



Policy Action Report Sun4All project

Sun4All D5.6 | September 2024



Deliverable No.	D5.6
Project title	Eurosolar for all: energy communities for a fair energy transition in Europe (Sun4All)
Work Package	WP5
Dissemination Level	PU
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Due date	2024-09-31
Actual submission date	2024-09-26
Status	Final version
Reviewer(s) (if applicable)	All partners



This document has been prepared in the framework of the European project Sun4All – “Eurosolar for all: energy communities for a fair energy transition in Europe”.

This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement no. 101032239.

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1. Introduction

Energy poverty continues to be a significant challenge that needs to be addressed in the EU, especially given its commitment to conduct a green transition that leaves no one behind. The COVID-19 crisis, coupled with the surge in energy prices and the Russian invasion of Ukraine in February 2022, has exacerbated the issue and undone years of progress, with 10.6% of Europeans unable to keep their homes adequately warm in 2023, compared to 6.9% in 2021. The share has more than doubled for people in the lower income and vulnerable citizens, although the middle class has also been affected.

Energy communities, through which citizens can jointly own, democratically control, and self-consume local energy, and energy sharing schemes in general, offer a promising avenue for tackling this issue. Over the past five years, EU legislation has spurred the growth of these communities across Member States, making them increasingly popular. These energy communities, however, face significant barriers to their establishment and long-term operations. A critical challenge is integrating a social approach into their business models, especially when it comes to addressing energy poverty.

The EU-funded Sun4All project is a concrete solution in this regard, as it sets up a financial support scheme for renewable energy access for energy poor households through innovative energy sharing programmes. The initiative is based on the existing New York State initiative named "Solar for All" and has been adapted and implemented in Barcelona (ES), Communauté de Communes Coeur de Savoie (FR), Rome (IT) and Almada (PT). The Sun4All project has a specific Work Package focused on sustaining transferability and scaling up the model across Europe, which includes making Sun4All a stable programme to tackle energy poverty in Europe and contributing to policy development at different governance levels.

This report looks at the policy actions undertaken in the context of the Sun4All project at three critical governance levels: the European Union (EU), national, and regional/local levels. At the EU level, our focus has been on exploring both compliance with the first generation of EU legislation on energy communities and examining new legislative developments under the ambitious climate and energy agenda of the von der Leyen Commission (2019-2024). National policies have been scrutinized to identify best practices, barriers, and opportunities for scaling up energy community projects. At the regional and local levels, we have strived to highlight the different roles that local governments can play to foster socially inclusive renewable energy schemes. At the same time, since the Sun4All pilots are contingent on public local action, policy development at local/regional level has been tightly linked to the implementation of the scheme itself and of replication efforts in other European municipalities.

Each section of the report provides an overview of the policy work conducted, the outcomes achieved, and the lessons learned. Our findings highlight the critical role of supportive policies in enabling the growth and success of energy communities, and offer actionable recommendations for policymakers at all governance levels.

Through this report, we aim to contribute to the ongoing efforts to fight energy poverty alleviation and support the widespread adoption of energy communities as a viable and impactful solution.

2. Policy action at EU level

At EU-level, policy actions have strived to understand the policy context and provide policy recommendations either during key negotiations of some EU files or to prepare for the next mandate of the European Commission. Collaborating with other EU stakeholders and sharing the experience of Sun4All as a unique incubator for municipality-led community energy projects with the main purpose of fighting energy poverty, has also helped make the project's results visible. More generally, policy action at EU level has been about raising awareness about local action to fight energy poverty and about socially-driven energy projects such as collective self-consumption schemes and energy communities. The summary of Sun4All policy actions at EU-level is divided into two main sections: policy analyses and EU-level communication and events, both those organised by the Sun4All consortium and external events in which Sun4All was represented.

2.1. Policy analyses and EU-level communication

Legislative developments at EU level have clearly played a key role to boost the community energy movement and to raise awareness about the need to address the issue of energy poverty, especially in the context of the energy price crisis. Understanding the EU regulatory context was a paramount first step in order to be able to further examine national and local policies and how EU rules and priorities have been implemented on the ground. To do so, a first [report](#) was published in May 2023, which gave a first overview of the EU framework on energy communities. In a nutshell, the EU Clean energy for all Europeans package (with the Renewable Energy Directive and the Internal Market for Electricity Directive) introduced very positive first steps in the legal recognition of energy communities. Our analysis shows that significant room for interpretation is given to Member states, which will require important monitoring of the transposition process, for instance to clarify important requirements for instance regarding governance or proximity, but also to establish a comprehensive enabling framework that fully supports the inclusion of vulnerable groups in energy communities. The report also studied the possible (due to the then ongoing negotiations) legislative changes relevant for energy communities as part of the Fitfor55 package and the REPowerEU plan. General provisions such as the introduction of an EU-wide definition of energy poverty and the increase of energy efficiency and renewable 2030 targets will impact all stakeholders, including energy communities. The acceleration of permitting processes for renewable deployment could favour the uptake of new renewable energy community projects. Specific provisions on energy communities will further promote their integration in the energy system. In the building sector, energy communities will soon be formally acknowledged as contributors to energy efficiency and renewable deployment efforts and be included as part of the relevant

market actors to be involved in multilateral dialogues between public and social actors regarding renovation barriers like the split incentive. The possibility to introduce a mandatory installation of solar panels on all public and commercial buildings, as well as new residential buildings, could boost self-consumption and energy sharing within local communities. The Commission complemented the Fitfor55 package with additional communications that encourage Member states to support energy communities with simplified administrative processes and highlight good practices. The EU Solar Strategy communication includes an indicative target to set up renewable energy communities in all municipalities of 10,000 inhabitants and above, and announces new earmarked funding under the LIFE programme. In addition, energy communities can benefit from EU state aid exemptions. The Recovery and Resilience Facility can also be used to support energy communities, and several Member states decided to do so. The main EU financial tools are open to energy communities, but, without proper earmarking, citizen energy competes with many other energy and climate priorities, and social inclusion cannot be guaranteed. The recently set up Energy Communities Repository and Rural Energy Communities Advisory Hub offer direct technical assistance to energy communities and share best practices, while the Technical Support Instrument can support national governments in their efforts to support energy communities deployment. Many of these initiatives have been established in the past 3 to 4 years, which shows that energy communities still are in their infancy, but nonetheless benefit from a positive political dynamic at the EU level.

A [policy brief](#) was published in October 2023. It summarised some of the EU-level findings of the report but focused mostly on the social contribution of energy communities to a fairer energy system and providing policy recommendations. Indeed, energy communities have the potential to strengthen social cohesion – by creating value at local and regional level, providing more affordable and stable prices to consumers, and redistributing some of their profits to the most vulnerable in their local community. The EU legislation acknowledges this potential by explicitly recognising them as a new type of energy market actors that operate more locally and beyond profit-making. However, their role needs to be better defined, including in the legislation. Additionally, in practice, energy communities struggle to reach vulnerable groups and the redistribution of profits to energy-poor households outside the energy community also remains limited.

Despite the social obligations ascribed to energy communities, the level of support needed to meet such expectations is insufficient, or absent. The policy brief thus also offers several recommendations for EU policymakers, to continue to help energy communities thrive and realise their potential to reduce energy poverty and make the energy system fairer. These include for instance conditioning any future dedicated funding (e.g. Energy Communities Facility) to the redistribution of social & local benefits according to a set of criteria, offering guidance to Member states to develop calls for tenders that include social criteria, encouraging Member states to adapt their enabling framework so that energy communities are supported/incentivised to engage in energy justice activities / fulfil social criteria and making sure that they report on how they plan to support the social

contribution of energy communities in their National Energy and Climate Plans (NECPs).

To ensure that these recommendations reached the right audience, in particular EU policymakers and stakeholders working on energy communities and energy poverty, several activities were carried out. Firstly, the report and policy were published both on the Sun4All website and on the website of the Jacques Delors Institute (JDI). A dedicated mailing campaign by JDI was targeted at the energy sector to promote the policy brief as well as the short [webinar](#) dedicated to this topic organised in the framework of the JDI's series "Euroquestions" (see next section). In addition, an [article](#) was published in the online publishing journal Social Europe, outlined the main research findings. Sun4All also carry out a social media campaign to highlight some of the main policy recommendations.

Another dimension of Sun4All EU-level policy efforts resides in the cooperation with other EU projects and other known EU stakeholders working on energy communities and energy poverty. This for instance resulted in a [joint collaborative briefing](#) entitled "Are renewable energy communities a vehicle to mitigate the energy crisis and lift people out of energy poverty?" and published in March 2023 together with ten EU-funded projects working on the topics of energy communities and/or energy poverty. Other relevant EU platforms were also exploited to make Sun4All, and its policy-related work known and ensure the replicability and sustainability of the project's outcomes. This includes the Energy Poverty Advisory Hub newsletter, the BUILD UP portal, the DECIDE Knowledge Hub, the EU Open Research Repository, the NetZeroCities Knowledge Repository, the Covenant of Mayors for Climate & Energy Europe Resource Library and the ICLEI Europe Resources.

On top of policy efforts, academic research was also a core element of Sun4All, bringing long-term reflections that extend beyond the immediate framework of the Sun4All pilot scheme. These academic publications are meant to both contribute to research on the relatively new field that is energy justice and just transitions, but they are also meant to provide a broader audience, including policymakers, with a better understanding of how solar development can advance solidarity with historically marginalised groups and create affordable distributed future renewable energy systems. A first [article](#), "Urban Renewable Energy Communities and Energy Poverty: a proactive approach to energy transition with Sun4All project", published by the Sapienza University of Rome, presents the methodology behind the Sun4All. It delves in particular into the beneficiaries' selection process and the role of the municipality, in particular the provision of public building roofs for PV plants. The article argues that the benefits of renewable energy communities extend far beyond mere energy efficiency, serving instead as a foundation for broader social and economic gains. Another original [research article](#) "Solidaric solarities: Governance principles for transforming solar power relations", by the University of Stavanger, advocates for governance principles informed by solidarity to ensure that solar energy transitions are just and equitable. It emphasises the importance of multi-scalar, cross-sectoral regulation that considers the specific contexts of different energy geographies. The goal is to develop solar energy in a way that empowers

marginalised groups, redistributes resources more equitably, and fosters interconnectedness. However, the text acknowledges that while these governance principles hold potential, they alone are unlikely to transform the underlying social relations that drive solar injustices. Instead, a broader reorientation of power relations is necessary to ensure that solar energy benefits all, especially the historically marginalised. Another academic publication focusing on the Solar for All programme (from New York State) and on the four Sun4All pilots will also be published in the coming weeks. Entitled, “Renewable energy communities for energy-poor households: Sociocultural carbon as policy mobility challenges in urban and peri-urban European contexts”, the upcoming publication by Siddharth Sareen and Bérénice Girard (University of Stavanger) explores how sociocultural factors influence the design and implementation of Renewable Energy Communities (RECs) aimed at reducing carbon emissions in energy-poor households. The paper shows that political and regulatory frameworks play a significant role in shaping how RECs are implemented, often leading to a preference for collective self-consumption over true RECs. The experiences and strategies of the individuals involved, as well as bureaucratic challenges, also greatly impact the success of these projects. Additionally, population density and housing types influence the various paths to carbon reduction, with different approaches emerging in France, Rome, Spain and Portugal. All of these research findings are crucial because they can help shape a broader policy agenda at the EU level, aimed at advancing and reinforcing the goals of a just energy transition.

The Sun4All project exceeded expected research outputs manifold. Part of this was due to synergies with projects running in parallel, funded by the Research Council of Norway, the University of California Berkeley, and Horizon Europe. Two prime examples are a monograph published by Bristol University Press, entitled ‘The Sun Also Rises in Portugal: Ambitions of Just Solar Energy Transitions’ and authored by Siddharth Sareen, and an edited volume published by UCL Press, entitled ‘Geographies of Solar Energy Transitions: Conflicts, controversies and cognate aspects’, edited by Siddharth Sareen and Abigail Martin and including a chapter by Bérénice Girard. The first of these books offers deep insights on the governance of the solar energy transition in Portugal, cutting across multiple spatial scales and placing the project learnings in Almada in wider policy and regulatory contexts.

Several other research publications were produced based on project engagement at University of Stavanger. One is an editorial introduction to an edited collection on the embedded nature of households in energy transition efforts, framing a special issue of the international journal *Sustainability Science*, with Siddharth Sareen as a co-author. This shows the influence of the focus from Sun4All on wider networks of researchers who contributed work to this question at the heart of many of our project pilot activities, which sought to actively engage households and navigated bureaucratic challenges. Another paper, in review with the same journal, led by Harry Lawford along with Siddharth Sareen, addresses a complementary aspect of these pilot projects, namely the roles that institutions play to enable small- and medium-scale solar energy transitions. Another article, to be published in the leading journal *Progress in Environmental Geography* in late 2024, led by Siddharth Sareen with 14 interdisciplinary collaborators and inspired by the

ENERGY4ALL project (funded through JPI Urban Europe's DUT call during 2024-2026), takes forward the implications of these pilot project insights into the policy agenda on energy communities that is gaining traction throughout Europe. Finally, an article in the leading governance journal Environmental Policy and Governance puts forward the policy challenge of coordinating sustainability transition metrics across sectors, something we grappled with throughout the Sun4All project in trying to build social inclusion and empowerment into the logic of solar development at the neighbourhood scale. Some of these research outputs are available online at the following links at present:

- [Geographies of Solar Energy Transitions: Conflicts, controversies and cognate aspects](#)
- [The Sun Also Rises in Portugal: Ambitions of Just Solar Energy Transitions](#)
- [Understanding the embeddedness of individuals within the larger system to support energy transition](#)
- [Cross-sectoral metrics as accountability tools for twin transitioning energy systems](#)

A public facing output from the parallel project Accountable Solar Energy TransitionS (ASSET) bolsters insights that Sun4All also helped generate, through a [short film](#) that brings together two dozen of the world's leading solar energy researchers. This was screened both at the University of Bergen Aula for its Norway premiere and at the Royal Geographical Society for its London premiere in 2024. It serves as a useful policy impact tool to build understanding of this juncture in the potential of solar development and is notably freely available for online viewing. Siddharth Sareen receiving a Nordic research excellence award (Nils Klim Prize 2024) also helped bring attention to the project results at a crucial time during the closing phase, leading to invitations to keynote talks and seminars where the results were profiled to international audiences in Graz, Oslo, San Francisco, Utrecht, Brussels, and in October in Mexico City (hybrid online).

Moreover, the Sun4All experience and research findings were further disseminated through mentions in other publications. It was notably highlighted as a best practice in the EU guidance on energy poverty accompanying the Commission Recommendation on energy poverty (C/2023/4080) and was also mentioned in the European Commission Joint Research Centre's report examines the potential of energy communities to alleviate energy poverty as well as in the Council of Europe Development Bank's publication "From Community Vulnerability to Resilience – The Experience of European Cities". Sun4All was also recognised in academic publications – beyond those by the Sun4All consortium – such as "Empowering energy citizenship among the energy poor" by Nives DellaValle and Veronika Czako in Energy Research & Social Science.

Lastly, the Sun4All consortium presented Sun4All and EU-level policy recommendations during many events throughout the project, as described in the next section.

2.2. Events

To present Sun4All and the policy work carried out in the framework of the Sun4All project during events, two different strategies were used: organising events ourselves and participating in other, sometimes more established events, to share our experience and present our findings.

Firstly, the Sun4All consortium presented their finding during a wide range of relevant European and international events. For instance, we were able to present our EU-level recommendations directly to DG ENER and other stakeholders working on energy communities during a LIFE-CET contractor's meeting. Sun4All was also able to share its knowledge during the 2023 Energy Poverty Advisory Hub Annual Conference in Warsaw. Sun4All shared its experience on the role of energy communities—structural obstacles and benefits for vulnerable consumers. The session introduced the current research findings on how energy communities can address energy poverty, followed by insights from the Sun4All project and two city case studies. The event also allowed us to learn about other experiences regarding energy poverty and energy communities and take these learnings into account for the rest of the project. In addition, Sun4All participated in other events such as the 2022 Energy Cities Forum, REScoop's 2024 European Energy Communities Forum, the International Social Housing Festival, the European Solar Prize Event and many more (see Table 2). Finally, Sun4All was also presented during academic events. For instance, on 23 March 2024, the University of Stavanger organised an event in Portugal focused on municipal-scale energy governance as part of the Empowered Futures Research School. The Sun4All Almada Pilot presented its experience with setting up a renewable energy community and/or a collective self-consumption scheme, as well as the municipality's perspective on electricity distribution grid concessions, and its implications. This policy-oriented event gathered mostly researchers from Europe.

Sun4All also co-organised events with other EU projects, for instance a side-event during the 2023 European Sustainable Energy Week, entitled "Inclusive energy services to fight energy poverty and empower citizens Capacity-building for municipal energy entrepreneurs with a social purpose" together with PowerUp and CEES. During this session, Sun4All and other projects' leaders shared their experience about testing schemes with a social purpose, with the perspective to bring social innovation into the EU Commission's current electricity market design reform. Sun4All also partnered up with the EnergyPROSPECTS project and ICLEI to organise an expert seminar in Brussels in February 2024 as part of ICLEI's Breakfast at Sustainability's event series. Based on the results of these projects and the input from various stakeholders (MEP, energy community manager, CSO representatives), the seminar discussed innovative solutions that could help mainstream social inclusion in the energy transition in a more coherent and comprehensive way. It thus highlighted concrete suggestions for an inclusive and democratic European Green Deal 2.0 before the 2024 European elections and the next Commission mandate.

In addition, Sun4All was successful in securing – together with Climate Alliance – the organisation of a policy session during the 2024 European Sustainable Energy Week in Brussels. Following the policy session, the consortium hosted a policy cocktail, bringing together a diverse audience to highlight the outcomes of the

Sun4All project, which is nearing completion. The two events gathered over 300 participants in total, shedding light on the nexus between energy poverty alleviation and the clean energy transition. The input of researchers, practitioners, EU policymakers, civil society organisations and local authorities focused on how local action can help alleviate injustices in the energy system through a diversity of initiatives and partnerships. The events highlighted best practices from Sun4All (pilot cities, Community of Practice, the Solar for all programme from New York state) and beyond (e.g. City of Besançon, Reschool project) and offered some insights for policy support towards local action on community energy and energy poverty alleviation. For instance, New York State's commitment to ensure that a significant portion of investments in clean energy (40%) benefits disadvantaged communities can inspire future action in the EU. The American experience also raised important question about the balance scale and depth in inclusion, and how to both scale up beneficiaries and boost engagement and education. The French city of Besançon's programme for energy poverty includes energy assessments and personalised support for vulnerable households, highlighting the importance of building trust and directly engaging citizens to reduce energy bills and improve living standards.

EU-LEVEL EVENTS ORGANISED BY SUN4ALL	
20 June 2023	Workshop: Inclusive energy services to fight energy poverty and empower citizens with PowerUp and CEES (Brussels, Belgium)
27 September 2023	Euroquestions: Energy communities for a fair energy transition (Online)
20 January 2024	Potential for energy poverty alleviation through an inclusive and democratic European Green Deal 2.0 45th Breakfast at Sustainability's (Brussels, Belgium)
23 March 2024	Empowered Futures - Event focused on municipal-scale energy governance (Lisbon, Portugal)
21 May 2025	Solar Energy Workshop (Stavanger, Norway)
13 June 2024	Policy session EUSEW acting locally for a fair and inclusive green transition (Brussels, Belgium and online)
13 June 2024	Sun4All Policy Cocktail (Brussels, Belgium)

Table 1: List of EU-level events organised by Sun4All

PARTICIPATION / PRESENTATION OF SUN4ALL DURING OTHER EU-LEVEL EVENTS	
22 April 2022	Energy Cities 2022 Forum (Brussels, Belgium)
4 May 2022	Contractors' meeting "Energy communities: existing projects and future challenges" (Online)
13 May 2022	ICLEI World Congress 2021 - 2022: The Malmö Summit (Malmö, Sweden)
30 June 2022	20th World Wind Energy Conference (Rimini, Italy)
12 September 2022	Solar cities: capturing solar energy potential (Online)

26 September 2022	EUSEW 2022 - ICLEI Europe stand in the Networking Village (Brussels, Belgium)
3 February 2023	Talk on energy poverty and transitions on Europe Day (Trøndelag, Norway)
23 February 2023	European Solar Prize 2023 (Rome, Italy)
9 June 2023	International Social Housing Festival 2023 (Barcelona, Spain)
June 2023	Inclusive Climate Action (ICA) Academy by the C40 platform (Barcelona, Spain)
21 June 2023	ICLEI Europe stand in the Urban Future 2023 conference (Stuttgart, Germany)
29 June 2023	2nd annual positive energy districts conference (Carcavelos, Portugal)
18 September 2023	SHIFT conference: Reflections on Transformation: Shaping the Future, Transcending Disciplinary Silos and Exploring 'Lived' Knowledge Systems (Graz, Austria)
19 September 2023	Energy Poverty Advisory Hub Annual Conference (Warsaw, Poland)
7 November 2023	Presence at the ICLEI stand at the Smart City Expo (Barcelona, Spain)
23 November 2023	Torreblanca Energy Communities Day
24 January 2024	9th Stakeholder Forum on Scaling up Energy Savings, ePLANET (Online)
13 March 2024	11th Procura+ Conference (Lisbon, Portugal)
13-15 May 2024	European Energy Communities Forum (Prague, Czech Republic)
13-14 March 2024	Enercom 2024 – Contractor's meeting Energy Communities (Belgium, Brussels)

Table 2: Participation / Presentation of Sun4All during other EU-level events

Overall, the context of negotiations of key EU files (EED, EPBD, EMD, RED) provided fertile ground to push for additional EU action in the field of energy poverty and energy communities. While it is difficult to assess to which extent projects like Sun4All directly influences EU policies, it is certain that the EU's policy orientation on this matter is in line with the main recommendations stemming from the Sun4All project. For instance, it is worth noting that the new directive on the energy market mandates that EU Member States must ensure vulnerable customers and those affected by energy poverty can access energy sharing schemes, which may involve financial support or production quotas. Additionally, a target is set for projects owned by public authorities, with at least 10% of the shared electricity to be made accessible to vulnerable groups. Such renewed commitment at EU-level to increase the inclusiveness of energy sharing schemes makes Sun4All all the more relevant politically.

In addition, Sun4All's work at the European level was well-received by other EU actors and projects working on similar topic and allowed for a multiplier effect, which is impactful when it comes influencing policies. Sun4All also largely exceeded its target of reaching at least 150 EU policymakers, thanks to the publications, activities and events described above. This proved once again the interest for the Sun4All project and the effectiveness of the policy actions undertaken at EU level.

Finally, the inherently social nature of the Sun4All project in relation to innovative energy sharing schemes like collective self-consumption and energy communities made Sun4All a unique experiment with a policy perspective that will be worth exploring in the next mandate of the European Commission. The focus on social housing within Sun4All can also feed discussions about housing issues, as part of the new dedicated Commissioner's portfolio on the matter.

3. Policy action at national level

Policy action at national level came in three main forms: policy analyses, and advocacy activities, in particular through events.

3.1. Policy analyses

Understanding the political and regulatory context at national level was crucial for several reasons. Firstly, it supported an effective implementation of the pilot schemes and for a successful replication process within the pilot countries. Secondly, it helped identify cross-cutting issues in Member states and formulate appropriate national-level policy recommendations that could be exploited in all EU Member states as well as by different types of actors for advocacy purposes in their own country.

A first [report](#) published in May 2023 notably examined the national framework on energy sharing and more specifically energy communities in Portugal, Spain, France and Italy. Interviews with the Sun4All pilots and other national-level stakeholders (e.g. HESPUL in France) allowed gathering preliminary insights about challenges arising from their respective national regulatory environments. Our research has shown that in recent year, Spain, Portugal, Italy, and France, all introduced different pieces of legislation on self-consumption and energy communities. Legislation has been very fast-changing at national level, reflecting the rise in self-consumption and renewable energies. But mostly, the development of a national regulatory framework on energy communities has been boosted by EU laws, especially the renewable energy directive and the internal market directive in 2018/2019. More recent national laws have continued to transpose EU provisions and to slowly introduce or improve the enabling framework for energy communities. However, overall, no country has fully aligned with EU legislation requirements on CECs and RECs and Member states remain in the exploratory phase of energy communities' regulation, with a strong need for assessment, monitoring and likely fine-tuning of the policies in place. This was reflected in the pilots' own experiences of regulatory and political uncertainty at national level leading to important delays and barriers. On top of this, and very importantly for the Sun4All project, Member

states have systematically failed to leverage on the potential of energy communities to contribute to reducing energy poverty. Finally, our analysis highlighted discrepancies between the theoretical design of the national regulatory frameworks, political ambitions and their operationalisation on the ground. National governments will thus need to boost implementation efforts, simplify procedures and overall increase support for these initiatives. This will need to be done on a tight timeframe since Member states also need to align their legislative framework in the coming years to match the new legislative developments.

These new obligations were highlighted in a [policy brief](#) dedicated to national-level policy analyses and recommendations, entitled “Fleshing out energy community legislation in EU Member states for a fair energy transition” was published in June 2024. The policy briefs reviewed the newest obligations for Member states in line with second-generation EU legislation on energy communities and offered concrete policy recommendations targeting national-level policymakers in order to boost the development of energy communities and support them in fulfilling their wider social goals. Second-generation legislation under the Fitfor55 and REPowerEU initiatives presents further opportunities to strengthen the role of energy communities in the transition to a renewable energy system that leaves no one behind. Revised directives encourage measures to support renewable energy communities, simplify permit-granting procedures, and promote cooperation between local authorities and energy communities. Member States are urged to establish comprehensive support frameworks, integrating energy communities into broader climate and energy strategies. Policy recommendations emphasize setting national targets for energy communities in line with the indicative EU target of establishing at least 1 REC in municipalities with more than 10,000 inhabitants by 2025 introduced in the EU Solar Strategy. Member states can also set more specific objectives reflecting their specific needs, such as prioritising rural areas and smaller municipalities. They should also adopt a comprehensive roadmap or action plan until 2030 to foster the development of energy communities and other socially innovative energy schemes. They should include these measures in their final NECP and in other relevant documents (e.g. National Building Renovation Plans, Social Climate Plans). Member states need to ensure that their national enabling framework actively supports the social missions of energy communities, by adopting new public procurement rules, adapting national welfare rules, and providing incentives and financing. Member states should ensure that sufficient financial, technical and human resources are available in regional and local government to support the development of energy communities on the ground, especially those working on alleviating energy poverty. Additionally, there is a call for better monitoring and reporting to identify barriers and track progress. The complete list of recommendations can be found in the [policy brief](#).

The report and policy brief were both published on the Sun4All website, as well as on the website of the Jacques Delors Institute. In addition, a social media campaign to highlight some key recommendations and promote policy development at national level was conducted during the last months of the project.

In addition, country-level analyses were also carried out by the University of Stavanger. Research focused its efforts on Portugal, focusing on ensuring a just solar transition, as Portugal is among the best-placed European countries to take advantage of solar power. The [publication](#) *“The Sun Also Rises in Portugal:*

Ambitions of Just Solar Energy Transitions" exemplifies this commitment. The publication delves into the critical question of how such fast-paced deployment can secure sociospatial justice. It explores the political and economic dynamics that are key to future transitions, drawing on long-term, multi-sited ethnographic fieldwork. The book serves as an essential resource for policymakers, practitioners, scholars, and anyone interested in the solar energy transition in Portugal and beyond. Finally, the national electricity services regulator in Portugal, called ERSE, hosted an event led by the University of Stavanger with 40 international participants discussing solar energy governance in Portugal and undertaking site visits in Lisbon.

Finally, policy advocacy activities were carried out in the pilot countries.

3.2. Events and other policy activities

- Spain

Firstly, the Sun4All Spanish pilot organised a webinar on combating energy poverty through national-level energy communities. The online event featured projects like Sun4All but also Community of Practice members like Energía Bonita, Tonenca Energy Community, Valencia Clima i Energía, as well as the Municipality of Salt. The webinar discussed the challenges faced by energy communities, such as inadequate legislation, slow law implementation, coordination difficulties, economic barriers, and the challenges of engaging vulnerable groups. To address these issues at national level, participants recommended clearer regulations, faster implementation of laws, recognition of energy communities as entities of general interest, and streamlined administrative processes. They also emphasized the need for better coordination among actors, increased public aid, diverse funding sources, and innovative administrative models.¹

In addition, the Sun4All project was also presented during external national-level events, such as the 2023 Sustainable Energy Forum, a yearly event hosted by Ecoserveis about sustainable energy use and products and services that help to use clean energy efficiently. Sun4All was also presented in Santander, in the framework of a university summer course held by citiES, the Spanish city alliance to cooperate and deliver the "100 Climate-Neutral and Smart Cities by 2030" European Mission.

NATIONAL-LEVEL EVENTS ORGANISED BY SUN4ALL	
4 April 2024	National Policy Webinar "Primer Webinar sobre las experiencias prácticas que luchan contra la pobreza energética en el marco de las comunidades energéticas a nivel estatal" (Online)

¹ Extract from the [Sun4All website](#)

PARTICIPATION / PRESENTATION OF SUN4ALL DURING OTHER NATIONAL-LEVEL EVENTS	
4 May 2023	Sustainable Energy Forum Participation and governance to deal with vulnerabilities: The commitment to energy communities (Barcelona, Spain)
16 July 2024	Presentation in CitiES event " Mission possible: Creating the cities we want " (Santander, Spain)

Table 3: National-level events and activities in the framework of Sun4All, Spain

- Portugal

On 11th September 2024, Almada Pilot organized the policy webinar: Sun4All - Energy Communities and Energy Poverty. This webinar aimed to promote the replication of the Sun4All model among organisations and municipalities interested or active in these topics. It was targeted at municipalities, energy agencies, and other organisations focused on energy communities and the social aspects of combating energy poverty and divided in two different panels. Panel 1: Policies on Energy Communities and Energy Poverty and Panel 2: Sun4All Project Replication and Energy Support System.

In addition, the Portuguese pilot of Sun4All was represented during national events.

The Almada City Council also supported the organisation of a public session by the cooperative Coopérnico about energy communities, presenting for instance the Portuguese translation of RESCOOP's practical guide for energy communities. The event was the opportunity to gather policymakers, associations, small businesses, cooperatives and citizens to discuss shared experiences of energy community projects in Portugal, and Ageneal was presenting Almada Pilot.

The municipality of Almada also participated in an event co-organised by ADENE, the Portuguese Energy Agency, and another European project, BUNDLE UP NEXT, thus also strengthening cooperation efforts and synergies with other European projects through national collaborations. The event aimed at sharing energy efficiency and renewable energy initiatives within the public administration, with a focus on collective self-consumption. Sun4All was able to thus present its model and lessons learnt directly to the National Energy Agency, but also to the Ministry of Environment and Climate Action (through the Directorate-General for Energy and Geology), public administration staff in general and other relevant national-level actors such as Portuguese Distribution System Operators like E-REDES.

NATIONAL-LEVEL EVENTS ORGANISED BY SUN4ALL	
11 September 2024	National policy webinar " Sun4All - Energy Communities and Energy Poverty " (Online)
PARTICIPATION / PRESENTATION OF SUN4ALL DURING OTHER NATIONAL-LEVEL EVENTS	
18 October 2022	Event " Comunidades de Energia - Apresentação do Guia Prático " (Almada, Portugal)
8 March 2023	Ponto Energia – Balcão Único de Investimento em Energia Sustentável (Lisbon, Portugal and Online)

Table 4: National-level events and activities in the framework of Sun4All, Portugal

- Italy

The Italian policy webinar took place on 27 May 2024 and focused on renewable energy communities and their potential for energy poverty alleviation. It gathered policymakers and municipal staff, members of cooperatives, researchers, social workers as well as members of various renewable energy communities and providers of innovative financing solutions for RECs (social microcredits).

In addition, the Rome pilot worked closely with the Italian Observatory on Energy Poverty (OIPE), which is a national network of researchers from universities, public and private entities and institutions interested in the subject of energy poverty. This collaboration aimed at concretely advancing the development of inclusive, solidarity-based energy communities (Solidarity Renewable Energy Communities). On top of sharing the experience of Sun4All from a qualitative perspective, the pilot also defined and tracked key performance indicators (KPIs) to assess and address energy poverty as part of Sun4All.

Importantly, the Department of Social Policies and Health of Rome Capital through the scientific support of the Research Center CITERA Sapienza University of Rome contributed to the drafting of resolutions for the promotion and implementation of REC by municipal offices. The Council approved the Regulation "For the provision of areas and photovoltaic solar systems of Rome Capital in favor of solidarity renewable energy communities" and a resolution that defines the guidelines for the simplification of installation procedures, for the support of families, associations and businesses, establishing the Intersectoral Working Group "Energy communities and solar systems".

NATIONAL EVENTS ORGANISED BY SUN4ALL	
27 May 2024	National policy webinar " CER e Contrasto alla Povertà Energetica: Politiche Attive ed Esperienze di Rafforzamento della Cittadinanza " (Online)

PARTICIPATION / PRESENTATION OF SUN4ALL DURING OTHER NATIONAL-LEVEL EVENTS	
15 July 2023	Key Energy di Rimini, World Wind Energy Conference WVEC 2022, presentation of the paper published in the conference proceedings entitled: Urban Renewable Energy Communities and Energy Poverty: a proactive approach to energy transition with Sun4All project.
OTHER NATIONAL-LEVEL ADVOCACY ACTIVITIES	
31/01/2023	Article in Quale Energia

Table 5: National-level events and activities in the framework of Sun4All, Italy

- France

To engage policymakers and stakeholders at the national level, two webinars were organised in the framework of the Sun4All project. On 24 January 2023, a first webinar was held to present to Sun4All project, in particular the French pilot. In addition, on 4 April 2024, Sun4All organised a national French policy webinar entitled "Collective self-consumption and energy communities – how to ensure vulnerable households benefits from solar energy?". The webinar focused on the national regulatory framework, but also on the European provisions that made and will make their way into the French legislation. The webinar also highlighted the French Sun4All pilot by looking at how such provisions are implemented on the ground and what improvements at the national level are required to ensure such local initiatives on the ground can thrive.

In addition, Sun4All fully took advantage of well-known and established networks such as the RAPPEL network, an open network of over 1,000 members from diverse professional backgrounds, which promotes the sharing of experiences and solutions for energy efficiency and poverty alleviation. This network is notably led by the CLER network which is recognized and authorized to participate in national decision-making bodies in France. In addition, our French pilot directly sought to influence national policymaking by submitting an amendment to a French legislative proposal related to the acceleration of renewable energy in France. The amendment aimed at clarifying and simplifying the administrative and financial rules for local authorities developing photovoltaic installations on their property, which in some cases, requires the creation of a management authority or a separate budget. While the amendments did not make it into the final text, especially since the file was especially sensitive politically at the same, the issue continued to be mentioned as an area of improvement in later activities of Sun4All.

NATIONAL-LEVEL EVENTS ORGANISED BY SUN4ALL	
20 January 2022	Meeting with the French partners of the Sun4All project (Enedis, <i>département</i> , OPAC, Unitoit, ASDER, DOREMI, Enercoop...)

12 April 2022	Visit of INES' premises by elected representatives of the Communauté de Communes Coeur de Savoie, including a presentation of Sun4All
24 January 2023	Webinar to introduce the Sun4All project at national level " Projet H2020 Sun4All - tout savoir sur "l'énergie solaire pour tous" ! " (Online)
4 April 2024	National policy webinar " Autoconsommation collective et communautés énergétiques - Comment faire bénéficier l'énergie solaire photovoltaïque aux ménages les plus vulnérables ? " (Online)
PARTICIPATION / PRESENTATION OF SUN4ALL DURING OTHER NATIONAL-LEVEL EVENTS	
3 May 2022	Energy Justice Seminar (Pau, France)
29 September 2022	Workshop on collective self-consumption during the national annual event of the TEPOS network (Monts du Lyonnais, France)
4 June 2024	Collective Self-Consumption national event 2024 (Lyon, France)
23 September 2024	presentation of ADEME's energy transition scenarios for France with their implementation at local levels (ADEME is the French Agency for Ecological Transition). The president of Coeur de Savoie presented the experimentation of Sun4All. The audience was local authorities, companies, associations of the region.
OTHER NATIONAL-LEVEL ADVOCACY ACTIVITIES	
01/12/2022	Submission of amendments to the French draft law on the acceleration of renewable energies
16/12/2022	Emailing to TEPOS network
12/12/2022	Press release published through the Réseau RAPPEL
22/04/2024	Article on the website of the RAPPEL network's website

Table 6: National-level events and activities in the framework of Sun4All, France

4. Policy action at regional and local levels

Policy action targeted at regional and local policymakers came in two main forms: publications, including policy analyses and advocacy work, and events. In addition, many policy actions aimed specifically at fostering replication of the project in other locations and exchange knowledge with other municipalities. This is thus presented in a separate section in this chapter.

4.1. Publications

Understanding the challenges and drivers of energy communities and other innovative schemes to fight energy poverty at local and regional level was crucial to formulate sound policy recommendations for regional and local policymakers. This was done through interviews during the first half of 2023 with pilot leaders. Preliminary insights were collected into a report published in May 2023. However, additional research was necessary to build a sound analysis beyond the experience in our four municipalities. A policy brief entitled "Municipalities: with great power come green responsibilities?" was published in April 2024 based on this additional research work, as well as interviews with experts. The purpose of this analysis was firstly to highlight the insufficient financing, human and technical capacities that exist at the regional and local level, despite increasing responsibilities in the field of energy and climate policies. Secondly, the publication aimed at highlighting the different roles that local governments can play to foster socially inclusive renewable energy schemes, building notably on the Sun4All experience, as it exemplifies the many kinds of municipal involvement and business models that can exist when dealing with energy poverty and energy sharing schemes. Widening our original scope – focusing on energy communities – was necessary not only to account for the diversity of social innovation in the energy sector on the ground (including within the Sun4All scheme itself), thus broadening the impact of our recommendations, but also to offer a wider range of recommendations, solutions and alternatives in light of the different implementation levels of energy community framework in EU Member States (see previous chapter) and of the delays, regulatory uncertainties and procedural issues that can either significantly delay or hinder the development of some projects and initiatives. In the end, we found that local and regional governments are also instrumental in ensuring that the benefits of the transition are distributed in a socially just way. Innovative schemes like energy communities are often seen as a good way to achieve this, although significant support, especially from municipalities, is required to make these initiatives into true socially-driven energy models. There are many different roles that local governments can play to foster energy communities and socially inclusive renewable energy schemes in general, from taking a leadership role, creating a supportive environment, to leveraging their existing network and expertise. Building on this analysis, we proposed several policy recommendations related to funding, policy, technical assistance and capacity building, and governance. These included for instance offering dedicated funding to renewable energy projects that have a clear social mission, designing community energy programmes for social housing and social dwellings, relying on existing inter-municipal cooperation structures locally to foster the involvement of smaller municipalities, foster cross-departmental collaboration and establish participatory policy processes at the local level to increase citizen participation.

To read about the different roles that local and regional governments can play to promote socially inclusive renewable energy schemes and to read the complete set of policy recommendations, please refer to the original [policy brief](#). Insights and recommendations from this publication were also advertised through a social media campaign on social media.

In addition to this analysis, pilot leaders have also produced important local-level advocacy publications. Many published articles to promote local events or to present the Sun4All scheme as an innovative solution to combat energy poverty on the ground. Examples of articles published in specialized local authority magazines like [LE MAG](#) (France), [Techni.Cites](#) (France) as well as in [L'osservatore Romano](#) (Italy), [abitarearoma](#) (Italy), [xarxanet](#) (Spain).

In France, the *Communauté de Communes Coeur de Savoie* published and disseminated a [press release](#) to raise awareness of the project and get other municipalities interested. An original comic strip, entitled '[Emma's destiny](#)', was also created by INES. Set in the Savoie region, the publication was targeted at local policymakers and at the general public, and was set in the year 2065 amongst a society that managed to adapt and take action in the face the challenges of climate change. The publication includes a technical report on energy renovation. It is both available online and in print form and was later translated into English.

Finally, one of the most important objectives of the Sun4All project was to ensure Sun4All become a stable programme to tackle energy poverty and guarantee vulnerable consumers participation in the energy transition in Europe. To this end, a Community of Practice of 9 cities and utilities was established to follow the project and plan a replication of the Sun4All schemes in their regions. The Community of Practice observed the pilots' implementation to get some first-hand experience, and work more effectively on their own specific energy poverty eradication plans and local business model. In addition, Sun4All set up a Sun4All Capacity Building and Knowledge Sharing Programme in order to further replicate and upscale its innovative scheme in at least 100 European cities and regions. In addition, many other replication activities and events were carried by pilots to consolidate efforts.

These replication efforts led to the creation of crucial materials for decisionmakers and administrative staff at the local level. First, the [Sun4All Capacity and Training Package](#) (October 2023) compiled all the key information about the Sun4All approach necessary for planning its adoption and replication at the local level. Then, the [Guidebook to integrate Sun4All in Cities Sustainable Energy and Climate Action Plans](#) (March 2024) provides support to local and regional governments to mainstream and include the Sun4All financial model in their sustainable energy and climate action planning process, based on the knowledge and experience gained by the Sun4All pilots and Members of the Sun4All Community of Practice. And finally, the [Sun4All Sustainable Adoption Roadmap](#) (August 2024) is a key tool to guide local authorities in effectively integrating vulnerable consumers into energy communities, ensuring equitable access to the benefits of renewable energy. This roadmap offers recommendations to promote the adoption and scalability of Sun4All across Europe, tailored to local and regional contexts.

On top on such materials, discussions during events also truly contributed to the exchange of best practices and peer-to-peer learning between different municipalities and organisations. Several knowledge transfer webinars were thus organised throughout the project on top of study visits in the Sun4All pilots (see next section). Sun4All was also represented outside of the Community of Practice and of the pilots' own replication and advocacy work at local level. For instance, on 21 February 2023, the Sun4All was presented during the Geneva Climate Council Meeting. On 29 March 2024, the Sun4All model was promote to policymakers during the 13. Congress of climate-neutral municipalities (Kongress Klimaneutrale Kommunen) in Freiburg.

Nevertheless, the majority of events targeted at regional and local policymakers were organised in the pilot municipalities and can be found in the section below.

4.2. Events in pilot municipalities

- Barcelona

At regional level contacts from Barcelona derived in the inclusion of Consell Comarcal del Gironès and Consell Comarcal d'Osona in the Sun4All Community of Practice. In addition, on 3 October 2023, the Barcelona pilot organised a study visit to share its valuable experience in addressing energy poverty at the local level. During this event, Barcelona partners Ecoserveis and ALEB warmly welcomed five members from the Sun4All Community of Practice, on top of external stakeholders. The event allowed the participants to share insights about their respective local contexts and strategies for combatting energy poverty. Moreover, they delved into the action plans that each of them is developing under the guidance of Sun4All partners. Key topics included active stakeholder engagement, collaboration with third-party entities, and the development of sustainable business models and financial strategies. Participants were pleased to discover that they faced similar challenges and could pool their ideas to find effective solutions. Many emphasized that one of the primary obstacles they face is gaining the trust of both beneficiaries and partner organizations, including utility companies.

In addition, the Barcelona City Council usually hosts local delegations to explain in general terms its energy and climate policy, during which Sun4All is briefly explained. Examples include trainings with Havana City, visits from Asian delegations (i.e. Chiba and Yokohama cities) or ICLEI SESA project, that includes some African cities.

Finally, the Sun4All pilot in Barcelona and the policy issues and recommendations associated with it were also tackled during external events. For instance, within the framework of the C40 network, Barcelona led a group of six cities (Warsaw, Seattle, Paris, London, Buenos Aires and Salvador de Bahia) to exchange experiences on the fight against energy poverty and the participation of vulnerable groups in a just energy transition.

LOCAL/REGIONAL-LEVEL EVENTS ORGANISED BY SUN4ALL	
24 February 2023	Training Havana City Council visit (Barcelona, Spain)
11 May 2023	SESA project visit (Barcelona, Spain)
3 October 2023	Study Visit with members of the Community of Practice (Barcelona, Spain)
PARTICIPATION / PRESENTATION OF SUN4ALL DURING OTHER LOCAL/REGIONAL-LEVEL EVENTS	
17 May 2022	Inclusive Climate Action Academy (Barcelona, Spain)

Table 7: Local and regional level events and activities in the framework of Sun4All, Barcelona

- Almada

The main local policy event organised in Almada was the Community of Practice Study Visit on 27 February 2024. Members of Sun4All Community of Practice had the chance to engage with key actors in Portugal's energy sector and learn about other projects happening across various towns. External stakeholders such as S.ENERGIA, Coopérnico, RdA Climate Solutions, and Centro Social Paroquial de Cristo Rei (CSPCR) shared their expertise and experiences, enriching the dialogue on renewable energy initiatives. In addition, the visit was the opportunity to focus on the Almada pilot and engage with the Community Centre of Tres Vales. This community institution, part of the Association CSPCR, plays a crucial role in providing home care, daycare facilities, and support to families and the local community. During this visit, Community of Practice members presented their proposed projects to tackle energy poverty, drawing inspiration from the Sun4All scheme. Following the presentations, a working session fostered peer-to-peer exchange, enabling participants to delve deeper into project specifics and share best practices. These exchanges provided valuable insights into the challenges and opportunities faced by communities striving to implement sustainable energy solutions. The study visit also highlighted the challenges that persist to fully implement the Sun4All scheme in the respective cities or regions, namely the lack of specialised human resources, unclear regulatory processes, and difficulties in accessing relevant data on beneficiary energy consumption. Nevertheless the visit also reinforced the importance of collaboration and knowledge-sharing in addressing energy poverty effectively.

In addition, the Almada pilot of Sun4All was represented during external events gathering regional and local policymakers. For instance, at Agenda for a Carbon Neutral Almada 2050, the Sun4All project and the Almada pilot were presented to executive members of the Almada municipality, young people and the general public. It was a great opportunity to disseminate the Sun4All project and reach policymakers at the local level.

Almada also presented its experiences on measures that successfully reach vulnerable groups, including the Sun4All project, to German local policymakers as part of the INCLU:DE project. Two events took place in May 2024. The first event focused on the city of Ludwigsburg's climate action, including general strategies for advancing social justice and fostering engagement opportunities with citizens. Overarching insights from Almada included the need for tailored, face-to face engagement, as well as the necessity of building bridges and long-term connections with low-income communities. The second event tackled the topic of effectively engaging disadvantaged communities in municipal climate action. Almada presented Sun4All as one inclusive participation example of municipal climate program. Overall, this exchange provided practical insights and strategies to empower municipalities and leverage community engagement and develop more inclusive and, ultimately, effective climate actions.

LOCAL/REGIONAL-LEVEL EVENTS ORGANISED BY SUN4ALL	
27 February 2024	Community of Practice Study Visit (Almada, Portugal)
PARTICIPATION / PRESENTATION OF SUN4ALL DURING OTHER LOCAL/REGIONAL-LEVEL EVENTS	
21 September 2022	Participation in the event "Plano Climático de Almada 2030" (Almada, Portugal)
15 February 2023	ICLEI Member Webinar - " Energy Communities and Cities: securing affordable energy " (Online)
18 September 2023	Presentation of Sun4All during the European Mobility Week 2023 (Almada, Portugal)
23 November 2023	Solar Cities and regions - " Accelerating permitting, staffing, and skilling in solar cities and regions webinar " (Online)
22 May 2024	INCLU:DE // Ludwigsburg - Almada introduction & exchange
27 May 2024	INCLU:DE peer exchange: Effectively engaging disadvantaged communities in municipal climate action
5 June 2024	Agenda for a Carbon Neutral Almada 2050 (Almada, Portugal)
18 June 2024	ICA Forum GGND Europe; City Peer Group Working Session 2

Table 9: Local and regional level events and activities in the framework of Sun4All, Almada

- Rome

The pilot of Sun4All in Rome held in January 2024 a Study and Stakeholder visit, as part of the Community of Practice Observers' Group support and sharing actions. Hosted by Roma Capitale Dipartimento Politiche Sociali e Salute (DPSS), in collaboration with the centro di ricerca interdipartimentale CITERA Sapienza Università di Roma and Ecoserveis, it brought together 5 members of Sun4All Community of Practice, along with external actors. The aim was to facilitate the

exchange of information and knowledge on tackling energy poverty. Experts from various sectors across Italy convened to discuss Rome pilot activities, experiences of other Sun4All pilots and CoP, and strategies for replication and policy advocacy. During the session, the Community of Practice members shared insights into their current contexts and outlined projects aimed at adapting the Sun4All scheme to combat energy poverty. Challenges faced, both present and anticipated, were discussed, alongside strategies for future implementation. Additionally, the visit provided an opportunity for other relevant stakeholders in the energy sector to engage in fruitful discussions on tackling energy poverty.²

In addition, meeting on November 28, 2023 held by Prof. Flavio Rosa at the Faculty of Architecture of Sapienza University of Rome met with students of the Sapienza Faculty of Architecture to discuss the two strongly interconnected and very current topics that are energy poverty and the new Italian legislation on renewable energy communities. During the meeting, it was possible to represent the phenomenon of energy poverty which, in its transversality, touches on many themes specific to architecture.

Overall, the Rome pilot has carried out its activities in a period of regulatory uncertainty regarding the creation of renewable energy communities. The publication of the implementing decrees on this topic came late in the project, on 24 January 2024. While this created delays when adopting business plans and constructing new PV systems for RECs, there was at the same time a strong momentum created by associations, citizens and other third parties to make positive advances on this policy issue. This resulted in a greater involvement of civil society by public bodies, regions, municipalities, etc., in decision-making processes where effective solutions can be found to combat energy poverty and improve energy efficiency.

LOCAL/REGIONAL-LEVEL EVENTS ORGANISED BY SUN4ALL	
28 November 2023	Presentation to the students of the Sapienza University Faculty of Architecture
13 December 2023	Sun4All Workshop n° 3 at Spinaceto community
31 January 2024	Study visit in Rome (Rome, Italy)
9 July 2024	Closing event Sun4All project by Roma Capitale (Rome, Italy)
PARTICIPATION / PRESENTATION OF SUN4ALL DURING OTHER LOCAL/REGIONAL-LEVEL EVENTS	
14 October 2022	Festival dello Sviluppo Sostenibile (Rome, Italy)
30 and 31 January 2023	W4RES meets the Energy community of Gallese: an example for Italy in Lazio Region (Gallese, Italy)

² Extract from the [Sun4All website](#)

22 July 2023	Creating community in Rome pilot: event in the Spinaceto neighbourhoods at the Parco degli Eroi with participants from Municipio IX
24 November 2023	Sun4all Workshop Montesapaccato Community (Rome, Italy)
5 December 2023	CERS coordination meeting of the RESS network (Rome, Italy)

Table 10: Local and regional level events and activities in the framework of Sun4All, Rome

- *Coeur de Savoie*

The Sun4All project in Cœur de Savoie has actively engaged the local community through a series of workshops, visits, and information sessions focused on key themes such as energy transition, fair energy transition, solar energy, and building efficiency. Subsequent events have continued to draw community interest, including the "Projection Débat 'Agir au quotidien'" workshop on October 6, 2022, and multiple renovation mornings, which have consistently involved both residents and professionals in discussions about building efficiency and energy consumption. Educational campaigns have played a significant role. Indeed, the project has also offered practical workshops, such as the "Atelier Ecoénergie" on February 14, 2023, which had 48 participants across two sessions, and public meetings on solar energy, self-consumption, and the impact of greenhouse gas emissions. Visits to photovoltaic (PV) installations have provided hands-on learning experiences for participants, with small groups gaining insights into solar energy technology.

The Sun4All project has also focused on local and professional engagements, with events like the half-day meetings offering energy advice sessions to both residents and professionals, emphasizing practical applications of energy efficiency measures. Inaugural events, such as the opening of the Atelier des quais Solar power plant on July 9, 2024, have marked significant milestones in the region's energy transition efforts.

Through these diverse activities, the project has not only educated the local population on renewable energy and energy efficiency but has also actively involved them in the transition to cleaner energy, demonstrating a commitment to making the energy transition fair and inclusive.

More direct policy actions have also been a priority in Cœur de Savoie, in particular through advocacy work targeted at local government representatives as well as stakeholders from the local ecosystem (trade union, DSO, private companies, social housing providers, etc.). One important event was the presentation of the Sun4All experience in Cœur de Savoie during the annual French mayors and local authorities' convention, which made it possible to share concrete policy measures like Sun4All to other municipalities, and present the obstacles and solutions associated with the project.

LOCAL/REGIONAL-LEVEL EVENTS ORGANISED BY SUN4ALL	
04 July 2022	Presentation for local representative of the project and the objectives (France)
10 October 2022	Meeting with social workers to present the Sun4All implementation in Coeur de Savoie (France)
22/02/2023	Meeting with local partners to develop Self-consumption project (France)
19/03/2024	Study visit with COP members and other territory and municipalities
09/07/2024	Opening event : Inauguration of Atelier des quais Solar power plant (6 months after sharing the first kW) (France)
09 October 2023	Grand Paradis visit and presentation of our solar strategy including Sun4All
PARTICIPATION / PRESENTATION OF SUN4ALL DURING OTHER LOCAL/REGIONAL-LEVEL EVENTS	
07 July 2022	Regional conference of the European POWERTY project (France)
28 September 2023	Conference 'Rencontres TEPOS' about SUN4ALL and energy poverty at the national meeting of territories committed to energy transition (France)
22 November 2023	Testimony of Coeur de Savoie in the mayors and local authorities' convention (France)
5 December 2023	Information session on renewable energies organised by a local energy trade union – In Coeur de Savoie (France)
OTHER LOCAL/REGIONAL-LEVEL ADVOCACY ACTIVITIES	
5 October 2021	Discussion with OPAC73 on the Le Belledonne and Sun4All programmes and screening of the Montmélian cinema film 'We the power' on the dynamics of citizen involvement in renewable energy. Followed by a debate in connection with SUN4ALL.
20 January 2022	Meeting of French potentials partners on the territory in the Sun4All programme (Enedis, Savoie department, OPAC, Unitoit, ASDER, DOREMI, Enercoop, etc.)
12 April 2022	Visit to INES by Cœur de Savoie elected representatives (TE commission) and Sun4All presentation

4 April 2023	Conference how to install photovoltaic systems for private company and presentation of SUN4ALL.
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Table 11: Local and regional level events and activities in the framework of Sun4All, Communauté de communes Coeur de Savoie

5. Conclusion

Overall, the Sun4All experience has made it possible to highlight regulatory and political hurdles for energy communities and energy poverty alleviation actions. Sun4All policy-related work was spread out over different governance levels, outlining the disconnect that can exist between advances in policy and implementation on the ground.

At the European level, Sun4All has been very successful at positioning itself as a pioneer of energy sharing action that prioritise social inclusion. This fits perfectly into the new European narrative on this matter, with EU provisions explicitly recognising the benefits of schemes like Sun4All and solidifying their relevance for the years to come, for instance through the revision of the EMD. Sun4All has thus strived to both show how the European momentum has had a significantly positive impact for the future of energy communities and to attempt to provide improvement avenues regarding the inclusiveness and social contributions of such initiatives. The main takeaway has been the need to promote the creation of enabling frameworks that provide dedicated support to renewable energy sharing schemes that prioritize energy justice and to highlight in this regard how crucial involving local governments is. The Sun4All project also included a dedicated KPI on the project's ability to reach and mobilise EU-level stakeholders. This objective was very largely exceeded through policy-oriented publications, academic work, the organisation of events, the presentation of Sun4All's conclusions during external event, the collaboration with other European stakeholders, and through a very successful communication and dissemination strategy. In the end, the Sun4All project was very well identified and managed to make its results visible and its voice heard on the European stage.

National-level policy advocacy was the weak point of Sun4All overall policy action. Although the national webinars were well received in each pilot, the Sun4All project struggle to weigh significantly at national level. This was mostly due to a very strong focus on both European and regional/local levels due to the inherent nature of the Sun4All project itself. National policies were mostly considered either in relation to the state of implementation of EU legislation or in relation to the support available to the regional/local levels. However, many of the delays and obstacles met during the roll-out of the Sun4All scheme were directly due to political uncertainties and evolving legislation as well as the establishment of new procedures. Influencing these policies – that were sometimes being negotiated during the duration of the project – based on the Sun4All experience could have been a gamechanger for replication and future initiatives like Sun4All. In this sense, a lesson learnt for the Sun4All project would be to identify from the start a network

or federation at national level that is already carrying out advocacy work on the topic of energy communities or energy poverty and propose a structured partnership with tangible goals. This would have allowed to use an already established platform to promote the national policy recommendations that stemmed from the Sun4All experience more widely and more efficiently.

Finally, regional and local policy work were geared both towards representatives from the pilot cities themselves – in order to advocate for more supportive policies and make Sun4All a sustainable and flagship programme of the municipality – but also towards a broader set of municipalities within the pilot’s region, country and, very importantly, all across the EU. While national regulatory contexts may differ, peer-to-peer local-level exchanges proved extremely useful to share good practices, especially when the geographical context or the participants’ profile were similar, and to help other municipalities with designing adequate policies and supportive measures to foster the development of energy communities on the ground and other innovative schemes to alleviate energy poverty. The Sun4All Community of Practice and the Capacity Building and Knowledge Sharing Programme were instrumental in this sense, reflecting the complementarity of policy and replication activities for projects at the local level and involving local governments. Finally, the Sun4All project represents additional evidence of the crucial role that municipalities and other local authorities play in promoting socially inclusive energy projects in their territory.