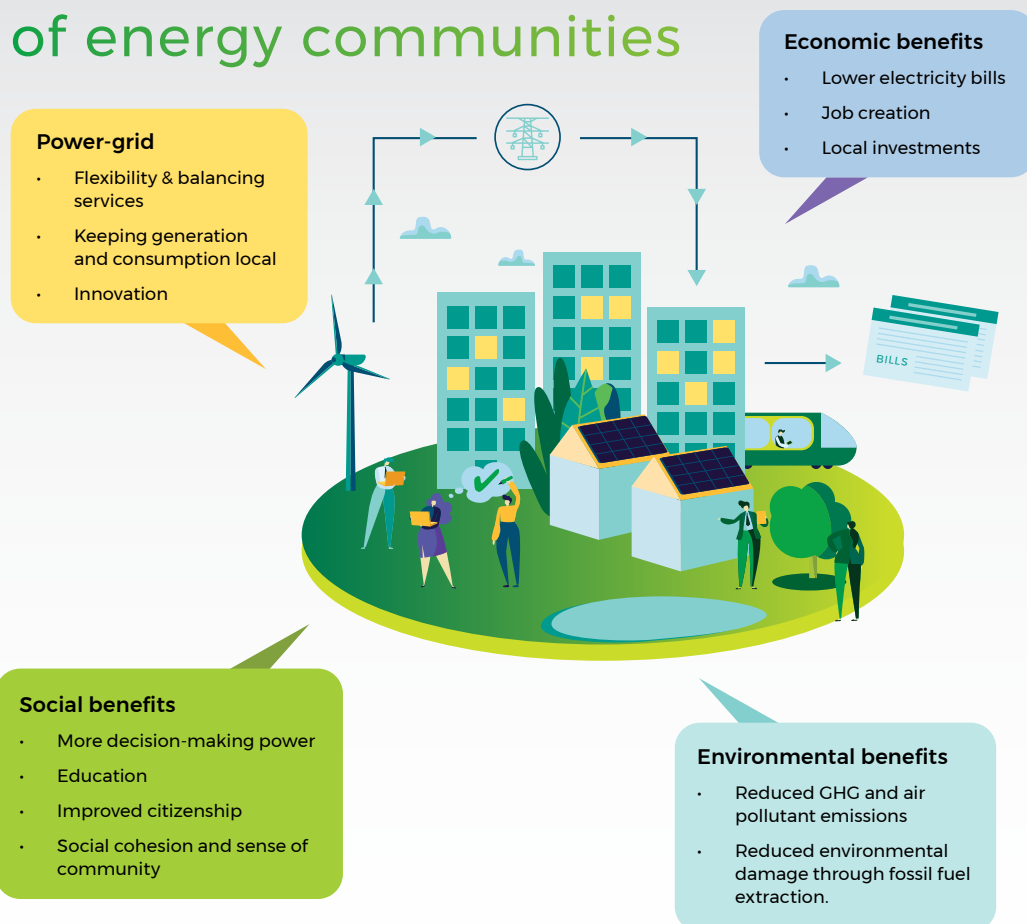


## Benefits and roles of energy communities

The focus of the NEWCOMERS research are new clean energy communities, the roles they play in the future energy environment, the benefits they bring and the social and political environments they need for successful growth.



## A word from our co-coordinators

Dear readers,

**we are delighted to share today the most recent insights and activities from the NEWCOMERS project with you.**

These are particularly exciting times as our project is entering its final phase: in the coming three months, the consortium will focus its activities on synthesizing and communicating the results of our research and the insights gained from the discussions with our NEWCOMERS case study communities and other stakeholders across Europe. Despite the restrictions we faced due to the pandemic, our consortium experienced strong support from our case study communities and other stakeholders in generating the required research data through virtual interactions, for which we are very grateful.

Thanks to the close collaboration with our societal partners, we were able to reach a number of relevant conclusions, which we share in our deliverable "[Comparative analysis of country-level and case study results & identification of best practices](#)". Some key findings are:

**1 Definition of clean energy communities:**  
A sufficiently broad definition of clean energy communities (CECs) is required in national policy to capture their activities and support further experimentation. We found that it is less the EU legal definitions as such but more the way the Clean Energy Package has been transposed nationally that affects the development of energy communities.



**Dr. Julia Blasch,**  
Vrije Universiteit  
Amsterdam



**Nicolien van der Grijp**  
Vrije Universiteit  
Amsterdam

**2 Governmental policies stimulating or hindering clean energy communities:** The development of CECs varies strongly by country. In some countries, CECs have emerged despite, rather than because of, specific governmental support (national or supranational). In others, governmental support paved the way for CEC development. Commitment of (local) governments is needed to support the development of renewable energy solutions and to overcome the various administrative and legal hurdles for energy communities.

**3 Supportive infrastructures for energy communities:** CECs are increasingly building up networks, partnerships, and alliances with a broad variety of actors in order to share knowledge and good practices. They may also function as arenas for networking and lobbying. Yet, there are considerable differences between EU member states in terms of supportive infrastructures for energy communities. Some have dedicated umbrella organisations in place, whereas others have none.

**4 Alliances with for-profit businesses:** CECs are largely dependent on volunteering citizens and may lack the full professional expertise needed to set up viable renewable energy projects. This makes them dependent on external parties with specific knowledge and skills. More research is needed about how to stimulate alliances between energy communities and for-profit businesses without denying members (citizens and SMEs) control of the CEC.

**5 Impact on citizen support for the energy transition:** CECs are mobilising people to invest and act. As a result, passive energy consumers become active agents who have an opportunity to influence and shape the future of energy systems in their country through collective engagement. A remarkably consistent finding from our citizen survey of around 13,500 households in nine different European countries is that the vast majority (>80%) consider CECs as an important or even very important element in the transition to a more sustainable energy system.

Together with our societal partners, we will translate these findings into policy recommendations directed at national and regional policy makers in the six NEWCOMERS countries. In addition, we will synthesize our research findings with our three immediate sister projects COMETS, SONNET and Social-RES and will present a joint policy brief at our final policy event on 28 April in Brussels/virtually. Please save the date in your agendas: This will be an opportunity to discuss the essence of our project's findings and derived policy implications with you.

We hope to meet you on 28 April, be it virtually or in person!

If you find our newsletter informative, please share it with people in your network working on social innovation in the energy transition.

**Julia Blasch & Nicolien van der Grijp**  
Co-coordinators of NEWCOMERS

## KEY FINDINGS OF THE NEWCOMERS PROJECT



With the end of our project slowly approaching, we have synthesised our project findings of the research done so far in the six NEWCOMERS countries into a short, easy-to-read deliverable. Key findings are highlighted with links to more in-depth explanations.

[READ HERE →](#)

### 'NEWCOMERS' and existing EU policies and regulations

It is important to acknowledge the need for adaptation of regulations to national circumstances in order to enable the development of local versions of energy communities, and not to exclude initiatives.

## The definition of new clean energy communities

We define clean energy communities (CECs) as 'associations of actors engaged in energy system transformation through collective, participatory, and engaging processes, seeking collective outcomes', a broader definition than the definition offered by the EU's clean energy package.

## Favourable environments for 'newcomers'

The development of the CEC sector varies strongly by country. The housing market (structure of property ownership) can significantly affect the dissemination of CECs, as can the commitment of the (local) government. Information and positive publicity have been shown to have influence as well.

## Actors, networks and the role of skills and learning

CECs build networks, partnerships, and alliances with a broad variety of actors, such as local municipalities, grid operators, and other energy communities, in order to share knowledge and good practices.

## Benefits for society

There are several benefits of the CECs for the society, such as mobilization of people to take action, promoting knowledge and know-how, reducing the need for system balancing with local production, development of the local economy, and the transition to a more sustainable energy system.

## Benefits for distributed energy systems

The most common resource our energy communities offer energy systems is distributed generation from renewable sources, increasing the proportion of renewable energy in the supply mix.

## Benefits for individual members and local communities

The benefits of clean energy communities (CECs) are wide-ranging and extend beyond environmental and financial aspects, including increased knowledge and skills, active participation in the energy transition and innovative governance arrangements, etc.

## New clean energy community business models

Energy communities come in different shapes and sizes. To survive and flourish within transforming energy systems energy communities have to develop new, often highly innovative business models, which depend on the national energy markets and policy frameworks.

## Observations on the (potential for) diffusion of energy communities

There are several ways in which CECs may be scaled or their benefits diffused. Elements of CEC's can be diffused via members sharing knowledge, or via the replication of parts of its business models. Legislation, regulation and policy have important implications for the diffusion of communities.

## Role of technologies for 'newcomers' to emerge and thrive

CECs may use a variety of technologies for generation, storage and distribution of clean energy, for a variety of reasons. CECs often choose well established technologies to minimise the risk of the technology not working as planned.





# Energy Communities: by, with or for the people?



**Dr. Jacob Barnes**

Who creates energy communities and who benefits from them? These questions have been central to our work within the NEWCOMERS project. Put simply, we've been interested in whether energy communities are developed by, with or for European citizens. Our research shows that all three options are possible and being actively pursued. It also shows that who develops energy communities impacts what they do and who benefits.



**Dr. Paula Hansen**

Over the last two years we have worked with 10 energy communities from across six countries to understand how they emerge and operate. This work confirms that a wide range of actors are involved, from local community members to government agencies and commercial enterprises. Established licensed suppliers play a particularly prominent role, especially where community members exchange power across public electricity networks. Other actors are involved in helping to set up new energy activities: financial institutions can help create new ways to finance energy assets such as wind turbines or heat pumps whilst digital start-ups design algorithms to allocate local generation to demand in near real time. Some of these actors provide discreet services or products to energy communities. Other actors come to play more active roles in the design and/or management of energy communities.

In the first, energy communities are developed by citizens and deliver benefits to local citizens and communities. Such communities typically involve generation of renewable energy, which is sold to a single customer or to the grid. In the second, energy communities are developed with citizens and others. Their activities are normally more complicated than those developed exclusively by citizens, and often involve linking local generation to local demand or sharing energy between members. Because this typically involves the use of low voltage distribution networks and requires engaging with the rules and regulations guiding energy systems, commercial energy actors are typically involved. As a result, these energy communities must deliver benefits to multiple, diverse actors. In the third, commercial actors develop energy communities for prospective communities, which are often viewed as groups of active consumers. While these kinds of energy communities must also deliver benefits for participating consumers, they are primarily driven by the parent company's interests, such as financial growth or strategic positioning. These energy communities are typically the most technically sophisticated, involving a range of smart technologies.

Surveying the range of actors involved in contemporary energy communities it is possible to outline three ways in which they are being developed:

1. **DO IT YOURSELF** – citizens coming together to coordinate and manage new energy activities by setting up new organisations, such as cooperatives, with an emphasis on collective decision-making.
2. **FORM AN ALLIANCE** – citizens and commercial actors form strategic alliances based on trust and contractual relations to develop new energy activities
3. **SOMEONE ELSE DOES IT FOR YOU** – commercial actors develop innovative solutions for the delivery of local energy services

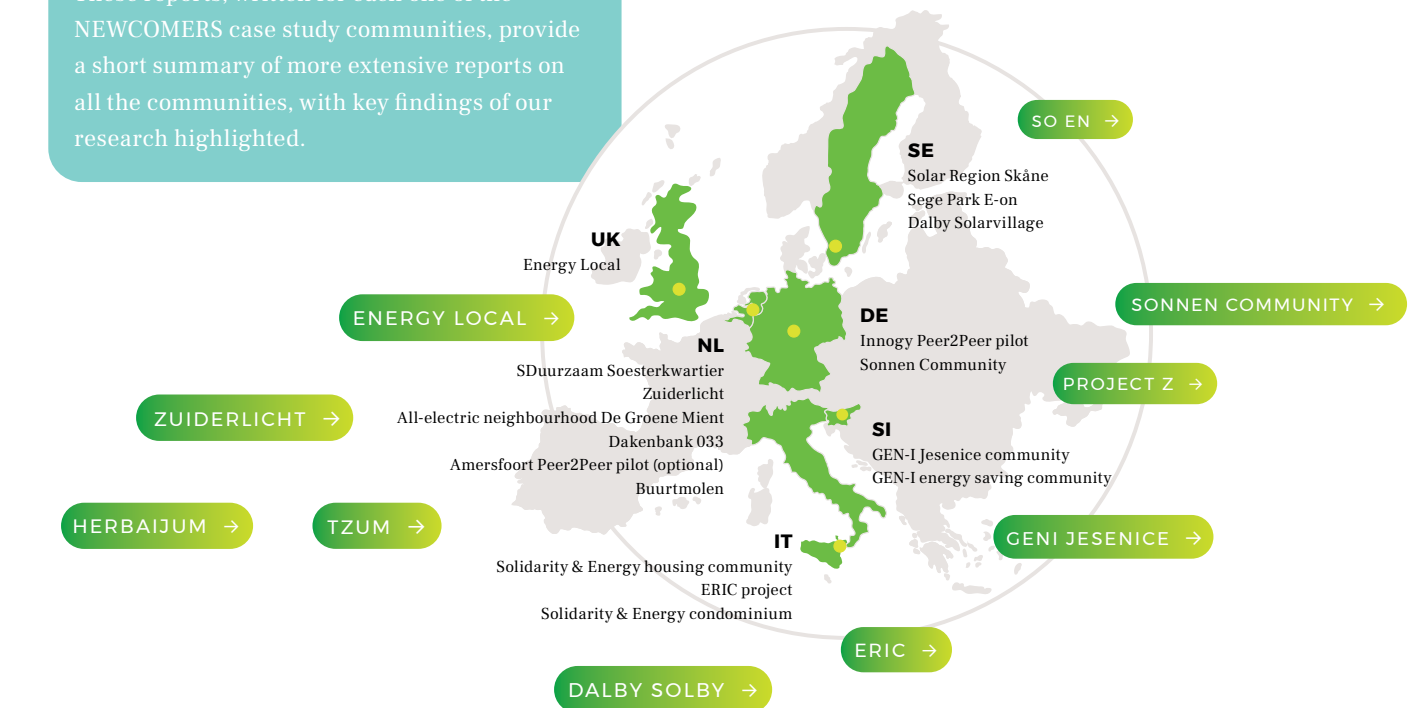
Understanding who is involved in energy communities allows to sketch the types of activities energy communities embark on and who the likely beneficiaries are. Each of the three approaches was present in the cases we studied. The most common by far was the formation of alliances because of the increased range of energy activities it allowed communities to embark on.

For the time being then, it seems energy communities can and will be developed by, with and for European citizens. Whether this remains the case or one approach becomes dominant is likely to be a question of the benefits each model brings for different energy system actors.

## SHORT CASE STUDY REPORTS

These reports, written for each one of the NEWCOMERS case study communities, provide a short summary of more extensive reports on all the communities, with key findings of our research highlighted.

## Our energy communities



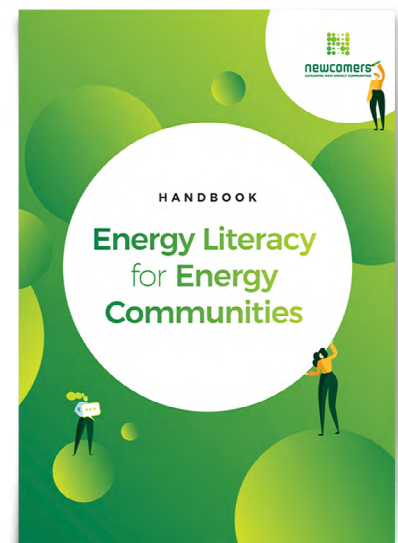
# ENERGY LITERACY FOR ENERGY COMMUNITIES



Energy Literacy for Energy Communities is a handbook created by the NEWCOMERS project. The handbook offers an introduction to some of the concepts and considerations relating to energy communities and their role in the energy system. It is written for community members and anyone else interested in joining the energy community movement.

The **purpose of our handbook** is to:

- **EDUCATE** energy community members about the physical, technical, infrastructural, social, economic, political, and other aspects of our energy systems;
- **RAISE AWARENESS** about the role of the energy community movement in local energy transitions;
- **EQUIP** energy community members with key knowledge to draw on in their efforts to establish, run, and improve their energy communities;
- **GIVE** other interested audiences an overview of the current and possible future roles of energy communities in the energy system.





# What will you find in the **Energy Literacy for Energy Communities handbook?**

The handbook explores 8 topics, focusing on different aspects and viewpoints regarding energy generation and consumption, energy transitions more broadly, and the role energy communities play in this complex system. Reading through the handbook will provide you with an overview of many aspects of energy systems in general and energy communities specifically.



- 1. Energy is a **physical quantity****

About energy in general, where it comes from and how we generate it
- 2. Energy **powers humanity****

About the energy mix of the EU and it's countries
- 3. What **energy sources power Europe?****

About the role of energy in the modern world and the role of energy communities in energy transition
- 4. What **influences energy decisions?****

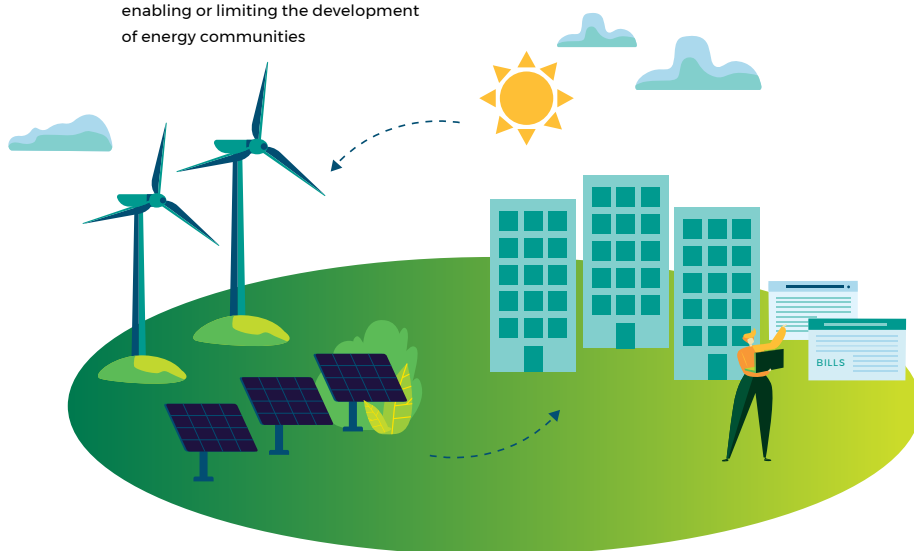
About making decisions about energy as individuals, societies, households and communities
- 5. What **motivates energy communities?****

About what motivates individuals to join the energy community movement
- 6. What **roles can energy communities play and what **benefits do they bring?******

About the benefits of energy communities for individuals, society, economy and the environment
- 7. Importance of **national settings****

About the role national setting plays in enabling or limiting the development of energy communities
- 8. Empowering energy communities: **collaboration, co-learning, networking****

collaboration, co-learning, networking:  
About the role of knowledge in energy communities



## Online version with updates available as OER (Open Educational Resources)

In line with the NEWCOMERS Open Education strategy, this handbook is available as an open online handbook that is regularly updated in collaboration with a multidisciplinary group of experts and other interested stakeholders:

<https://handbooknewcomers.pressbooks.com>

### Do you have information you would like to add to our digital handbook?

Knowledge and information-sharing is one of the best ways to promote and encourage the growth of energy transition. If you have any information you would like to add to our handbook, e-mail you're your suggestions to [info@newcomers.eu](mailto:info@newcomers.eu)



### NEWCOMERS project steps into the world of Open Education

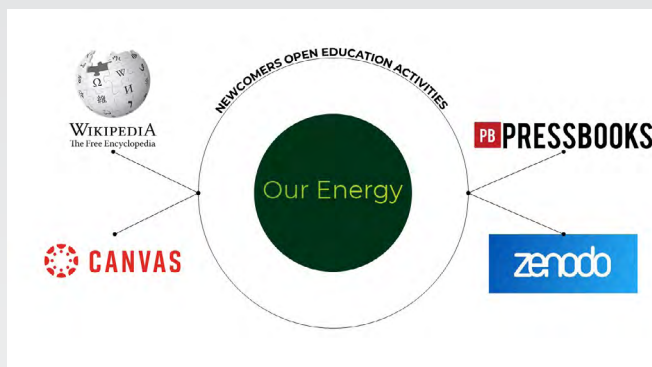
The NEWCOMERS project took up a new challenge in 2021. We decided to dive into the world of Open Education. The Open Education movement tries to improve the availability of education for everyone, without financial, technical, or other barriers. This is supported by Open Educational Resources (OER), which are teaching, learning and research materials in any medium – digital or otherwise – that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation, and redistribution by others with no or limited restrictions.

Through open knowledge sharing practices, new insights on the operations and possible improvements of energy com-

munities' future developments can be gained effectively. Therefore, the NEWCOMERS project is activating several areas of openness to provide added value for both the new

clean energy communities as well as for other key stakeholders like researchers, policymakers and society at large.

Our approach towards 'open' (open science, open education) started in 2020 by launching the Our Energy online platform for education and awareness-raising of new clean energy communities. In 2022, our open educational activities will spread into the following four key areas:



sharing findings on Wikipedia, open handbook, open online course, sharing all materials on Zenodo open repository.

### International and national NEWCOMERS workshops

At the end of October, we held an insightful workshop with members of 10 different energy communities. The aim of the workshop was to share and develop knowledge on energy community business models amongst researchers and practitioners of energy communities. The workshop covered three topics: actors, technologies, and value. We summarised all the key takeaways and put the together in a short and sweet document, which you can access [here](#).

In January and February, we started with our national workshop, which will be held in all 6 of the partner countries. With a wide array of relevant stakeholders, each workshop will discuss the policy and regulator environment in which energy communities are trying to grow and diffuse. The purpose of these workshops are policy recommendations for local, national and EU policy makers.

### We met virtually in Essen and Lund

Due to the pandemic, all NEWCOMERS meetings in the year 2021 were held online. This however did not mean, that the reunions were any less productive, fruitful, or fun. In both meetings, the NEWCOMERS consortium discussed the achievements and findings of the project so far and planned for the upcoming final stages of the project.

Despite the virtual occurrence, there was no lack of socializing and fun. Our German partners from the RWI Institute took us on a

virtual sightseeing tour and so did our Jenny Palm in Lund. In our Lund meeting, we even took part in traditional Swedish Fika.



Our Energy

#### NEWCOMERS deliverables and materials

With the end of our project just around the corner, we have in the last 3 years developed an extensive library of deliverables, reports and other materials.

Take a look at them at our **NEWCOMERS** page and **OurEnergy** platform.



## EC<sup>2</sup> Co-Creation workshops

EC<sup>2</sup> is excited to announce a series of Co-Creation workshops aimed at bringing together local authorities, energy community members and engaged citizens to understand the legal and economic opportunities and barriers for establishing and strengthening energy communities. The workshops will be held in-person between 26th March - 19th April in Italy, Netherlands, Poland and Spain. For more information and to register, please keep up with our [Facebook](#) or [Twitter](#).



## BECOOP tools

Several barriers prevent citizens from becoming (bio)energy producers and bioenergy projects to be more appealing, including a lack of preparedness for communities to tap the full bioenergy market potential, and a lack of bioenergy stakeholders' awareness of the potential of communities. To fill these gaps, BECoop released a set of tools and material supporting stakeholders: an e-market environment connecting offers and demands, and a set of reports and factsheets presenting bioenergy heating technologies as well as business and financial aspects related to the set-up of new (bio)energy communities, guiding stakeholders through complex decisions and minimising their project development efforts. See more: <https://www.becoop-project.eu>



## COME RES Policy Brief: Things are moving, let's speed up!

The policy brief, created by the COME RES project, presents insights into the current state of affairs regarding the transposition of RED II, in particular focussing on Germany, Italy, Belgium and Spain.

Take a look at the policy brief:

PDF →



Save the Dates

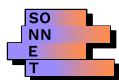
## Putting people at the heart of energy transitions:

four projects shine a light on the path forward

28-29 April 2022



Illustration: Maria Frajge



Join four Horizon 2020 projects for a two-day online event that digs into **social innovation** and **collective action** as key drivers of just and sustainable energy transitions.

REGISTER HERE →

MORE INFO →



For more information:

[www.newcomersH2020.eu](http://www.newcomersH2020.eu)

✉ [info@newcomersH2020.eu](mailto:info@newcomersH2020.eu)

🐦 [twitter.com/NEWCOMERS\\_H2020](https://twitter.com/NEWCOMERS_H2020)

in [www.linkedin.com/company/newcomers-h2020](https://www.linkedin.com/company/newcomers-h2020)

Project partners:

Universita e Gublianti



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 837752.