory nature and sharing potential solutions.

The workshop was held on the 27<sup>th</sup> April 2023 as a half day online event focused on presenting project success and challenges and brainstorming the solutions and further developments. Target audience included local, regional and national authorities, policy makers and policy supporting bodies such as NGOs, consultancy organisations, energy centres, etc.

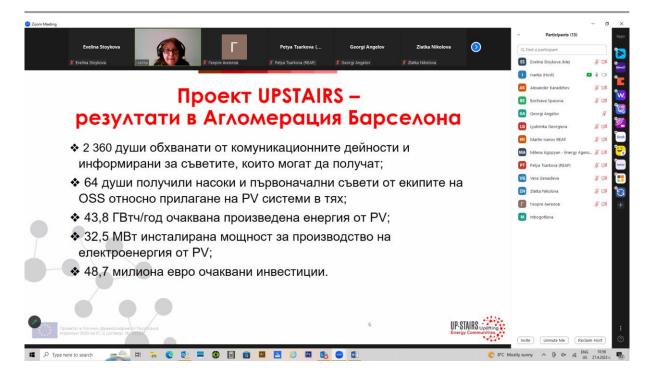
### 3.2 Participants and Agenda

### 3.2.1 Participants

The workshop was attended by 13 participants representing various Bulgarian regions such as Asenovgrad, Plovdiv, Pazardzhik and Smolyan. There were also stakeholders from municipal associations, local and regional energy agencies and NGOs. As it was an online event, the list of participants is provided in the screenshots below:









### 3.2.2Agenda



Setting up One Stop Shops. First results, further challenges and plans for the development of energy communities. 27 April 2023 Time: 10 - 12:30 (CET+1)

#### Agenda

Time	Topic	Leader
	Session 1: Introduction	
10:00-10:15	Welcome and introduction	Tenjo Manolov, Deputy Mayor, Asenovgrad Municipality (TBC)
10:15-10:35	Introduction to UP-STAIRS project	Ivanka Pandelieva-Dimova, SEC
Ses	ssion 2: One Stop Shop Setup, Progres	s and Development
10:35-10:55	Overview of current status, activities and results of ASEN OSS	Georgi Angelov, ASEN OSS
10:55-11:10	Overview of current status, activities and results of other pilot regions	Ivanka Pandelieva-Dimova, SEC
11:10-11:30	Discussion: barriers and challenges during setting up and operation, main conclusions and lessons learnt	Moderator: Ivanka Pandelieva- Dimova, SEC
	Session 3: Legal and Regulator	y Aspects
11:30-11:50	Legal and Regulatory Framework in Bulgaria	Georgi Angelov, ASEN OSS
11:50-12:10	Legal and Regulatory Framework in partner countries	Ivanka Pandelieva-Dimova, SEC
12:10-12:30	Discussion: challenges in Bulgaria and what needs to be done; positive examples from other countries.	Moderator: Georgi Angelov, OSS ASEN

### 3.3 Summary of delivered presentation of the OSS

The workshop was divided into three sessions. The first session was introductory, with welcome remarks delivered by Georgi Angelov, Project Coordinator from Asenovgrad Municipality. This was followed by a presentation of context, aims and current status of UP-STAIRS project, delivered by Ivanka Pandelieva-Dimova, Project Manager from SEC.



### 3.4 Group activity results

# 3.4.1 Barriers, challenges, and lessons learnt during setup and operation of ASEN OSS

Discussion was held after the second session (OSS Setup, Progress and Development), which focused on achieved results and main challenges and barriers met in the process of ASEN OSS establishment and start of operation. The availability of financial support scheme to increase the attractiveness of energy communities for citizens and other stakeholders, and thus the interest towards services provided by OSS was identified as a key factor. In the case of ASEN OSS positive influence was observed by the availability of National programme for energy refurbishment of private multifamily residential buildings which give financial support to legally established communities to refurbish the entire building.

It was outlined the necessity to actively communicate OSS activities and maintain good contacts and collaboration among the citizens and local authorities, and with the other enablers like NGOs and consultancies.

The need for flexibility was also stressed in the process of OSS establishment, in order to reflect local circumstances, which are not set in stone but often change.

An important topic of discussion was information about different available funding possibilities in Bulgaria and their requirements. It was underlined that during the new programming period 2021-2027 of Regional Development Programme, EE measures are applicable only for existing buildings, including single family houses, but not for new construction. The respective priorities of the existing funding framework were presented and discussed in more detail and the conditions for applying were provided – territorial coverage, requirements for municipal size and availability of municipal plans or strategies.

At the end it was reaffirmed that citizens can access OSS ASEN for more information or can also approach the Regional Information Offices on their territory.

# 3.4.2 Importance of legislative and regulatory issues for success of establishment of energy communities

It was concluded during the event that a major factor affecting the process, is the availability of appropriate legislative and regulatory framework for energy communities at national/regional level which significantly increases the interest among stakeholders towards the creation of energy communities. In the case of ASEN OSS, the important role is played by National programme for energy refurbishment of private multifamily residential buildings, which sets the legal aspects of energy communities of coowners by mandating the creation of Association of Owners to be eligible to participate in the programme. The Programme also establishes the



nature of relationships between citizens- coowners of residential buildings and local authorities, who are viewed as an important partner accompanying citizens during the whole process. Thus, the successful launch and operation of OSS ASEN is enabled by the existence of respective legislative framework in Bulgaria and by the fact that OSS ASEN is owned and operated by the municipality, which is by law defined as important player in the process of establishment of energy communities and refurbishment of multifamily private buildings.

There was a question from the audience about the buildings that benefited from the advice from the OSS ASEN and the energy performance rating requirements. It was discussed that all buildings using OSS ASEN services were recommended to achieve Energy Class A, as it is a requirement of the current funding facility in Bulgaria. It was also discussed that it is an important difference with the previous funding requirements. Although the new funding programme came into force after OSS ASEN start of operation, it was known beforehand from the public consultations and was taken into account by the staff, being delivered as information to the citizens.

### 3.4.3 Summary

The event was held on-line, which attracted more participants and provided a venue for presenting information about OSS ASEN establishment and current operation, communicating positive results as well as challenges and barriers met and the ways to cope with them. Interest was shown from the audience towards the presented and discussed issues, as well as towards future similar activities. The main discussed topics reflected the needs for information exchange and the aims and objectives of the workshop were met.

### 3.5 Conclusions, recommendations, and further actions

The workshop was assessed as a good opportunity to exchange views on important aspects among local stakeholders and it was concluded that another one should be organised towards the end of the project to present and discuss final results from ASEN OSS operation and draw respective conclusions.

It was agreed that such workshops are a necessary and useful tool to communicate these issues and therefore, UP-STAIRS and OSS ASEN teams will keep in touch with the audience for future similar activities.



### 4. Upper Austria

### 4.1 Introduction

The workshop "Neue lokale Energiegemeinschaften"/"New local renewable energy communities" was organised by ESV on the 13<sup>th</sup> April 2023 in Linz as an in-person event.

The main objective was to bring together stakeholders, interested in renewable energy communities (RECs) and experts and to provide in-depth information on planning and implementing energy communities. Regulatory barriers were identified, and potential solutions shared. Besides presenting the current status of the Upper Austrian OSS, policy issues and related challenges, solutions and success cases were discussed.

### 4.2 Participants and Agenda

### 4.2.1 Participants

The workshop met with very high interest and was attended by 47 participants. To allow for interaction and for logistical reasons, participation had to be limited to this number.

The group of participants consisted mostly of community representatives (mayors, head officials), but also service and technology providers as well as a few citizens interested in setting up a REC. With this composition, the most important actor groups for RECs in Upper Austria were present.



### 4.2.2 Agenda





# RENEWABLE ENEGY COMMUNITIES OSS WORKSHOP 13 APRIL 2023, 9:00 – 13:00

Park Inn by Radisson Linz, Hessenplatz 16-18, A-4020, Linz

### **PROGRAMME**

#### 09:00 Energy communities in Upper Austria

Regulatory, technical aspects and relevant support schemes Gerhard Dell, Energy Commissioner of Upper Austria

### Step by step towards energy communities

The Upper Austrian OSS, organisational aspects Christiane Egger, OÖ Energiesparverband

Q&A session

Coffee break

#### Grid integretion of energy communities

Barriers and solutions from the DSO perspective
Alexander Schicketmüller, Energie AG Oberösterreich Customer Services

The legal entity model of "cooperation"

Gerhard Steinkress, Raiffeisenverband Oberösterreich

Q&A session

13:00 End of Workshop, possibility to discuss with experts bilaterally













### 4.3 Summary of delivered presentation of the OSS

The workshop presented and discussed in detail the service offer of the OSS.

The participants were informed about organisational, technical and legal aspects related to RECs, grid integration of PV systems in RECs and support schemes.

FAQs and best practice examples were highlighted, and presentations were followed by discussions.

The possibility to ask the presenters questions was valued and used also during breaks.

### 4.4 Group activity results

The status quo of the situation of RECs in Upper Austria was presented and discussed at the workshop. The insights from this event and many other stakeholder interactions can be summarised as follows:

### Two main organisational REC-types have emerged:

- "neighbourhood/family" RECs (e.g., family members with homes in close proximity)
- municipality-driven RECs

#### Generally, two main legal entities are used:

- associations ("Verein") typically for small RECs
- cooperatives ("Genossenschaften") for larger RECs

#### Key motivations for founding and/or entering a REC are:

- increase self-consumption (5 kW = about 30 % self-consumption, municipalities with several PV)
- · economic benefits (sometimes overestimated)
- frustrations with grid operator (especially citizens and SMEs)
- possibility to build more PV -> "independence "
- energy crisis (high electricity prices, worries about energy security)

Consequently, it can be stated that the interest in RECs is still very high and general knowledge increased, however, RECs continue to be a complex issue.

Therefore, during implementation many specific questions appear, e.g., grid issues, pricing, regulatory aspects, economic and funding questions.



### 4.5 Conclusions, recommendations, and further actions

### Recommendations from the learnings in Upper Austria

### Strengths – what went well:

- Starting with "GEA gemeinschaftlicher Erzeugungsanlage" to learn sharing economy was a successful approach. (Since 2018, residents in multi-family buildings are allowed to coown and use PV electricity and optimise their self-consumption as part of a "PV community").
- Differentiation between local RECs (members must be connected via a low-voltage distribution network and down-stream from the same transformer station) and regional RECs (via the medium-voltage distribution network and down-stream from the same medium-voltage transformer station) was difficult at the beginning but works well now.
- Cooperation with DSOs improved very much (due to intensive communication and involvement).
- Knowledge increase by all stakeholders on grid issues.
- Municipalities are in the focus; they are the focal point for many RECs.

#### Weaknesses - what hinders

- It took time to get DSOs on board.
- Large companies were disappointed that they are not allowed to participate.
- It can be very difficult to draw the line between economic benefits of RECs and profit-making (which are not allowed).
- Communication that the service provider is allowed to make profit.
- Economic advantages very much depend on the electricity tariff (high tariff fluctuation is negative).
- The main challenges in the past months: electricity price for households (2900 kWh/a) is capped at 10 Cent/kWh by national support scheme it is cheaper for households to use this support than buying electricity within an REC.



### 5. Barcelona Metropolitan Area

### 5.1 Introduction

The workshop took place in Bilbao the 8<sup>th</sup> June in collaboration with other public energy agencies, such as the Navarra Energy Agency, the Basque Energy Entity, the Andalusian Energy Agency or the Extremadura Energy Agency.

The main goal was to present real cases of functioning energy communities and to share barriers and challenges encountered in the setting up OSS and Energy Communities.

### 5.2 Participants and Agenda

### 5.2.1 Participants

The dissemination action titled "Presente y Futuro de las Comunidades Energéticas" ("Present and future of energy communities") involved various participants who contributed to the event. Here is a summary of the participants and their respective roles:

- Vasque Eneergy Entity: Iñigo Ansola Kareaga, Natalia Díaz de Arcaya y Oscar Puche Ormaetxea
- Department of Economic and Business Development of the Government of Navarra
- Andalusian Energy Agency : Joaquín Villar Rodríguez
- Barcelona Metropolitan Area (AMB): Arnau Alarcón Costa
- Verdia Legal Legal consultat : Carlota Palleja i Martos
- Other municipal and private entities: José Miguel Granados, Joxian Jauregui Ríos, Edorta Herce Susperregui y José Andrés Palacios Ferrer

### 5.2.2 Agenda

Time	Activity
9:30	Welcome
9:45	Rules, regulations and legal framework
10:00	Examples of energy communities:
11:00	<ul> <li>Toda Navarra</li> <li>Local and regional energy communities: <ul> <li>Ekiola.</li> <li>Edinor</li> <li>Goiener.</li> <li>Red de comunidades energéticas, Soc. Coop.</li> </ul> </li> </ul>



11:45	Coffee break
12:15	Barries and challenges of Energy Communities:  • AMB: Social, legal and economic challenges  • Financial challenges  • Legal challenges
13:00	Future: Development of new Energy Communities, Tools and Challenges
13:45	Closing

### 5.3 Summary of delivered presentation of the OSS

The Barcelona Metropolitan Area (AMB), covering 636 km² and home to 3.3 million inhabitants in a densely populated region, faces significant challenges in its pursuit of sustainable energy solutions. The region's objectives to install photovoltaic (PV) panels on private rooftops to meet 2030 targets encounter obstacles due to limited available rooftops. To address these challenges, AMB aims to create a new energy model that is decentralized, democratic, renewable, and electrified.



To achieve its goals, AMB employs two main strategies. Firstly, it supports municipalities in installing PV and leading Energy Communities. Secondly, it assists private citizens and SMEs in establishing Energy Communities and installing PV, as part of the European UP-STAIRS project.

A survey conducted by AMB highlights social barriers to PV adoption, with 63% of respondents expressing willingness to install PV. However, challenges include installation costs, community agreements, and a lack of information.



To tackle these barriers, AMB has established the Observatory of Social Sustainability, which offers advice and solutions related to PV and serves as a virtual platform accessible through various channels, including email, telephone, and WhatsApp, along with face-to-face support.

Another barrier faced by AMB is the collaboration between public and private entities, which is hindered by a lack of a legal framework and challenges in harmonizing public and private law.



Five main social barriers have been identified by AMB, including governance democracy, energy poverty, limited range of action (2km), Energy Communities focused solely on electricity, and a lack of involvement from Distribution System Operators (DSOs).

In conclusion, AMB's commitment to addressing these challenges and breaking down social barriers through collaboration, innovation and support is vital for achieving its vision of a decentralized, democratic, and sustainable energy model in the Barcelona Metropolitan Area.



### 5.4 Group activity results

### 5.4.1 Examples of local Energy Communities

The first session of "Presente y Futuro de las Comunidades Energéticas: barreras y retos" ("Present and Future of Energy Communities: barriers and challenges") workshop, the focus was on presenting a diverse array of citizen and Small and Medium-sized Enterprises (SMEs) led initiatives that epitomize the essence of community-driven sustainable energy practices. The workshop shed light on remarkable examples, including Torreblanca, Obanos, Río Monachil, Ekian, and Toda Navarra, each representing distinct models of local and regional energy communities. Additionally, attention was directed towards visionary projects like Ekiola, Edinor, Goiener, and the "Red de Comunidades Energéticas, Soc. Coop.," underscoring the significance of collaboration and innovation within regional energy ecosystems. These enlightening presentations not only provided valuable insights into successful community-led initiatives but also set the stage for engaging and constructive discussions throughout the workshop, fostering an atmosphere of shared knowledge and inspiration for the participants.

### 5.4.2 Barriers and challenges

During the second part of the workshop, led by AMB (Barcelona Metropolitan Area), the spotlight was directed towards a comprehensive examination of the legal, social, and financial barriers and challenges faced by energy communities. The insightful session brought together esteemed representatives from Verdia Legal, AMB, and Krean, each contributing their expertise to shed light on the intricacies surrounding community-driven energy initiatives.

AMB, as a pioneering entity in sustainable urban development, shared its insights into the social aspects influencing community engagement and public support for sustainable energy projects. Verdia Legal, delved into the regulatory frameworks impacting energy communities, uncovering potential hurdles and opportunities for growth. Lastly, Krean, a stalwart in financial innovation, offered invaluable perspectives on financing mechanisms and investment models that can fortify the financial resilience of energy communities.

Through this collaborative and thought-provoking session, participants gained a deeper understanding of the multifaceted challenges faced by energy communities, and the importance of fostering inclusive and supportive environments for their growth and success. As the workshop delved into the complexities of creating resilient energy communities, the exchanges during this session served as a catalyst for forging strategies to overcome obstacles and foster sustainable, community-led energy practices in the UP-STAIRS European project.



### 5.5 Conclusions, recommendations, and further actions

#### **Conclusions:**

- 1. Community energy initiatives play a crucial role in advancing the transition to sustainable energy systems by promoting local engagement and ownership.
- 2. Collaboration among different stakeholders, including government entities, private organizations, and communities, is essential for successful community energy projects.
- 3. Real-life examples of existing community energy projects demonstrate their feasibility and potential for replication in other regions.

#### Recommendations:

- 1. Establish clear and supportive regulatory frameworks to encourage the growth of community energy initiatives.
- 2. Enhance public awareness and education about community energy to foster participation and support from local residents.
- 3. Encourage the development of digital platforms and technologies to facilitate the integration and management of community energy projects.

#### **Further Actions:**

- 1. Foster partnerships and knowledge sharing among municipalities and private entities to accelerate the implementation of community energy projects.
- 2. Seek funding opportunities and financial incentives to support the establishment and expansion of community energy initiatives.
- 3. Conduct further research and analysis to measure the environmental and social impacts of existing community energy projects and refine future strategies.



### 6. Summary of all workshops

In total, all workshops organised by the Partners were attended by over 80 people representing i.e.: municipal associations, local and regional energy agencies, non-governmental organizations, authorities, representatives of communities, service and technology providers, as well as citizens.

Two partners organised online workshops, and two workshops were held in a physical form, depending on the capabilities and needs of each specific partner and region. All workshops, however, contained the most important aspects, i.e. presentations of the current development of One-Stop-Shops and a discussion part, during which participants shared their thoughts and ideas related to the subject, i.e. challenges and barriers noticed during the creation of OSS and concerning the entire region. At all workshops, participants were asked to present their recommendations regarding not only the further development of OSS, but also increasing interest among stakeholders in OSS and collective actions.

Workshop participants often pointed to similar solutions that could overcome significant barriers and problems, the most important of which are:

- The need to educate citizens about economic, environmental, legal and technical aspects.
- More materials and information meetings.
- More incentives for residents to participate in the OSS, e.g. financial.
- Presenting more success cases and possible benefits of participating in OSS activities.
- Creating a clear and understandable legislative framework that will enable the development of energy communities.
- DSO engagement is critical to support the proliferation of Energy Communities. DSOs need to provide adequate resources to enable engagement with energy communities.