

Barriers and opportunities for the development of Energy communities with municipal involvement

Results from LIFE LOOP survey (D2.3)
March 2023, updated June 2024

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PROJECT INFORMATION

Project name: LIFE LOOP - Energy Communities – Local Ownership of Power

Grant agreement number: 101077085

Project duration: 2022-2025

Project coordinator: Energy Cities





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Introduction

The ongoing energy crisis, which came on top of the climate crisis, and fuelled inflation has made it even clearer why Europe must commit here and now to vast investments in clean energy supply, energy sufficiency, renewable energy production and energy efficiency to end its high dependence on fossil fuels. It is of paramount importance that this transition to energy sufficiency takes place in a democratic and socially just manner. Investments in local renewable energy projects should be primarily made by local citizens in collaboration with municipalities and local small and medium enterprises (SMEs), ensuring that the benefits that flow from this renewable clean energy production strengthen the local economy and society.

Community energy projects contribute to local resilience, as the community actively participates in the collective decision-making process and project investments, whose returns are reinvested locally. There are many benefits to municipalities and citizens working together. These actors have access to a range of valuable and diverse resources. Energy cooperatives and citizen-led initiatives are able to engage local communities, mobilise local capital, access specialised networks and to utilise a wide spectrum of capacities and skills. Moreover, municipalities can mobilise local communities in different ways, access public funds, access specialised networks, access land, and develop strategies and supportive local policies.

The current crisis has demonstrated how important it is to understand that climate emergency is just one of the many emergencies cities are facing simultaneously. On top of that, despite the growing popularity of the concept of energy communities across Europe, many cities, especially in the Southeast and the landlocked countries of Central Europe, are still struggling to move away from ideas to action. Many local municipalities have committed to energy or climate goals but reaching them can be challenging. Often the ideas come easily, but it is more difficult to turn them into reality.

The main objective of this report is to identify the existing diverse capital of local communities and present the current barriers and opportunities for the collaborative development of energy communities with municipal involvement.





The findings of this report provide input for the development of our capacity building programme, on the one hand, and contribute to our pool of messages aimed specifically at local authorities and citizen energy communities, on the other. Furthermore, some preliminary recommendations are provided to local authorities that wish to get involved in energy communities and to the citizen-driven energy initiatives that wish to collaborate with their local municipalities.

Key takeaways

- A local detailed assessment of the reasons that may discourage municipalities from collaborating with citizens in community energy projects and vice versa should be conducted;
- Awareness raising is still very much needed, along with the creation of networks and platforms to share experiences, and build evidence about the benefits of energy communities with municipal involvement and support;
- Targeted training and capacity building is needed for local municipalities to participate in energy communities, including softer skills around communication, trust, and relationship building, and more technical ones related to financial and legal issues;
- Specific policies and concrete incentives are needed for municipalities, both at the national and European level, to support the development of energy communities with collaboration between local authorities and citizens' initiatives;
- Member States should recognise the role of energy communities, and include in national and regional budgets funds that can be used by regional and local authorities to safeguard municipal involvement and support for energy communities;
- Monitoring the progress in removing unjustified barriers to the development of energy communities
 with city-citizen participation is imperative.



Methodology

In preparation of this report, and as a starting point for the survey, a literature review was conducted that focused on academic publications and industry reports on the collaboration between citizen energy cooperatives and local municipalities. The list of resources reviewed can be found in the **Annex**. Based on this, a list of **sociotechnical**, **organisational**, **environmental**, **social**, **financial**, **legal and political substance**, was compiled and shared with the members of the LIFE LOOP consortium for feedback and input; this request was particularly addressed to the project's pilot organisations in Croatia, Greece and Romania. Three online meetings were organised between REScoop.eu and the Pilot organisations (all members of the 3 Task Forces – see below). These conversations informed the addition of further questions to be explored in the survey.

After integrating the feedback received, a survey was prepared, including a list of statements for participants to rate on a Likert scale. The options given were: Strongly agree (SA); Agree (A); Neutral (N) Disagree (D); Strongly Disagree (SD); and I don't know (NK). The survey was reviewed by colleagues from REScoop.eu and Energy Cities. The survey was then disseminated in three waves. The first wave targeted LIFE LOOP consortium members and their networks. The second wave targeted the networks of REScoop.eu and Energy Cities through internal member mailings. REScoop.eu also shared the call to action through its Basecamp Community Energy Agora (an interactive platform that brings together energy community stakeholders across Europe). Lastly, the survey was shared more generally with relevant coalitions, such as the Community Power Coalition mailing list, contacts from other related projects, and social media, clearly indicating the target audience: citizen organisations (energy cooperatives or energy communities) and municipal governments. For all three waves the communication strategy included: a landing page, personal emails to identify relevant actors and relevant networks (to further amplify our message), a tailored campaign on social media (and the mobilisation of the project partners to join and promote it), the addition of the survey to the newsletters of Energy Cities and REScoop.eu, including a countdown for the final week with more intensified messaging. Our aim was to collect around 100 responses in order to compile a representative sample.



The survey was open for a month (mid-January to mid-February 2023) and despite the efforts outlined above, in total, we received 72 responses of which 70 were valid and reliable¹. However, given the literature review, feedback and interviews it was felt that 72 responses were still a useful and valid data source from which to undertake our analysis.

We rejected 1 respondent from Palestine (out of scope), as well as another respondent who provided only unreliable, extreme responses and input in Croatian language.





Task Force Greece

MINOAN Energy Community is the main stakeholder of the taskforce. Their role is that of engaging local authorities within community energy projects. The following experts are part of the task-force:

- Giorgos Viskadouros is an electrical engineer with a very active role in the community. He is primarily responsible for PV studies, but also contributes to coordinating and providing information to the public and municipalities.
- Giannis Giannakoudakis is a mechanical engineer and he is supporting Minoan in the development
 of the energy saving projects, the implementation of the roadmap and the coordination of the
 programs.
- Giorgos Zidianakis is a physicist and also a member of the community's scientific team. He supports the community in energy upgrade studies, event organization, and overall community development.
- Aristotelis Tsekouras is a production and management engineer, member of the scientific team, with a very active role in the community. He participates in the community's studies for implementing new projects, in developing optimal techno-economic models, through the info-days he is informing citizens about energy efficiency and participates in supporting municipalities.
- Dimitris Katsaprakakis is a volunteer for Minoan, with a very active role. He is a University professor and a founding member. He is responsible for energy studies and he is involved in a multitude of community activities such as citizen outreach, support of municipalities and project coordination.
- Eirini Dakanali is a mechanical engineer, volunteer and member of the scientific team of Minoan. She participates in energy upgrade studies, project coordination, and the implementation of Minoan's dissemination plan and roadmap.
- Chrysa Iakovopoulou is also a mechanical engineer and a volunteer of Minoan. She is supporting the municipalities that are members of the community, organizes events, mapping of members and supports the implementation of Minoan's roadmap.
- Charalampos Giannopoulos is an agronomist and the president of Minoan Energy Community.
 His role was crucial for the establishment and development of the community and he is the source of inspiration for the entire Minoan team



The community receives support from Electra energy. The role of Electra Energy is to offer support for capacity-building activities, to build synergies with local authorities, and to better develop the internal infrastructure and operations of the community through working groups. Moreover, Electra will support the community in the fulfilment of its roadmap. The team is:

- Ioanna Angelaki, team leader regarding the LIFE LOOP project and project manager at Electra Energy. She is a lawyer with expertise in energy and climate law. She works closely with Greek Municipalities in North Greece, promoting community energy projects and building synergies between energy communities and local authorities. Coordinated the development and the submission of the deliverables under WP5. She is also responsible for the maintenance of the Match-making Tool.
- Dimitris Kitsikopoulos, coordinator at Electra Energy. He is an electrical engineer with extensive experience in energy communities' movement in Greece and in the South-East Balkan Region.
- Chris Vrettos, project manager at Electra Energy and communication manager, with extensive experience in community development.
- Sandy Familiari, project manager at Electra Energy with over 8 years' experience as energy and climate campaigner.

The municipalities that will be approached are:

- Agios Nikolaos
- Lasithi Plateau
- Hersonissos
- Rethymnon
- Anogeia
- Karpathos
- Sitia
- Leros
- Amari

The community receives further support from:

- Antonia Proka, project manager at REScoop.eu, expert on community energy, with a focus on participatory processes for the development of strategic roadmaps, business models, internal organisation, and inclusiveness.
- Sofia Corsi, project manager at Energy Cities, expert in project management, networking, participatory processes and strategic development.
- Anna Francis, project manager at Energy Cities with expertise and extensive experience of community energy at citizen and municipal level.





Task Force Romania

Bistrita, Romania – is represented by a team within the Municipality of Bistrita which works by the end and in partnership with Cooperativa de Energie. The team of the Municipality of Bistrita is:

- Cristina Cudrec: is working within the Municipality for 19 years, implementing soft European funded projects. Within the LIFE LOOP project, she is in charge of: coordination and monitoring the project and its actions; making decisions together with the financial manager regarding the allocation of resources; establishing periodic meetings; checking financial flows and approval of invoices; elaboration of the budget and planning for project implementation; monitoring the activity and the fulfilment of the duties that were given to the members of the project implementation team; proposing sanctions for the people in the implementation team if they do not fulfil their duties in the project implementation; representing the municipality's interests and obligations in implementing the project. Also she is responsible for achieving the objectives and results of the project; coordination of the achievement of the planned results and compliance with the financier's implementation requirements; coordination of the periodic reporting process to the financier; participates in the national and transnational events to which she is a delegate; coordinates the organization of the local transnational meeting; coordinates the organization of the project's local dissemination event.
- Iulia Popartac: is working within the Municipality for 15 years, implementing soft European funded projects. Within the LIFE LOOP project, she is responsible for the creation and local organization of the energy community; is responsible for the local organizing actions of the project, as well as those regarding its dissemination; responsible for disseminating the project among stakeholders; responsible for direct interaction with stakeholders; participates in the transnational events to which she is delegated by the project manager and the head of the institution; prepares together with the project team, the transnational meetings; prepares the necessary materials for organizing meetings with the local community; assists the project manager in fulfilling his duties, on the organizational side.
- Marian Florin Cimpeanu: is working within the Municipality for 2 years, implementing hard European funded projects. Within the LIFE LOOP project, he coordinates and monitors project activities that are directly related to energy communities; makes decisions together with the project manager regarding their approach; contributes to the realization of specific, periodic reports; participates in the periodic meetings of the project team; elaborates the plan for the implementation of the energy activities of the project; is responsible for achieving the objectives and results of the project from a thematic point of view; coordinates the achievement of the planned energy results and compliance with their implementation deadlines; participates in the national and transnational events to which he is a delegate; participates in the local transnational meeting; participates in online meetings organized by the project leader.



The team of Cooperativa de Energie (CdE) that supports the Bistrita team is:

- Nicu Plai former Head of Board of CdE, involved in the first months of the project in documenting and researching, together with Municipality of Bistrita.
- Andrei Ilas former Member of the Board, involved in the first months of the project in documenting and researching, together with the Municipality of Bistrita.
- Bogdan Stroe -Head of the Board of CdE, working on both advocacy and capacity building of Municipalities but also citizens, working together with Camelia on identifying and proposing new projects that can be built together.
- Camelia Sava Project Manager at CdE, working on developing energy communities in Romania together with municipalities, also on development of legislation in Romania through advocacy activity.

The community receives further support from:

- Antonia Proka, project manager at REScoop.eu, expert on community energy, with a focus on participatory processes for the development of strategic roadmaps, business models, internal organisation, and inclusiveness.
- Sofia Corsi, project manager at Energy Cities, expert in project management, networking, participatory processes and strategic development.
- Anna Francis project manager at Energy Cities with expertise and extensive experience of community energy at citizen and municipal level.

Task Force Croatia

Zagreb, Croatia is represented by the team from the City of Zagreb, REGEA and ZEZ.

The City of Zagreb is a national pilot area whose role is to offer roofs for the implementation of pilot projects, set up a community energy info centre, and organise community energy workshops, and a citizen dialogue. The Team is:

- Marko Kućan, team leader and head of the Department for energy infrastructure, renewable energy sources and environmentally friendly fuels.
- Filip Ćurko, team member and adviser to the leader at the city office for economy, energy and environment protection
- Matej Majić, team member and expert advisor for energy infrastructure
- Ivan Ivanković, former team leader and former assistant head of office and head of energy & climate at the city office for economy, energy and environment protection
- Kristina Ercegovac, former team member and expert advisor for the supply and systematic management of energy





REGEA – the role of REGEA is to provide technical support. The support consisted of analysis of optimal capacity of PV plants (yearly consumption equals production), analysis of roof statics and overall condition necessary for PV installations, analysis of legal and ownership aspects including necessary permits. The team is:

- Tijana Šimek, project leader from REGEA side coordination of project activities, expert in innovative financing mechanisms
- Velimir Šegon, expert advisor technical support and expert for RES/EE

ZEZ has two primary roles in the project. One is focused on capacity building for community energy for municipalities and relevant national institutions. The other role is to develop community energy projects by supporting existing citizens' energy initiatives and by establishing new energy communities. The team is:

- Mislav Kirac project manager. Coordinates project activities and timely submission of WP 3 deliverables. He is a manager of the newly established energy community ZEZ Sun and is responsible for developing community energy projects.
- Zoran Kordić cooperative manager. Leads advocacy activities for development of supporting mechanisms for community energy on a local and national level. He participates in development of community energy projects.
- Anita Beljo financial expert. Provides financial expertise support for the development of community energy business models. She provides support in preparation and implementation of share offers and public campaigns.
- Kristina Laus communications manager. Responsible for all aspects of communication, both online and offline. She is a lead in developing promotional materials and implementing public campaigns.

The community receives further support from:

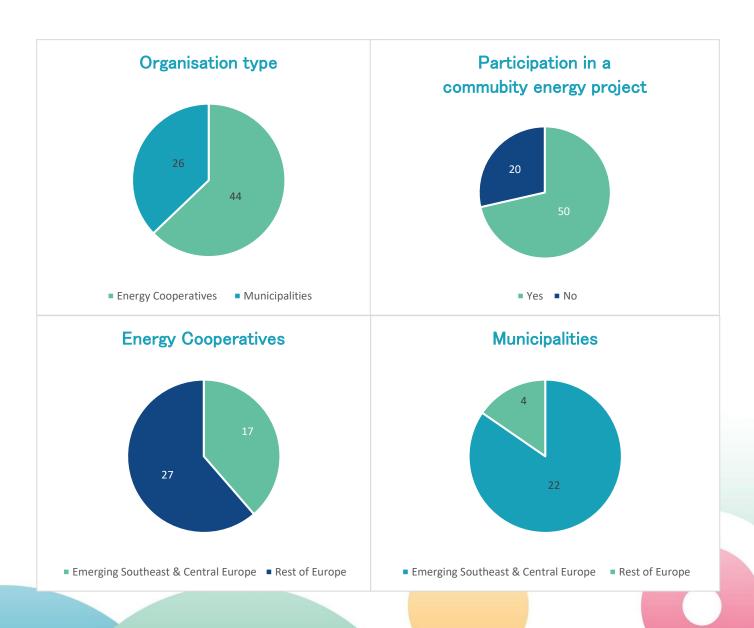
- Antonia Proka, project manager at REScoop.eu, expert on community energy, with a focus on participatory processes for the development of strategic roadmaps, business models, internal organisation, and inclusiveness.
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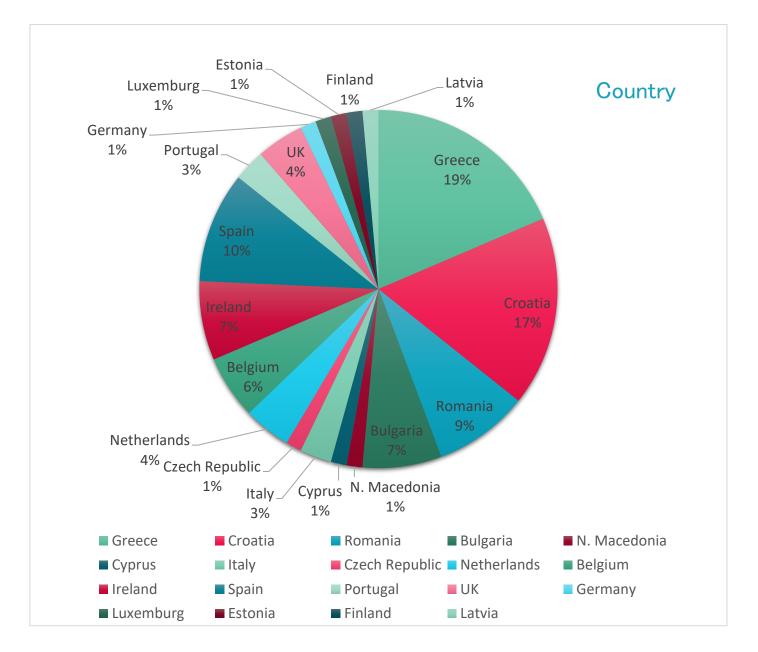


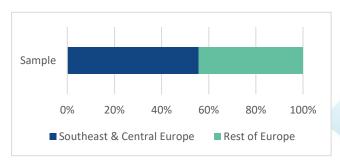
Sample

About 63% of the respondents were people engaged in citizens organisations, while the rest (37%) were engaged in local municipalities. 71.5% of the respondents had already been involved in a specific community energy project, while the remaining 28.5% were not. It should be noted that our sample includes respondents who are already part of a community energy project, regardless of whether they are involved in citizen organisations or local municipalities. Some respondents, while involved in a citizen organisation, do not yet have a concrete community energy project. This is related to the wide geographic coverage of our sample and the different stages of development of the citizen initiatives reached. A brief overview of our sample is presented next.









When clustering countries, we consider the emerging, regarding energy communities, Southeast region, which in our sample consists of Greece, Croatia, Romania, Bulgaria, North Macedonia, Cyprus, together with the neighbouring emerging territories of Central Europe,

which in our sample entails only the Czech Republic, as one. All the remaining countries are treated as the "rest of Europe".



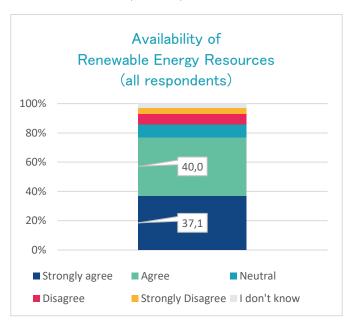


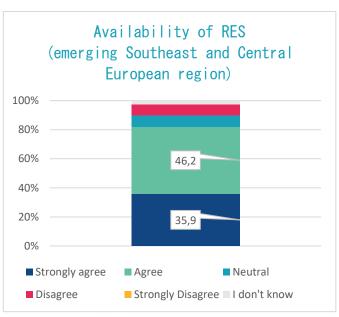
The state of affairs of community energy

This report presents an analysis of the existing diverse capital of local communities, and discusses the identified current barriers and opportunities for the collaborative development of energy community projects with municipal involvement.

Natural, sociotechnical, human and social capital

The analysis of the contextual conditions for the development of community energy projects through cooperation between citizen energy cooperatives and local municipalities starts with a look at the natural capital available in their respective areas. The survey demonstrates that, overall, the vast majority of people think that there are many renewable energy sources available. Specifically, 77% of people strongly agrees or agrees with the statement (37,1% SA; 40% A). The rest rather stay neutral than oppose the statement (N: 8.6%; D: 7.1%; SD: 4.3%).





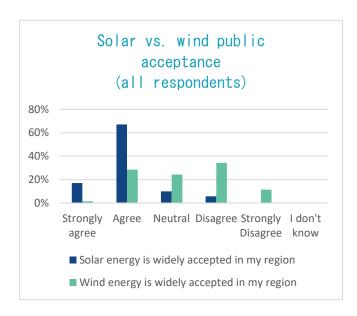
If we zoom in on the perspective of people in the emerging territories of Southeast and Central Europe, we see a similar, yet slightly stronger pattern, especially concerning the strong agreement, with the majority of them – 82,1% – noting the great availability of RES in their region (Emerging (EM)–SA: 35.9% or EM–A: 46.2%)), and very few opposing the statement (EM–D: 7.7%).

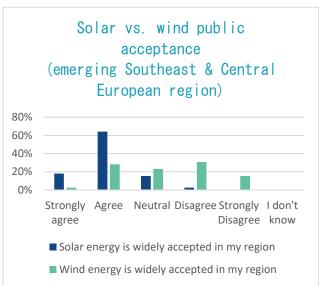
Therefore, the natural environment certainly provides a good basis for the development of energy communities in the region.





Next, we assessed the acceptance of solar and wind energy technologies to exploit this great potential of renewable energy resources. Our project hypothesis has been confirmed: solar technology is more widely accepted than wind. Specifically, about 84% of the respondents believe that solar energy is widely accepted in their region (SA: 17.1%; A: 67.1%), while only 30% of all respondents think this is the case for wind energy (SA: 1.4%; A: 28.6%). When it comes to wind energy technologies about 46% of people disagree with the statement, and 24% prefer to stay neutral (in contrast to only 5.7% disagreement and 10% neutral responses in the case of public acceptance for solar energy).





Zooming in, and comparing responses from the emerging southeast and central Europe with those from the rest of Europe, we find that public acceptance of both solar and wind energy technologies is slightly lower in the emerging region. In the case of wind energy, more survey respondents from the more advanced, in terms of community energy, European countries reject the statement that wind energy is widely accepted in their region (RE-D: 39% vs. EM-D: 30.8%), while more survey respondents from the emerging territories strongly reject this statement (EM-SD: 15.4 % vs. RE-SD: 6.5%). This may indicate a cultural difference to express an opinion more strongly.

Most people who responded to our survey think that there is sufficient physical infrastructure, such as roofs and/or appropriate locations for the development of community energy projects. There is no major difference in perspective between respondents from the emerging territory compared to the rest of Europe, with the exception of neutral responses, which are double in the case of the southeast and central Europe (EM-N: 20.5% vs. RE-N: 9.7%), which may indicate a "hidden" lack of knowledge.





The survey also shows that while a significant proportion of participants do not perceive any problems with the capacity of the grid (D: 35.7% or SD:7.1%), about one third of the respondents still point to grid saturation in their region (A: 21,4% or SA: 10%).

Comparing the responses, we see that respondents more or less agree on the quality of the grid. While more than 45% of the survey participants from the more advanced, regarding community energy, countries state that there is no saturation on their local grid (RE-D: 45.2% and RE-SD: 6.5%), this percentage drops to around 28% when we focus on the emerging territories (EM-D:28.2% and EM-SD: 7.7%), which may reflect the lower capacity of the grid across the Balkans and Eastern Europe. At the same time, more people from the rest of Europe, albeit with an overall lower percentage, confirm grid saturation in their region, compared to those from the emerging territories (RE-A: 25.8% or RE-SA: 6.5% vs. EM-A: 17.9% or EM-SA: 12.8%). It is worth mentioning that slightly less than one quarter of the respondents from the emerging southeast and central Europe remained neutral to this question (EM-N: 23,1% vs. RE-N: 9.7%), and about a tenth clearly indicated their lack of knowledge (EM-NK: 10.3% vs. RE-NK: 6.5%). This may indicate that people in this emerging region are less aware of the issue than in the rest of Europe, but it may also indicate that respondents are less advanced in their local energy transition and/or less involved in the development of renewable energy projects in general.

The research verifies that more needs to be done to raise awareness about the need for the energy transition and the benefits of involving energy communities, and that across Europe. People in the emerging southeast and central European countries are almost divided into three, as about one third agrees, another disagrees and the rest prefers to stay neutral to the survey's statement "a majority of people in my area are aware of the necessity of the energy transition and the anticipated benefits brought about by the involvement of energy communities". At the same time, a lot of people in the rest of Europe (i.e. 38.4%) disagree with this statement.

Our survey confirms a general lack of awareness on the topic of energy communities (SA: 24.3%; A: 57.1%), and interestingly, there does not seem to be a major difference between the two regions. Moreover, the survey points to a lack of platforms and tools to support people and organisations involved in community energy projects in general (A: 60% and SA: 18.6%), as well as a lack of infrastructure and facilities specifically for energy performance improvement projects such as retrofitting (A: 45.7% and SA: 12.9%). Perhaps not surprisingly, there is more infrastructure and support for energy performance upgrading than for community energy. The lack of platforms for energy communities is also slightly more strongly emphasised in the emerging region (EM-A: 61.5% and RE-A: 58%).





Moreover, the survey confirms the lack of sufficient information about energy communities (A: 60% and SA: 21.4%). And in fact, there is an almost unanimous confirmation of a lack of information about energy communities in the emerging region: 94,9% of people agree or strongly agree with the proposed statement (A: 71.8% SA: 23.1%). As for the rest of Europe, 45.2% of respondents agree with the lack of information on energy communities, while 19.4% strongly agree with the statement; yet 22.6% remain neutral.

The survey responses show that existing energy communities and energy cooperatives mostly function as one-stop-shops where information is provided to those who want to learn more about energy communities and how they could set-up one in their region. In municipalities, there are no dedicated staff nor dedicated training programmes. In some cases, such as the city of Zagreb (Croatia), the topic of community energy is partly addressed, by the municipality itself, along with other issues such as energy poverty. In the case of Hermani, a town in the Basque country (Spain), the task has been outsourced to the local energy community, which has been contracted by the municipality to provide information and technical support on energy communities. Table 1 presents the survey responses regarding existing One-stop-shops focusing on community energy.



Country	Organisation type	Answer
Bulgaria	Local government	Burgas Energy Office
Croatia	Local government	Zagreb City: Energy poverty focus including energy communities (by Society For Sustainable Development Design) & Online solar potential calculator (ongoing upgrade aiming to cover the entire PV installation process).
Croatia	Local government	City of Križevci Energy & Climate office
Czech Republic	Local government	Partially in some regions
Estonia	Citizen energy organisation (cooperative / community)	Tartu Regional Energy Agency
Ireland	Citizen energy organisation	Superhomes
North Macedonia	Citizen energy organisation	Skopje City
Spain	Citizen energy organisation	ENHERKOM: Energy community contracted by the local municipality
Various: Greece Croatia, Portugal, Belgium	Citizen energy organisation	Energy communities or energy cooperatives themselves

Table 1. Responses vis-a-vis the existence of Community Energy One-stop-shops

The survey also shows the lack of intermediaries or supporting network organisations for energy communities across Europe, which is more intense in the emerging region, where about 44% of the survey participants agree with the statement proposed in the survey, and about 13% strongly agree. This is underlined with a follow-up question on the existence of a committed network of experts, actively providing technical support to energy communities (D: 27.1%), again noting that while more than one third of the respondents from the rest of Europe confirm, only slightly more than a quarter of the respondents from the emerging territories acknowledge the existence of such a committed network of experts in their region. This calls for more capacity building and support for the existing network of energy experts in the region.





Energy communities are built by people for the people. Therefore, their establishment requires several social pre-conditions, including trust. Our survey shows that trust between people in the emerging regions of the southeast and central Europe is different from trust between people in the rest of Europe. While about 39% of people from the latter group disagree with the statement that "trust between individuals living in my local community is low", only about 31% of people from the emerging territories disagree. At the same time, while our sample generally shows low trust in government authorities (A: 47.1% and SA: 22.9%), about 55% of people in the remaining wider European region confirm the statement that "trust in government authorities is low", and 41% of people from the emerging region agree and 33.3% strongly agree.

Survey participants suggest a lack of initiatives driven by sincere and socially responsible people (A:34.3% and SA:15.7%), indicating an actual lack of initiatives, but also a lack of trust in the ethics of (the few) people who drive them. In the emerging southeast and central Europe, this statement is endorsed by the majority of people (EM-A:38.5% and EM-SA: 20.5%), while it is rejected by many respondents from the rest of Europe (RE-D: 45.2%).

Another factor that may play a role in people's commitment to the energy transition is their concern regarding the negative impact of renewables on the landscape. About 40% of the people in our sample agree that there are many concerns regarding the negative impacts of renewables on the landscape. Interestingly, our respondents from the emerging region, are slightly more positive than neutral towards the statement (EM-A:38.5% and EM-SA: 2.6% vs. EM-N: 28.2%), while people from the rest of Europe are significantly more positive towards the statement (RE-A: 41.96% and RE-SA:16.1% vs. RE-N: 22.6%). This difference may be related to the lower level of deployment of renewables in the southeast and (part of) central Europe, but it may also indicate a more positive attitude towards the technologies themselves, and thus lower annoyance due to them.

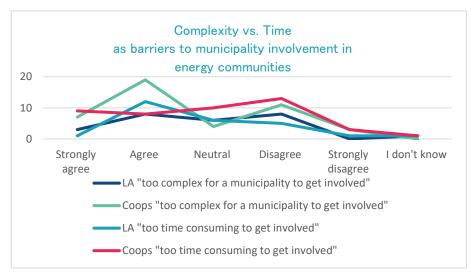
Our survey also looked at the engagement of people and local small and medium enterprises (SMEs) in the energy transition. Our overall sample shows that more people believe that local citizens are actively involved and engaged in the energy transition (A:37.1% vs. D: 32.9%), compared to local SMEs, where around 43% of all respondents reject the statement. In the emerging region, slightly more people disagree (than agree) with the statement that citizens are actively involved and engaged (EM-D: 38.5% vs. EM-A: 35.9%), compared to the rest of Europe, where more people agree with the survey statement (RE-A: 38.7% vs. RE-D: 25.8%).



Municipality involvement in Energy communities

Focusing on the engagement of municipalities in energy communities, the participants of the survey emphasise complexity more than time needed for their involvement in an energy community (A: 38.6% vs. A: 28.6%). The same is observed when zooming in and contrasting the emerging southeast and central European region with the rest of Europe (EM-A: 43.6% and EM-A: 30.8% for complexity and time respectively in the emerging region, compared to RE-A: 32.3% and RE-A: 25.8% in the rest of Europe).

When we look at and compare the responses of people involved in local authorities and those engaged in citizen-driven energy initiatives, we notice that the former are divided on the complexity of engaging in energy communities, with about one third of them agreeing



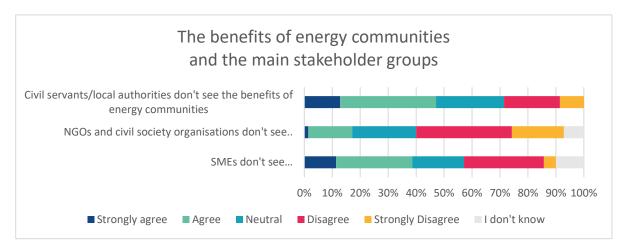
and another third disagreeing with the statement, while the latter mostly believe that the matter is complex for them (with A_{coop} :43% compared to D_{coop} : 25% of them who disagree). At the same time, more civil servants (A_{mun} : 46%) believe that involvement in a community energy project might be time consuming, compared to engaged citizens who mostly disagree with this statement (D_{coop} : 29.5%). It could thus be argued that while citizens recognise the complexity of community energy for civil servants, they don't consider that their involvement will be time-consuming, while the opposite appears to emerge for civil servants. A collaboration between the two could be fruitful in improving the current situation and accelerating the local energy transition.

While the benefits of a municipal target for the development of community energy initiatives are clear, most survey participants, in the emerging southern and central European region but also across Europe, underline that their municipalities have not set clear community energy targets (SA: 31.4% and A: 28.6%). However, more than one quarter of the respondents (mainly from the rest of Europe) disagree, thus confirming that clear community energy targets have been set in their region by their municipalities. About a quarter of the respondents even suggested that their local Sustainable Energy and Climate Action Plan (SECAP) includes a clear community energy target; many remained neutral (N:11.4%) or stated that they did not know the answer to this more specific question (NK: 18.6%).





To flourish, energy communities need to build partnerships and engage a variety of local stakeholders. Yet, the survey respondents think that the benefits of energy communities are not equally recognised by the main potential partners of citizen-driven initiatives, that is, local authorities, NGOs and SMEs.



Alignments and divergence of perspectives on main stakeholder groups

The views of citizens involved in energy cooperatives and local municipalities regarding the main stakeholder groups, relevant to the local energy transition have also been analysed and compared. These include: i) civil servants/local authorities, ii) citizens/ citizen initiatives, iii) civil society organisations (NGOs), and iv) Small and Medium Enterprises (SMEs). A full presentation of the responses regarding these stakeholder groups can be found in the *Annex*. The issues that are more emphasised (due to agreement or disagreement) will be discussed in more detail, followed by the issues that mark the greatest divergence between the perspectives of stakeholders in citizen-driven energy cooperatives and those in local municipalities.

Civil servants / local authorities

The two statements most endorsed, with a strong agreement of 38.5% of participants, state, on the one hand, that civil servants/local authorities lack the knowledge, skills and expertise to develop community energy projects, and, on the other, that they lack vision for community energy projects (with an A: 41.4% for the former, and A: 32.9% for the latter). Next, about 46.5% of respondents underline that civil servants don't take the initiative now, but instead wait for future savings opportunities. Some 44% of our survey participants also believe that civil servants don't want to change their internal processes and habits, which marks another barrier to the development of and involvement in community energy projects.

At the same time, the statement that civil servants/local authorities don't see the benefits of energy communities is the most disagreed with, it is rejected by 20% of respondents and strongly rejected by 8.5%.





Citizens/ citizen initiatives

Interestingly, the statement most supported is that citizen initiatives lack the knowledge, skills and expertise to develop community energy projects (SA: 25.7% and A:50%). This may be explained by the fact that the survey statement includes citizens as individuals as well as collectives. This may have led to some confusion in the questions in this particular section, but at the same time, it may show that many capacity building activities are needed.

Another statement that receives a lot of support is the one stating that citizens' initiatives have little financial literacy (SA:20% A:45.7%), which means a lot of efforts are needed to raise awareness and build capacity in this area.

Obviously, the statements with the most disagreement are those on the benefits of energy communities and their acknowledgement and the existence of a vision for community energy projects (SD21.4% and SA:12.9% respectively). Another argument underlined (by disagreeing) is the statement that citizens' initiatives can't mobilise and recruit people for actions (D: 32.9%).

Interestingly, respondents are divided on the ability of citizen initiatives to effectively communicate and build relationships with local municipalities, mostly believing that this ability is lacking. This calls for special training and capacity building on communication on one hand, and guidance and support on building trust and fostering relationships between the two groups on the other.

Contrasting city-citizen perspectives

Next, our analysis focuses on some pertinent issues to contrast the perspectives of respondents involved in citizen-driven energy cooperatives or energy communities (see Cooperative*) with those of respondents engaged in local municipalities (see Civil servants*). The overview of responses can be found in the *Annex*. First of all, it is interesting to note that not only the majority of people involved in citizen-driven energy initiatives suggest that municipalities lack a vision for community energy projects, but in fact, about half of the respondents involved in municipalities also confirm this. Only about one third of respondents engaged in municipalities believe that local authorities do have a vision for community energy projects. Sharing some good examples of cities at the forefront of climate and energy collaborating with their citizens



to develop projects, especially in the emerging southeast and central European region, could help inspire others to follow this path, to help address this barrier.

The majority of respondents involved in energy cooperatives also believe that municipalities lack the knowledge, skills and expertise on community energy. However, this is claim is rejected by about 20% of those involved in municipalities.

This lack of capacities and skills of municipalities is a well-identified area, and requires further attention, efforts and partnerships with existing energy cooperatives/communities that can help municipalities engage in community energy.

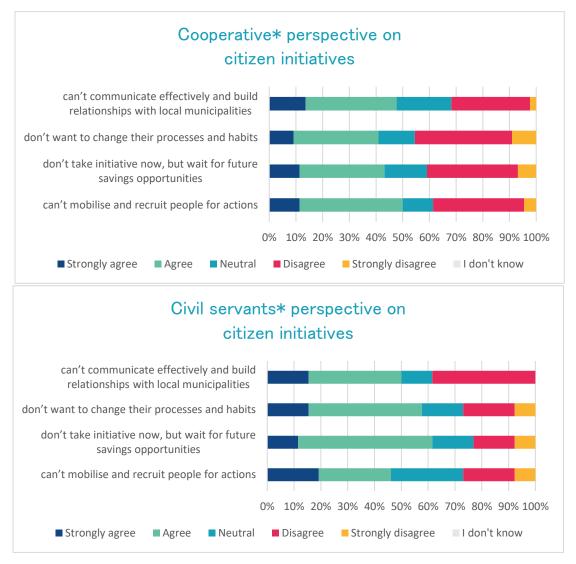


The lack of work-related flexibility of civil servants around internal processes and habits is put forward by the majority of citizens involved in energy cooperatives, and around 50% of the respondents from municipalities. Yet more than one quarter of respondents from local municipal governments reject that statement. Next, the statement that local authorities and civil servants are risk-averse is also widely supported by those involved in energy cooperatives, as well as by respondents involved in such local





authorities themselves. Yet, once again, under 20% of them reject it. These issues, and especially the latter characteristic of municipalities in relation to their position as public institutions, represent significant barriers to the development of community energy projects with municipal involvement.



Regarding the views on citizen initiatives, about half of those involved in citizens' initiatives and half of those involved in local municipalities, believe that citizens' initiatives cannot communicate effectively and build relationships with local municipalities. The only difference is that, interestingly, more people involved in local municipalities reject this statement than people involved in the cooperatives (37% instead of 33%). Clearly, citizens' initiatives would benefit from some communications training to join forces with their municipalities.



Regarding practices, more people from local municipalities believe that those engaged in citizens' initiatives do not want to change their processes and habits than those involved in such initiatives. The latter reject this statement more strongly. And on the issue of initiative, the people involved in the energy initiatives are remarkably divided but tend more towards the acceptance that they are waiting for future (cost) savings opportunities, while more than 60% of the local authorities' respondents suggest that such a postponement of action in anticipation of future improvements is indeed happening from citizens' initiatives.

Finally, surprisingly, about half of those involved in citizens' initiatives, and slightly less than half of those involved in local municipalities, believe that citizens' initiatives cannot mobilise and recruit people for actions. Nevertheless, about 43% of people involved in such initiatives disagree or strongly disagree with this statement.

Civil society organisations (NGOs)

Regarding NGOs and civil society organisations, we first note that once again the lack of knowledge, skills and expertise to develop community energy projects is highlighted (A:30% and SA11.4%), as well as the lack of time for community energy actions (A: 21.4% and SA: 8.6%). More people already involved in such energy initiatives disagree with this statement, possibly indicating the variety of skills needed for community energy projects.

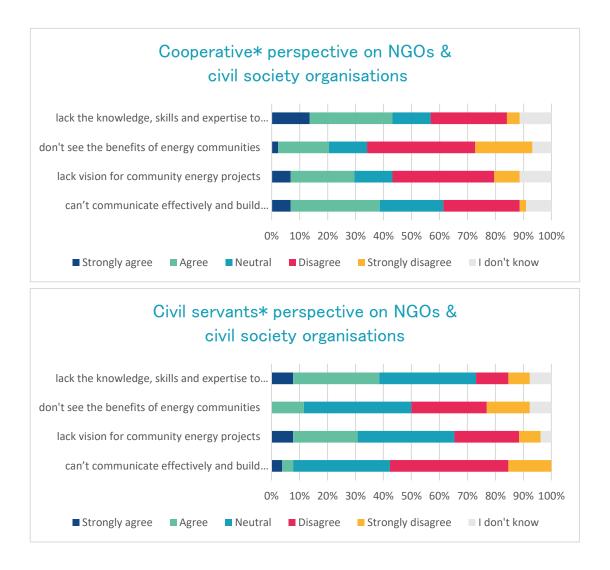
And this brings us to the next point. In addition to the fact that NGOs and civil society organisations see the benefits of energy communities (D: 34.3%) and have a vision for community energy projects (D: 31.4%), respondents emphasise (with their disagreement) the fact that NGOs and civil society organisation in general can mobilise and recruit people for actions (D: 34.3%) and are able to effectively communicate and build relationships with local stakeholders (D: 32.9%).

A (time-efficient) capacity building programme would thus be beneficial for the empowerment and strategic involvement of NGOs and civil society organisations in the community-driven local energy transition.





Zooming in on the difference in perspective, we notice that more people involved in energy cooperatives think that NGOs see the benefits and have vision for community energy projects, compared to those involved in the municipalities.

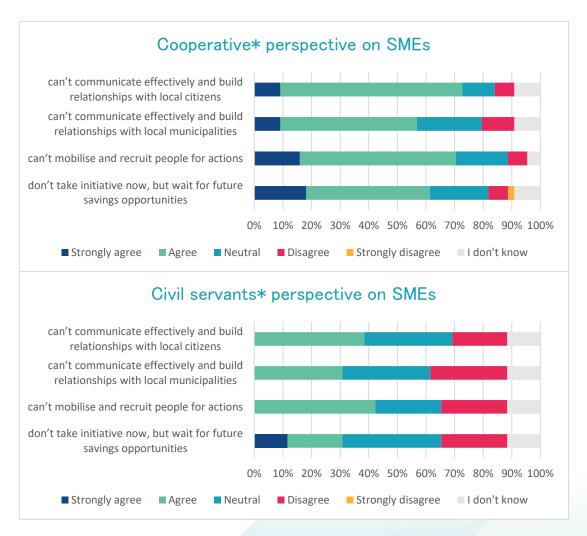


Interestingly, those involved in energy initiatives seem to be more critical than those involved in the municipalities regarding the ability of NGOs to effectively communicate and build relationships with local stakeholders.



Small and Medium Enterprises (SMEs)

Interestingly, more than half of the respondents (A: SA:54.3%) state that SMEs can't communicate effectively and build relationships with local citizens. Next, one out of two participants claims that SMEs lack knowledge, skills and expertise to develop community energy projects and can't mobilise and recruit people for actions. It is then claimed that SMEs are not able to effectively communicate and build relationships with local municipalities (A: 41.4%). At the same time, people are more likely to disagree with two statements: the acknowledgement of the benefits of energy communities and their lack of financial literacy (D;28.6% for both).



A comparison of their views shows that civil servants are more positive about SMEs' ability to communicate with both citizens and municipalities. They are also more positive about their ability to mobilise people. Lastly, they disagree with the lack of initiative from the side of SMEs.





Legal and regulatory matters

Regarding the legal and regulatory issues that emerged from our explorative research, our survey shows that the majority of respondents believe that the administrative procedures concerning community energy projects are disproportionate and unfair (SA:27.1% and A: 34.3%). Moreover, the majority of respondents (stronger) believe that planning and permitting procedures are complex (SA: 41.4% and A: 42.9%). This complexity of planning and permitting procedures of RES projects is unanimously stressed by citizen energy organisations from the emerging southeast and central European regions, while some respondents from local authorities from the same regions point out that they have insufficient knowledge of administrative procedures. At the same time, citizen-driven energy initiatives from the rest of Europe somewhat disagree with the disproportionality and unfairness of such administrative procedures concerning community energy (RE-D_{mun}: 30%), while most of them strongly agree with the qualification that planning and permit procedures are complex (RE-SA_{coop}: 52%). Therefore, it can be suggested, that while the fairness and proportionality of administrative procedures for energy communities differ across Europe, due in part to different frameworks, different experiences and skills of those involved, planning and permitting procedures for RES projects are consistently considered complex across Europe.

One quarter of respondents remain neutral about the (lack of) clarity, as well as the (lack of) stability of local or regional energy and climate policies, while more believe that such local or regional policies are unstable (A: 41.4% and SA: 12.9%) rather than unclear (A: 25.7% and SA: 12.9%). This is the case for respondents in the emerging southeast and central European region and beyond. Naturally, most of the people who stress the lack of clarity and stability are involved in citizen-driven organisations. Most people from local and regional authorities disagree with these statements.

The vast majority feel that support schemes for energy communities are unstable. Specifically, more than 41% of respondents agree and more than a quarter (25.7%) of respondents strongly agree with the survey statement. This argument is stronger among survey participants from the more advanced, regarding community energy, countries, as 70% percent of them agree or strongly agree, while the same holds for 60% of the participants in the emerging regions.

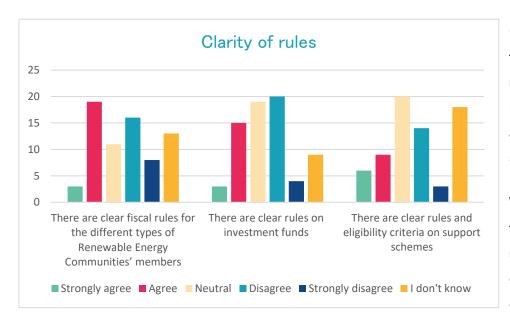
The majority of our survey respondents, (31% are convinced and 41% are strongly convinced) that the support for energy communities is low. In particular, about 81% of survey participants involved in citizendriven energy initiatives, as well as 58% of those involved in local authorities, argue that the support provided to energy communities is low. There is no major difference between the initiatives of the two regions, except for two respondents from the emerging region acknowledging their lack of knowledge.





Existing (or previous) contracts with energy suppliers comprise a barrier to developing new partnerships with energy communities according to about 40% of survey respondents. This argument is equally supported by people involved in local authorities and citizen initiatives.

About half of the people responding to our survey believe that community energy projects are not being prioritised for licensing (SA: 20% and A: 28.6%). Most people who identify this barrier to the development of community energy projects are involved in citizen energy initiatives, and especially in Western Europe. Around 20% of the participants stay neutral and 23% say they have insufficient knowledge.



Our research also focused on the clarity of rules regarding tax issues, investment funds, and eligibility criteria for support schemes.

While the fiscal rules for the different types of members of renewable energy communities. e.g. citizens, local authorities,

SMEs or NGOs, seem be quite clear, the rules on investment funds, i.e. investment products created to raise capital and invest it collectively through a portfolio of financial instruments, and how they relate to energy communities do not seem to be so clear to the participants of our survey. In fact, most participants of our survey disagree with the statement regarding the clarity of rules of such investment funds. The rules and eligibility criteria for support schemes for energy communities also seem rather unclear to our survey participants, especially for those in the emerging region.

We found evidence that capacity needs to be built on legislative and regulatory rules including financing matters.





Financial capital

First, more than half of the survey participants underline the high requirements for energy communities to access the energy market (A:54.3% and SA:17.1%). The majority of participants declare that their organisation faces tight budget constraints; this is similarly the case for people involved in energy cooperatives and local municipalities. Nevertheless, perhaps not surprisingly, both citizens' initiatives and municipalities in the emerging southeast and central region agree more than their counterparts in the rest of Europe (EM- A_{coop} : 65% vs RE- A_{coop} : 48% and EM- A_{mun} : 54% RE- A_{mun} : 50%).

Our analysis demonstrates the lack of grants for energy communities as underlined by the majority of respondents (SA:30% and A:30%). This lack of subsidies is more strongly acknowledged by respondents in the emerging southeast and central region, of whom 38% strongly agree and 33% agree, than in the rest of Europe, where 19% of respondents strongly agree and 26% agree.

The vast majority of respondents further acknowledge a lack of project guarantees from the municipalities for community energy projects, (SA: 35.7%, A:30%), while a third of them either have no opinion (N: 15.7%) or lack knowledge on the topic (NK: 12.9%). An alignment seems to be merging between respondents from the emerging southeast and central Europe region and those beyond. Unsurprisingly, 45% of respondents involved in citizen-driven energy initiatives strongly agree with the statement, while only 19% of respondents involved in local municipalities strongly agree.

This lack of project guarantees is especially important in the context of the problematic access of energy communities to bank loans.

About one third of the participants of our survey reject the statement that bank loans for community energy are (well) accessible (equally divided between strongly or merely). Next, just over a third of the participants agree with the statement about accessibility, while the remaining third is divided among those who remain neutral or acknowledge their lack of knowledge regarding the matter.

Comparing responses across regions, we notice a reflection of different realities. In the emerging southeast and central European region, about 21% of respondents strongly reject the accessibility to bank loans. In fact, it is mostly people involved in local energy cooperatives who reject their access to bank loans for community energy projects, while people involved in local authorities are somewhat more likely to reject the statement as well, but some of them also accept it or remain neutral. Among more advanced energy cooperatives, and some local municipalities, across the rest of Europe, we register that 32% acknowledge access to bank loans for community energy projects. Nonetheless, if we zoom in more on the responses





of the different citizen energy cooperatives, we notice that they are divided: as one third of them agrees, another disagrees and yet another stays neutral or expresses lack of knowledge.

Regarding the provision of sufficient meeting space for people setting up community energy projects, our survey respondents are divided. In the rest of Europe, conditions for meeting spaces appear to be slightly better than in the emerging region. This means that local authorities in the region have the opportunity to play an important role in the local energy transition by providing these meeting spaces to community energy leaders.

Public procurement policies and community energy projects

About 39% of survey participants strongly reject the statement about the compatibility of public procurement policies and community energy projects. In addition, about 31% of the participants claim that municipal procurement rules are incompatible with community energy projects. At the same time, about one-fifth of the respondents (of both related survey questions) either does not have an opinion or knowledge on the matter.

The current public procurement processes and associated criteria appear to emerge as an outright barrier to community energy projects.

Nevertheless, while nearly half (48%) of the respondents in both the emerging region and beyond, underline the incompatibility of public procurement with community energy projects, a closer look at the responses of people involved in community energy initiatives reveals some disagreement. Specifically, about 6% of the communities in the emerging southeast and central European region and about 15% in the rest of Europe disagree with this statement.

More visibility of current good practices on the topic, as well as more targeted training of those involved in public authorities, are considered crucial for the development of community energy projects involving municipalities.





Political capital

Our research highlights the low level of knowledge on energy communities among politicians and decision makers. This is confirmed by about 51% of the survey participants, and further emphasised by 37% of respondents who strongly agree. There is no major difference between the emerging territories and the rest of Europe, except that in this case the latter express their agreement more strongly (EM-A: 53.8% and EM-SA: 33.3%, compared to the former (RE-A:41.9% and SA-A:41.9%). At the same time, as might be expected, those already involved in energy communities also agree slightly more with the statement than those involved in local municipalities and local authorities (SA_{coop}: 40.9% and A_{coop}: 52.2% vs. SA_{mun}: 30.7% and A_{mun}: 50%).

Furthermore, according to our survey participants, community energy initiatives are not sufficiently politically accepted or promoted, as about 31% of the participants disagree with the statement, or at least remain neutral (N: 31.4%), and only about one in five people think that community energy initiatives are both politically accepted and promoted, across Europe. This is underlined more by people involved in community energy initiatives than by people involved in local authorities. This is consistent with the identified lack of political vision regarding community energy initiatives and projects across the different European counties, which is stressed more by people involved in energy communities (D_{coop}: 45%) than those from the local authorities (D_{mun}: 35%).

Our survey also addressed the issue of local-level resistance towards community energy projects. About one third of participants suggest that community energy projects do not generate resistance at the local level (D: 33%), while just undern half remain neutral (N: 30%) or acknowledge their lack of knowledge (NK: 12.9%). Yet, a bit less than 15% of the participants state that there is resistance at the local level, even for community energy projects. Looking closer, it seems that this is underlined by survey participants from the more advanced in community energy (western) European countries (RE-A: 26%), and in particular by those involved in community energy initiatives (RE- A_{coop} 30%). This warns for caution when working on renewable energy projects, even if the project is community-driven and owned.

About 40% of the survey participants reject the statement that opposition in the local government creates resistance to community energy projects, yet about 19% agree. Comparing responses from the emerging territories with those from the rest of Europe, we again find that people who confirm the presence of opposition in the local government as the cause of resistance to community energy projects are active in community energy initiatives in the more advanced in community energy countries, and about 40% of them are active in a citizen energy organization.





About 31% of the participants agree with the statement that incumbent, energy companies hinder the access of energy communities. We see that slightly more people from the more advanced in community energy countries confirm the statement compared to the emerging region (RE-A: 39% vs. EM-A: 33%). Again, we notice a trend within the group of people already involved in citizen energy communities, and while this statement receives some support from respondents from municipal or regional civil servants from the emerging region (EM-Amun: 18%), we notice no support from local or regional authorities from the rest of Europe.

The survey also highlights a lack of open and direct dialogue between energy communities and top-level officials of the respective Ministries of Energy, this is claimed by almost half of the survey participants (D:30% and SD:14.3%). This lack is particularly stressed by citizens involved in local energy initiatives. Only, one in five respondents argue that such a dialogue takes place (A: 12.9% and SA: 7.1%).

Lastly, when we look at the endorsement of the views and experiences of energy communities regarding the development of supportive legislation frameworks by their various national governments, we again find a lack thereof, as evidenced by the fact that a total of 42.8% of respondents (strongly) disagree with our statement. A significant proportion of our survey participants remain neutral (25.3%) or openly acknowledge that they lack knowledge (12.9%), which is consistent with the finding that there is a lack of an open and direct dialogue between communities and high-level Ministry officers in the first place. Such a dialogue with responsible ministry officers is a prerequisite for such an endorsement.



Conclusions and recommendations

As Europe's energy transition progresses, the opportunity to maximise local benefits should not be lost. We must work together to ensure a just and sustainable energy transition that helps eliminate climate risks for both citizens and nature. LIFE LOOP aims to build knowledge and experience to facilitate, incentivise and empower citizens to take action, using a set of powerful, accessible tools, locally adapted approaches and capacity building activities. At the same time, it aims to use this knowledge and network to strengthen the communal, technical, and financial capacities of local actors to support citizen-led energy initiatives. With this aim in mind, one of the first activities of the project was the development and analysis of this survey focusing on the barriers and opportunities for the development of energy communities with a collaboration between citizens and their local authorities.

While our sample showed that local citizens are actively involved and engaged in the energy transition, this report presented a number of challenges that citizens and local authorities face when attempting to develop community energy projects together. From the general lack of awareness, the absence or, at best, limited skills and capacities for the development and operation of energy communities, to complex legislative frameworks and unstable local and regional policies.

Critical in this regard is the identified lack of intermediaries or supporting network organisations for energy communities in the southeast and central European region (and beyond). Member States have the responsibility to develop a one-stop-shop in the form of a single point of contact, providing a manual of procedures for renewable energy communities. Such one-stop-shops should also act as a single contact point, that can guide and "facilitate" interested parties through "the entire administrative permit application and granting process". However, our survey shows that Member States have not yet established such platforms, and that so far, energy communities and local authorities are fulfilling this role. LIFE LOOP will support the organisations that emerged as in charge of this function by developing of guidance materials, tools, and templates of all relevant documents and information.

To begin with, more evidence needs to be gathered on the benefits of the collaboration between citizen initiatives and local authorities on community energy projects, and platforms should be created or strengthened for knowledge exchange, technical support and advice. Connecting these two actors can help address some of the different barriers that cities and citizen initiatives face. Our survey showed, for instance, that while citizens recognise the complexity of community energy for civil servants, they don't consider that their involvement will be time-consuming, while the opposite appears to emerge for civil servants. Citizen initiatives can guide cities in their effort to shape a decentralised and renewable energy future with citizens at the centre.





The ability of citizen energy cooperatives to effectively communicate and build relationships with local municipalities has been stressed by both the people involved in such initiatives and the local municipalities. Yet, these two types of organisations have (as a minimum) overlapping visions and objectives. And since both energy cooperatives and municipalities are mission—oriented rather than profit—oriented, trust is often built quickly, and both entities can become long—term partners, mutually building capacity. To this end, some training should be provided, along with good practices for inspiration and some pilot projects need to be developed to establish the collaboration between the two actors.

Targeted training and capacity building are also required for local municipalities to participate in energy communities, including softer skills on communication, trust and relationship building, and more technical skills on financing, and legal issues. Sufficient time and money for each stage of the development of an energy community should be allocated by and for the local authorities, to ensure the organisation and participation in relevant meetings. Various public funds are currently available for this purpose.

From the EU Cohesion Fund to the Just Transition Fund and the Recovery and Resilience Facility, there has never been more strategic motivation for the EU to invest in energy communities. Member States should recognise the role of energy communities by including them in operational programmes which have so far mostly not supported community energy initiatives. Such funds should be deployed in national and regional budgets and be used by regional and local authorities looking to support the development of energy communities.

For each stage of the development of an energy community, sufficient time and money should be allocated by and for the local authorities to ensure the organisation of and participation in relevant meetings.

Undoubtedly, the capacity of both local authorities and citizen energy cooperatives in terms of legal and regulatory rules, as well as financing schemes needs to be built. The lack of project guarantees by municipalities is especially important in the context of the problematic access of energy communities to bank loans and should be addressed. Moreover, while current public procurement processes and associated criteria seem to be an outright barrier for community energy projects, there are good practices in Europe that should be shared to inspire and mobilise similar (transformative) action in the region. Schemes tailored to the needs of energy communities are now emerging and are enthusiastically welcomed by the community energy movement.





At the same time, NGOs and civil society organisation confirm their position as actors who can effectively communicate and build relationships with local stakeholders, and who are crucial for the mobilisation and recruitment of people for actions. Partnering with and engaging NGOs and other types of civil society organisations seems a good opportunity for energy communities. Moreover, SMEs can also play a role in the local energy transition. Local municipalities collaborate with local SMEs and have more confidence in the ability of SMEs to communicate both with citizens and with the municipalities themselves. Involving local SMEs may offer new opportunities for the advancement and diversification of community energy projects.

Regrettably, the low level of political support and lack of political vision regarding community energy initiatives and projects, as well as the low level of trust in the government authorities, were highlighted across European counties. Moreover, the respondents stress the absence of an open and direct dialogue between energy communities and top-level officers of the respective energy Ministries. A case should be made for the development of specific policies, both at the national and European levels, to support citizen-driven energy communities with municipal involvement by removing existing counterincentives.

Lastly, it is important to monitor and communicate about the progress regarding the removal of the unjustified barriers to the development of energy communities with the collaboration of local authorities and citizen energy cooperatives.

This work has mapped issues spanning from social, organisational, (socio)technical, and environmental, to financial, legal, and political substance. All in all, our analysis shows that citizen initiatives and local municipalities experience associated, yet often, different barriers and opportunities in their efforts to advance a decentralised, democratic, and renewable energy future. Joining forces to collaboratively develop and operate energy communities, they can tap into their complementarity, and "lift each other up" when needed, to materialise their shared ambition for local ownership of renewable power that can maximise the benefits for the local communities.



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2. Survey: Contrasting perceptions on key stakeholders

for energy communities

