



DESCRIPTIONS PILOT PROJECTS

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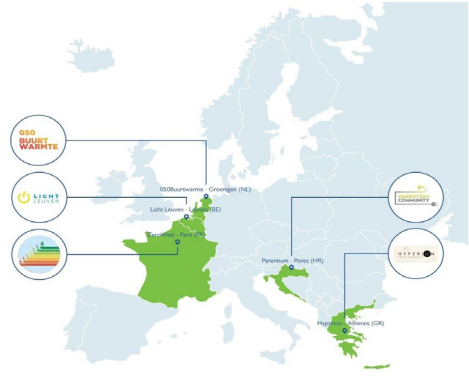
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INTRODUCTION

The first phase of the SCCALE 203050 project is dedicated to structuring and advancing each of the five pilots. The pilot projects are located in the Netherlands, Croatia, Greece, France and Belgium. Together they represent a diverse range of activities community energy initiatives can engage in including the production of renewable energy, district heating, building renovation and behavioural change.

Project	Pilot Focus	Location
Buurtwarmte (NL)	District Heating Deployment	
Parentium Community (HR)	Cultural Heritage Public Building renovation	
Hyperion II (GR)	Collective self-consumption schemes	
Les Économes (FR)	Energy Efficiency and collective purchasing	
Licht Leuven (BE)	PV production and sustainable heating	

The pilot preparations and their set-up by the pilot leaders is well underway. Initial community meetings have been organized in all pilots and the core groups (the ones that will drive the pilot project) have already been identified. This report provides the key information for each of the respective pilot sites.

PILOT 1 – BUURTWARMTE

		
Location	Groningen, Netherlands	
SCCALE Leader	Energie Samen (ENS)	
Pilot Focus	District Heating Deployment	
Goals	<ul style="list-style-type: none">● Deploy a sustainable district heating network, substituting natural gas for >3.000 households● Get +70% of citizens in targeted neighbourhoods to join in● Organize local ownership of the collective heating system	

The first pilot is called Buurtwarmte. It is located in Groningen and will be one of the first projects in the Netherlands to replace the ‘traditional’ natural gas grid by a district heating network. It is one of the most advanced community-led district heating projects in the entire country.

The pilot is unique since it is one of the biggest projects that focuses on mostly private homes. The challenge with these houses is that multiple stakeholders have a say in whether they want to participate in the project or not. A certain level of participation is needed per district to make the project a success. Districts with a higher percentage of participation have a higher chance of success.

ABOUT THE COMMUNITY

The pilot is located in the North-Western part of the city of Groningen. The scope of the project entails over 3.000 individual households that currently have a gas-fired boiler. In order to replace the old heating infrastructure, all these individual households need to join in and participate into the new district heating project. Since the national and local government cannot force anyone to connect to the district heating network, the cooperative will have to foster engagement and participation.

The houses in the Dutch pilot were all built in the 1960’s and 1970’s, which means

that most of them are not very well insulated. Some homeowners however have done energy retrofits over the past years, but most of them haven't. This means that the energy required from the district heating network must have the capacity to heat both well and less insulated houses.

The inhabitants that live in the community are quite diverse too. Most houses are owned by elderly people that have been living in the community since the beginning but there are young people (even families with children) too. There are also houses that serve as student homes and that host up to 6 students.

DEVELOPMENT OF THE PROJECT

A feasibility study was published in November 2019 covering just part of the current project scope (450 households). The report explores how to facilitate the connection between the houses and the district heating network. For the follow-up study, the municipality gave an additional grant. The main goal is now to develop a roadmap that explains what kind of district heating network is technically feasible and economically viable. The roadmap should also identify a good location for the heating network and the way the citizens (inhabitants) will get engaged. All inhabitants are now invited to contribute to the development of the project (technically, economically and socially). The roadmap for the project will get published by the end of 2021.

ENGAGING THE COMMUNITY

Preliminary financial calculations show that the project needs a participation rate of at least 70% of the community to be economically viable. Local support and engagement will thus be crucial for the project's success. Citizen engagement activities over the past year were rather limited due to COVID-19, and the ones that took place were done in an online format. Online meetings allowed citizens to dive deeper into the matter with project experts. Topics that were discussed in these digital meetings included technology, project costs, governance and how to more people could get involved. The next step now is a local ownership workshop through which citizens will learn more about ownership, participation and the cooperative.

CORE GROUP AND STAKEHOLDERS

The core group that is driving the pilot is called Grunneger Power, the local energy cooperative. Grunneger Power is a member of the Dutch cooperative network Energie Samen. Throughout the process, Grunneger Power will gradually be shifting its role from project manager to community builder. The core group will have to overcome the technical, economic and social barriers that are need to be get everyone on board. Right now they are having conversations with all relevant stakeholders including inhabitants, homeowners, social housing institutions, local energy suppliers, the municipality (Gemeente Groningen) and the municipal heating company (WarmteStad).

Different groups of stakeholders are involved in the project in different ways. The inhabitants (homeowners and tenants) are all informed about the progress of the pilot every three to four months by mail. All are invited to participate in working groups. These groups are focused both on in which district the people live (the pilot focuses on three districts) but also focuses on different themes (technical, financial or organizational).

Owners associations are invited to discuss the effect of the project on their environment, as well as housing corporations. Individual landlords with one to a few houses in the pilot are informed about the pilot on a different level. Since the exploitation of the pilot takes place outside the individual houses (e.g. in the public space) but also in the houses itself, all stakeholders wishes and questions need to be clear and met.

The municipality and the local heat provider will have a role in the pilot, when the construction is finished. Grunneger Power, together with the inhabitants, is organizing meeting with these two stakeholders to discuss the interest of the inhabitants. For a cooperative solution, a support base is needed.

CHALLENGES

The multi stakeholders situation is one of the biggest challenges. A district with only one housing corporation as building owner is an easier challenge than one with over four hundred in some cases. This means that each individual homeowner and

each individual resident needs to be involved in the project. This requires an intense level of communication towards the stakeholders.

Together with the inhabitants, an 'offer' needs to be determined. This does not only contain the financial quote of the connection costs to the heat grid and the heat tariffs, but goes further than that. To reach the goal of disconnecting from the gas grid, some offer for electric cooking needs to be made. Not only the cooking plate itself, but also the installation of the equipment and even the extra costs to make the home 'heat grid ready'. In this phase, all questions the inhabitants have are collected and answered. Based on the questions, the first outlines of an offer can be designed.

FINANCE

In this phase the pilot is organized in a way that GP received a budget from the municipality to achieve several goals, on participational level, technical and financial and finally organizational. Together with the municipality, GP organized workshops for the inhabitants to inform them about the project. A goal is to establish a trust base within the districts, based on inhabitant participation. Parallel, an engineering firm is determining what the best way is to make a design to connect all households to the district heating system in the future. Third, with all stakeholders, meetings are organized to determine the wishes and needs for an organization that can exploit the heat district in the future. For all this, the municipality has granted €500.000 to GP. Half for own hours, half for other costs, like engineering.

METHODOLOGY

Energie Samen will follow the 12-steps 'neighbourhood approach', an engagement technique that aims to reach a considerable buy-in from local citizens for large sustainable energy projects including district heating. All steps are centred around collective citizen action. The idea is to support a group in their development from a starting initiative to a



sound and professional organization that can manage and control their own district heating system. The steps in the model are divided in four stages:

1. Initiation (Preparation, Vision and coalition, Definition),
2. Development (Design, Execution, Tender).
3. Realization (Contracts, Execution, After-care)
4. Exploitation and maintenance (Maintenance, Optimisation, Replacement and scaling up).



1. Core group of the Buurtwarmte pilot


NEXT STEPS

Hold a community meeting with pilot leaders to further develop communications.

Develop a toolkit and governance model for local ownership.

Launch a new citizen engagement and support campaign.

PILOT 2 – PARENTIUM

Location	Porec - Parenzo, Croatia	
SCCALE Leader	Green Energie Cooperative (ZEZ) and the municipality of Porec	
Pilot Focus	Cultural Heritage Public Building renovation, Energy Efficiency	
Goals	<ul style="list-style-type: none"> • Create a replicable model for citizen participation in renewable energy and energy efficiency projects • Educate local citizens on the subject of energy communities and the role they can play • Develop and test the applicability of citizen participation through a 'voucher model' • Retain value and returns gained by the community members through vouchers at the local level by promoting their utilisation for local public services 	

The pilot in Croatia is called Parentium and aims to develop new and viable financing models for energy retrofits in old historic public buildings by means of integrating community-owned renewable energies. This combination can provide value to the community and lead to a financial return for citizens that support the project. Parentium is the result of a collaboration between the Green Energy Cooperative (ZEZ) and the City of Poreč – Parenzo. It could be replicated in other cities.

The goal of this pilot is to develop a simple and practical approach to increase citizens engagement and enable their participation in implementation of public projects of making their city greener, healthier and more sustainable. The model will enable citizens to invest in public projects and specifically in case of pilot in Poreč to invest in solar power as part of re-construction and energy rehabilitation project of a historical building and thus to connect the history with the present and the future.

This voucher model includes various elements that are not seen in such extent in Croatia and the region, including:

- Collaboration between different public bodies (service providers) and their joint implementation of projects.
- Use of an innovative approach of combining multiple city and public company budgets
- Development of new public sector products allowing citizens to lower their bills by investing in green future

ABOUT THE COMMUNITY

For many Croatians, historical buildings represent an important part of their cultural identity. Nowadays cultural heritage and ancient public buildings do not only host museums or castles, they sometimes even serve as schools, hospitals or even kinder gardens. Energy refurbishments and the integration of renewables in ancient public has so far been supported by the government through co-financing, but those funding streams will soon disappear. This will obviously make it hard for local authorities to reach the requested energy targets in public buildings. For the refurbishment of Parentium and the integration of renewables, ZEZ will come up with an innovative scheme that allows local citizens and the city to participate.

DEVELOPMENT OF THE PROJECT

The public tender for the planned reconstruction been published and is currently in the final stage. ZEZ is carrying out the analysis of the existing Croatian legislative framework in order to identify available approaches for citizen participation. This requires an assessment of public procurement and other applicable laws.

The development and integration of a small solar PV installation on the rooftop of Parentium will be one of the key elements of this pilot project in an attempt to test new and viable cooperation and financing models for citizens. One of the things that will be tested here is the application of a voucher system (compared to the traditional dividend) to remunerate the capital.

Regarding the technical aspects of the pilot, the documentation has already been prepared. The implementation of the reconstruction works is planned for the The primary developers of the voucher model that is to be applied within the Poreč pilot

site are Green Energy Cooperative and City of Poreč-Parenzo through their municipal company Parentium d.o.o.

The final confirmation of the model, as well as definition of any specific model details, will be done in coordination with the key city departments. The model finalization will include:

- Assessment and confirmation of all model elements within city governing structures (legal, technical, and administrative)
- Definition of the steps for the formal acceptance of the voucher model in the City
- Formal model acceptance
- Preparation of contract templates between public bodies and investors for voucher contracts
- Development and adoption of citizens mobilization process, i.e. mobilizing the citizens and creating a community for investment

The simpler option of the voucher model will focus on users of services in the specific public institution (building) where investment is being made. In the case of pilot project in Poreč the targeted initial community to be engaged in are the citizens users of the kindergarten services. Currently there are roughly 100 kindergarten users that will be called for participation in the pilot installation of mini PV powerplant (3 to 5 kW) that is planned to be implemented as part of the overall project of re-construction and energy rehabilitation of the Radost II kindergarten building.

This simpler model will be implemented first to valorize the model functionality as the voucher contract will be made only between the users and specific institution hence reducing the administrative steps and the number of parties included in the process (avoiding multiple institutions and multiple budgets).

In parallel, the broader voucher models that will include several public institutions will be developed as well. Within this broader model several public institutions will provide an exchange of their services for vouchers for citizen investors. For example, investors that don't use services of kindergarten would as well have the opportunity to invest in vouchers intended for kindergarten PV powerplant and utilize the

vouchers for other communal public services provided by the city and other engaged public institutions (for example water services, waste services, etc.). The broader model will provide opportunity to expand the investors community and to expand the number and types of sustainability projects to be implemented.

CORE GROUP AND STAKEHOLDERS

Through the collaboration between the Green Energy Cooperative (ZEZ) and the municipality of Poreč – Parenzo, this pilot will provide replicable and scalable community engagement practices, as well as innovative financing models for the urban revival of numerous Croatian cities. We will work with community experts and public authorities to further develop the project. Local communities, citizens and energy cooperatives are key stakeholders for the success of this project.

The city departments that will be involved are Administrative Department of Finance for alignment of the model with city finance and budget planning, Administrative Department for General Administration for model alignment with the Public procurement and other administrative processes of the city, Administrative Department for Utility System to evaluate expansion of the model to other utility services provided and optionally Administrative Department for Spatial Planning and Environmental Protection as the main focus of this model will be implementation of sustainability improvement projects.

ENGAGING THE COMMUNITY

ZEZ is currently identifying and evaluating the most suitable approaches for engaging the community. In a next step, they will test relevant models to include citizens in the project. In addition, ZEZ will organize local meetings to present the project and the approach to the citizens of the City of Poreč–Parenzo and assess the interest of the local community to join in. ZEZ hopes that at least 250 citizens will sign up for this project.

Challenges

The main challenges are related to alignment of the developed voucher model with the public sector administrative rules. Some of the issues that arise include:

- Can a voucher for a period longer than one year be issued (multiyear voucher)?

- Is the institution implementing the project the only one that can issue a voucher for services or can other companies / public bodies join their project?
- If more than one institution participates, how they define their mutual relations?
- How will the planning, incurrence, monitoring and recording of future costs related to vouchers be done?
- Are the vouchers transferable from one investor to another and if yes, under what conditions can the coupon be transferred?
- Can a value coupon be inherited and how is it divided in inheritance?
- Once the model is aligned with public sector rules, the challenge will be to make sure that the model is still simple and robust enough to be replicable in other cities as well as to keep model operative costs as low as possible to make future projects economically sustainable.

METHODOLOGY

As the first crowd-investing platform in Croatia, ZEZ Impact allows for simple and transparent investments in RES and EE projects. Through this, local communities are able to invest in and benefit from sustainable energy projects. This platform will be used in the Parentium community project to attract the necessary investments in energy refurbishment at the pilot-site.

The first step in our methodology will be to analyse the legislation and further develop the framework of the “voucher model” as a model for citizen participation. After identifying regulatory and other barriers to develop new financially viable models, we will work to create the energy community through community workshops and community meetings, where we will aim to test, scale and replicate our developed models.



2. Kindergarten Radost II – City of Poreč-Parenzo

Next Steps

Analyse all legal requirements to put in practice the voucher model.


Organise meetings with legal department representatives in City of Poreč-Parenzo to confirm the applicability of the model and prepare all the legal and accounting decisions and procedures to roll out the voucher model.

Organize local meetings in the community to present the planned approach and assess the interest of local community for joining the project.

Develop the process of management of the future community.

Mobilize the local community to join the voucher model and form the Parentium Community that will actively participate.

PILOT 3 – HYPERION II

		
Location	Athens, Greece	
SCCALE Leader	Electra Energy (ELE)	
Pilot Focus	Collective self-consumption schemes	
Goals	<ul style="list-style-type: none">● Scale up Hyperion to 500kwp and more than 160 members● Include energy poor households● Include other underrepresented social groups in the energy community (e.g., women, refugees)● Replicate the Hyperion model in other locations● Contribute to a cultural mind shift around the importance of citizen participation in the renewable energy transition.	

This project will be actively engaging more citizens in our collective self-consumption solar energy community, Hyperion. The pilot will also work with other energy communities and public and private entities (e.g. municipalities and cultural organizations) to raise awareness, engage in capacity-building, and help facilitate the replication of Hyperion in other sites and through new energy community projects.

The pilot is unique in that it is one of the first collective self-consumption measures in Greece, and much more so through a larger scale (100+ members). It will also pioneer a digital platform (set to be developed within January 2022 with the support of Greenpeace Greece), that will facilitate the organization and governance of (larger) energy communities in Greece (e.g., online voting, collection of funds etc.). The pilot will also be the first collective self-consumption project in Greece to include tens of energy vulnerable households for free (up to 60) whilst achieving a financially sustainable operational and working model. Finally, the project will utilize the expertise of some of the members of Hyperion Energy Community to attempt to implement an agrivoltaic model, whereby we will plant trees, edible plants, herbs in the PV park area and generally implement measures to increase biodiversity and

landscape multifunctionality and thus prefigure a model which reduces land use conflict.

ABOUT THE COMMUNITY

The population of the broader Attica region is approximately 3.8 million. Athens is a car-centric city, facing high levels of air pollution. Many citizens of Athens/Attica face energy poverty due to improper housing insulation and general financial insecurity. Rising gas and petrol prices further contribute to this phenomenon. In addition, most people live in blocks of flats, thus they are unable to utilize their rooftops for solar panel installations. As Greece is undergoing a transition to renewable energies, a fierce political debate has emerged about whether this transition risks perpetuating the social inequalities of the fossil energy system, by concentrating power and wealth into the hands of a few private investors. This is often manifested in outright resistance to renewable energy projects (mostly wind parks), which are considered anti-democratic 'quick-cash' schemes.

Through collective investments in solar projects we aim to 1) reduce the price per participant through economies of scale, 2) unlock collective access to other energy efficiency tools, such as insulation, and 3) we scope for available space and utilize the Virtual-Net-Metering model, which only energy communities are allowed to use in Greece and 4) provide a clear alternative to the oligopoly of large renewable energy players, by placing energy in the hands of citizens. This last point is something that we plan to clearly emphasize in all our awareness raising and networking events, i.e., that energy communities can also act as surrogates for a broader cultural shift in how we envision the energy system of tomorrow.

DEVELOPMENT OF THE PROJECT

We are now discussing potential synergies and installation sites for Hyperion II. Some of the examples include: a farm in the neighbouring region of Voiotia, including agricultural production to create an solar farm project, a synergy with Chalandri and Athens Municipalities in Attica region, and utilizing the rooftop spaces of the many buildings of the Benaki Museum in Athens, which is one of the biggest and most prestigious museums in Greece. A potential synergy would increase visibility, funding and networking opportunities.

As for the technical model, in any of the above cases we will be utilizing the virtual-net-metering model, allowing for the RES production to not be in the same site as the consumption. This requires the participation of an electricity provider, the latter being responsible for the net-metering measurements. We already created a positive synergy with a provider for Hyperion I, and we will draw from this experience moving forward.

CORE GROUP AND STAKEHOLDERS

The people involved in the pilot cover a wide range of stakeholders. Currently these include: 1) regular households that will participate with an economic contribution, 2) vulnerable households that will have their electricity bills fully or partly subsidized for free by the energy community, 3) NGOs and other institutions (e.g., a community space in the center of Athens) which will participate to power their offices through the EC.

ENGAGING THE COMMUNITY

Electra will reach out to various networks, such as NGOs, grassroots groups, cultural organizations, SMEs and municipalities, to start consolidating the participant base. Furthermore, they will strive to create synergies with a broad array of social groups, such as refugee advocacy organizations and artistic collectives. This is not only to broaden the participant base, but to also ensure that they're including all kinds of voices into our planning and operation processes.

Local ownership will be built through a series of workshops on energy prosumership, while professionalization of our own organization will be strengthened by networking with other energy communities to exchange best practices. Hyperion will be a lighthouse project for other not-for-profit energy communities in Greece (and hopefully more broadly in the Balkans), and we will transfer our tools and knowledge through targeted community workshops and outreach activities.

So far, the stakeholders have been engaged through the following routes:

- one-to-one phone calls, online and in-person meetings, detailed e-mail exchanges, to explain the energy community model and the context and specificities of Hyperion.

- Public presentations (targeted events organized by ELECTRA such as workshops or presentations, participation in conferences),
- encouraging stakeholders to engage in word-of-mouth snowballing within their social circles,
- news media articles,
- expression of interest form through a dedicated section in Hyperion's website.

Finally, a future engagement strategy we have considered but have not yet utilized is paid ads on social and news media. We have also engaged with actors that will not become members but are willing to collaborate with Hyperion to offer additional services (e.g., the Greek Passive House Institute that will work with Hyperion members to achieve bulk renovation of members' houses).

CHALLENGES AND FINANCE

A key challenge has been funding the project, although we are close to locking a favorable low interest loan from a French Impact Fund. The total cost of the project for the 500kwp park (including land permits, installation fees etc.) is expected to be up to 400,000 euros. This will be covered primarily by the Impact Fund's loan and through economic participation by the members.

Currently, we are close to overcoming another key challenge: access to land (also in an area with available space in the grid), as one of our members is conducting a feasibility study for a plot of land within the Attica region. Finally, an ongoing challenge will be the instability of the legal and regulatory framework. To address this Hyperion (and ELECTRA) are engaged in ongoing advocacy work to ensure that the political landscape remains favorable towards energy communities.

METHODOLOGY

Through its innovative business model and approach, HYPERION energy community has successfully engaged citizens, municipalities and SMEs interested in clean energy collective self-consumption. The project will build on this by developing different models based on the technical and financial model of Hyperion I, but adapted to different conditions, such as subsidizing membership costs of different energy poor households.



3. Core group of the Hyperion pilot

NEXT STEPS

Contact stakeholders to arrange dissemination and awareness raising events.

Potentially co-organize a session with Klima500 initiative that emphasizes how energy communities should be centerpiece of any Greek climate law.

Collaborate with cross-sectoral stakeholders to bolster the toolkit of services that Hyperion can offer to its members.

PILOT 4 – LES ÉCONOMES

Location	Ile-de-France region, France
SCCALE Leader	Enercoop (ENE)
Pilot Focus	Energy efficiency and collective purchasing schemes
Goals	<ul style="list-style-type: none"> • Create a collective citizen group to awareness about energy sobriety • Reach energy savings of 20% in the households involved • Organize collective purchasing actions



Les Économes departs from the insight that behavioural change will be key to achieve the energy transition to a more sustainable model. Although public marketing and educational campaigns can effectively raise awareness for a specific issue, most people will only change their behaviour after seeing one of their peers make this change, and being better off with it. Building on this insight, Les Économes is an ambassador program in France that supports energy communities to look into energy sobriety and collective purchasing. It aims to trigger behavioural change in the residential sector through peer-to-peer training and effective communication.

Decreasing the energy consumption is an unavoidable step for the energy transition to succeed. By relying on citizen-based peer-to-peer training, the French pilot will develop an innovative way to take up energy sobriety as a service for future energy communities. Thanks to the training provided by Enercoop, trainees become experts, ambassadors and change makers in their respective communities. This holds the potential to create a long-term domino effect.

The pilot project aims to bring citizens together and the stakes of the energy sector. By sharing information about how the energy is produced, carried through the networks and consumed, the citizens involved in the program will likely feel more concerned about their own energy consumption.

ABOUT THE COMMUNITY

The pilot is located in the Ile-de-France region, which is the most inhabited (12 million people) and densely populated region in France. The region has a great diversity in terms of territories, being the largest urban territory in France but also including an important share of rural activities. The level of incomes in the region is also very diverse, with Paris and some suburbs gathering a huge part of wealth while the average poverty rate in the area is 15.6%. There is a rising level of environmental awareness, which can be seen by the growing average percentage of votes received by the green party in France. There are approximately 10.000 members of Enercoop in the region, and the Ile-de-France growth rate of Enercoop as a renewable energy supplier in the region is the highest.

Les Économes will be located in Paris or in the suburbs closest to Paris as it would be too complicated for people living far from Paris to participate in the different events (mostly during the week in the evening). For the replication, we will have to keep in mind that the pilot has been created in a very urban and densely populated area and that the expectations about energy savings of people might be different in other parts of France.

DEVELOPMENT OF THE PROJECT

The Économes Program is based on the recruitment and involvement of approximately 20 members of Enercoop volunteering to constitute the pilot community in Ile-de-France. They will be trained by the Energy Services and the cooperation team of Enercoop to get enough knowledge about energy savings & group animation to become autonomous actors in their communities and carry out collective awareness-raising actions about energy savings.

The training will be based on new and existing tools such as the Dr Watt Training (proved efficient during the REScoop PLUS European project). Once trained, the Économes will be involved in shaping the program (with the support of the Enercoop team) to target interested audiences, create new tools and any other help needed for the benefit of the program. They also will be main contributors to the shaping of a legal entity supporting their activities.

Their goals are to raise awareness about energy savings among different audiences (private meetings, SMEs, collectives, schools) and facilitate actions by organizing collective purchasing, such as LED lighting for example. Finally, by guiding people to already existing energy services in France, they will help them get access to existing financial support in the renovation sector. Moreover, the project builds on the insight that change in individual consumption behaviour is more easily triggered by peer learning and when one can illustrate their behavioural change to target audiences.

The legal department of Enercoop has initiated the exploration of the legal status of these communities. In France, only three types of legal entities will fit the requirements of 'citizen energy community' after the Electricity Market Design Directive will be applied into national law. The recommendation for the Économes community is to create an association, as the goals of the community are not commercial and as the enrolment of the Économes is based on volunteering.

To strengthen a sense of community and collective identity, the pilot team has worked to create a visual identity for the Économes community, as well as several tools that will help them in their missions. A logo has been recently created and will be used as the logo for the association.



The training, and the tools of the Économes ambassadors are still under construction. We are seeking to make tools as playful as possible as it will help the Économes to adopt them and ease their utilization in autonomy.

CORE GROUP AND STAKEHOLDERS

The selected members will form the core groups of the Économes and will receive their training in October or November. This will be done over a weekend to have time to strengthen the links between them, and do some team building. They will gain access to additional online content to complete their training, and start awareness-raising actions at the end of 2021 or the beginning of 2022. Other stakeholders include supporting organisations for hosting events, among which Parisian café's that are clients of Enercoop as an electricity supplier (Le Hasard Ludique and Petit

Bain). The French association NégaWatt has been involved in the public gatherings to help the future Économes. NégaWatt is working on energy transition scenarios for France and led a fair amount of work on energy sobriety. Enercoop members that were present at these meetings can join the Économes community.

Members are from diverse backgrounds. Most of them are living in Paris (16) while 3 of them are coming from the suburbs, which can still represent a challenge to organize physical meeting on a more regular basis than once a month, having in mind that their commute to the meeting place may be more time-consuming. The group of Économes is gender-balanced (9 women for 10 men), aged-balance (young workers to retired people). Some of them are already “expert” on energy savings thanks to their job (1 researcher at Polytechnique on the field of “energy sobriety”, 1 project manager in renewable energy), some don’t. Some of them are already engaged in numerous associations (zero waste, sustainable development of their territory) while some don’t have any experience about citizen communities.

Their involvement in the communities has different levels:

- a core group of 5 people was created. The goal of the core group will be to frame the group, to lead different working group targeting different aspect of the community (communication, animation, legal statute, partnerships, collective purchase ...)
- each individual will be free to choose a working group that interest him/her
- each individual will have to carry on at least one awareness-raising / training time with a targeted public.

ENGAGING THE COMMUNITY

The recruitment of Enercoop members started in September 2021. We are preparing different communications to our members in Ile-de-France to inform them about our pilot. Two public gatherings were held in September (on the 15th and 24th) to engage the discussion with the interested members and get them involved in the pilot. We are currently organizing a webinar with the same information as provided in the public meeting to give a chance to people that were not available on these two dates to be part of the Économes.

While the pilot in Ile-de-France is still under construction, two workshops have already been organized with cooperatives of the Enercoop network to identify potential replication sites. In these workshops, we worked on several aspects of the community:

- What different profiles of Économes ambassadors are we expecting?
- From the integration into the community to leaving the community, what are the different steps an ambassador is going through?
- What are they expecting from Enercoop? What do they need to get into action (tools, support, confidence raiser)?
- What is the content and form of the training of the Économes? Two teams of experts (energy savings and group animation) worked together on this section.

We want to focus on the conviviality of the community. To do so, we will create a specific section on the online collaborative platform created by Enercoop for their members ("le Village"). The Économes will be able to share their experiences and discuss different questions around energy savings on their own, thus facilitating the circulation of knowledge and experience. Once a month, we are planning to gather the Économes for a special event with external experts. Finally, we are planning to organize an Économes weekend once a year that will aim to include and train new Économes into the community.

Our members already spent one evening and one weekend all together as a community; we provided them with a training on energy sobriety, energy efficiency and renovation, thanks to our experience gained for years on this subject. But they have also been trained in group management, helping the community to be more organized as a dynamic collective.

We also supported them to brainstorm about energy sobriety, their vision of ecogestures and more importantly, about the kind of animation they want to carry on to their audience. During the training weekend, the community narrowed the kind of public they want to reach: family and close friends, condominiums (to raise awareness among neighbours and try to engage renovation works if needed), schools, and other energy communities based on Île de France (mostly producing

renewable energy thanks to PV) to diversify the fields of citizen action on the energy transition.

The Economies are working towards becoming part of the citizen's network of local action on energy. They also planned to create at least one game about energy savings, in order to have an educational, fun and collective approach on the subject, establishing a baseline of initial awareness on which the project can build. This game is inspired by a famous French card game called "Mille Bornes" and stimulates participants to think about individual and collective energy sobriety, their forms, their limits and the importance of a regulatory framework facilitating changes.

Besides the creation of energy savings animation and training, the Economies have also decided to study and to set up a new innovative service for the audience of their awareness-raising actions: a collective purchase of electronic equipments. By adding this service to their field of actions, they will go further in raising awareness of the ecological transition by also facilitating the transition to action. A dedicated working group has been created with Economies members to tackle the question and we will especially support this group to study and design this service. The idea is to give good prices to some equipments and to make it easier to acquire them: multi-socket to cut off consumption of standby equipment, efficient equipment, low consumption light bulb. The collective purchase will make these equipments more affordable for the audience.

Starting in February, they will start organizing event by themselves, and participating in event that they find interesting. Their goal is to help raise awareness on energy sobriety and how we, as citizens, can be actors of the energy transition by reducing our consumptions and have more sustainable lifestyle.

In contrast to citizen-oriented program about energy savings created by companies or professional entities, considered as "experts", the essence of les Economies is entirely imagined and created by the Economies for peer citizens, companies or schools. It makes a big difference because it helps to focus on peer-to-peer learning and to leave behind the "expert position" often found when dealing with these subjects and leading to less energy savings and behaviour changes. The

Économes have, by themselves, often recalled that their status of citizens must always be at the heart of their thinking and that considering themselves as experts will mostly be detrimental for their actions. The Économes also helps citizens to get more involved about energy savings as they will not only participate to a program but they will create it.

CHALLENGES

The challenges will be of two kind at least :

- keep the 19 members community engaged through time, help them keep their energy and become a structured and organized group, that can live by itself without our support
- with the covid situation persisting, considering our community is based on peer-to-peer, human interaction, dialogue, we might face challenge organizing event in real life, and mobilize targeted audience as we should.

METHODOLOGY

All tools that will be developed for training and awareness-raising actions will be made in co-creation with the Économes communities. The project will engage citizens by:

- Asking key questions about motivation to help them to view themselves in the role and grow their commitment
- Fast forward to practical activities to take advantage of the commitment
- A weekend of training
- Privileged location in the Village (an online platform for members of Enercoop) on which they will be able to communicate and exchange infos
- Engaging members on the long term, by committing them to train new Économes and finding new ground for energy savings activities



4. First public gathering of Les Économes


NEXT STEPS

Organize trainings for the Économes.

Build tools and activities to be used by the Économes during their awareness-raising actions by targeting precisely the kind of actors we will involve

Create exchange space and a group dynamic within the Économes.

PILOT 5 – LICHT LEUVEN

		
Location	Leuven, Belgium	
SCCALE Leader	Ecopower and City of Leuven	
Pilot Focus	PV production and sustainable heating	
Goals	<ul style="list-style-type: none">● Involving 250 citizens in an energy community● 50 household investments in 3 kWp photovoltaics (or equivalent isolation)● 350 kWp large photovoltaics● Heat network for 40 households (heat pump on river water)● Energy sobriety program	

In the coming years, the City of Leuven and Ecopower will bring together 250 to 500 people in the already established energy community LICHT Leuven. 'LICHT' is an acronym for Local Initiative for a Cooperative and Renewable Transition. The LICHT Leuven pilot project unites people in Leuven who are taking steps together in the areas of energy efficiency and renewable energy. Collective investments are also being made within the framework of this energy community. It is all part of the SCCALE project. The actions in the project are described so that they can also be used in other energy communities.

In Leuven, the municipality and Ecopower will cooperate to develop a support organization aiming at:

1. installing 10 non-residential PV-installations (of 350 kWp in total)
2. installing 50 residential PV-installations of 3 kWp in average (or an alternative investment in roof insulation or energy-efficient devices),
3. connecting 40 households to a district heating network
4. starting an energy sobriety ambassador program and
5. actively involving 250 people during the process

ABOUT THE COMMUNITY

The pilot is located in Leuven, a city of 100.000 people (and 60.000 students) in the (Dutch speaking) Flemish region in Belgium. The city is known for its university, has a thriving knowledge economy, and is popular among expats. The average household income is high, but the city is not free of (hidden) poverty. It is currently governed by a progressive board with high social, housing and climate ambitions. The cooperative Ecopower has 2.000 members in Leuven.

DEVELOPMENT OF THE PROJECT

A plan of action has been developed, but refinement and follow-up will be needed. To connect to the Leuven households, the city is preparing a tender to develop and test technical scans to convince and support people to install PV and energy-efficient heating systems and to increase the self-consumption of their solar power through smart energy management, changing habits and storage systems. The concept of the scans and info sessions have been developed, and linked with each other.

The city is preparing another tender to supply an energy monitoring system for all citizens, making it possible to monitor and analyse their own energy consumption, and compare it with other comparable households. The tender documents are almost finished. They will be launched in October 2021. The execution of the tenders will start in November or December.

For the “Dijlemolens”, much of the financial plan will depend on the permit for a water mill and the usage of an existing electricity cabin. If profitable, Ecopower will invest, while recruiting new members to invest in Ecopower. A Flemish subsidy for the project has been commissioned.

CORE GROUP AND STAKEHOLDERS

A coalition between the City of Leuven, Ecopower and Leuven 2030 has already been formed under the name “LICHT Leuven”. The partners are investigating closer cooperation with energy cooperative ECoOB and the non-profit organization Minder = Meer.

ENGAGING THE COMMUNITY

Communication activities around the 10 sessions that have been planned so far. The start of those sessions be held September 2021. These sessions will be organized around diverse topics, including photovoltaics, heat pumps and saving energy. In October Ecopower, ECoOB and the City of Leuven will organize an info session about larger investments in photovoltaics. All these sessions will be linked to the SCCALE project. Participants will have the possibility to sign up for LICHT Leuven. In the coming years, the city and Ecopower will organise further information events linked to the SCCALE project. In addition to the capacities already dedicated to the project within Ecopower, a vacancy for a community manager has been launched.

For the Dijlemolens:

- The users of the energy all live in the same building, which is a great starting point. Through physical meetings, the project will focus on social cohesion between the inhabitants. Community building potential can profit from shared interests linked to the fact that they live in the same building and therefore have a less diverse living situation.
- The combination of energy focused activities in a broader social context where neighbours get to know each other is an added value for community building. Besides the ownership component, a challenge on energy savings can create an additional engagement entry.
- The particular living situation might bring specific topics of shared interest to the table. This might be literally 'to the table' since there is a restaurant located in the building.

For the households with individual PV-units:

- We will aim to set up an energy monitoring system including challenges and individual and collective goals. This type of 'gamification' creates engagement and links the individuals to each other.
- Besides this digital component, we will also invite the individual households to participate in an event where we highlight the collective achievements (e.g. on energy savings, auto consumption, ...) and reward individual winners.
- To activate participants, we will provide a format (potentially online but ideally also offline) where they can share advice and experiences of energy efficiency.

- We will potentially create subgroups of people living more close to each other on neighbourhood or street level.

Through communication with a local focus, the project aims to reach new citizens to become members of the energy community and thus co-owner of collective PV-projects and of the Dijlemolens collective heating project. Although it's not appropriate to push or oblige anyone to become a cooperative member, a tangible energy project in their own building can be a great incentive.

Bringing these people together will happen in different ways:

- In the first phase, the city of Leuven started with 10 information moments related to energy. Anyone can sign up to participate.
- Additional information moments afterwards. For example, every time a collective investment is made.
- All existing cooperative members of Ecopower in Leuven will be invited to join the energy group. Also people with whom we had contact before in Leuven will be asked to join the group.
- Energy scans will be performed in many houses in Leuven. These people will also receive an offer of possibilities from the energy community. Of course, they can also join the energy community.
- If the small district heating network is successful, all residents will be able to participate in the energy community.

CHALLENGES

There are a series of challenges for the pilot:

- In times of corona, it is difficult to bring people together. The first experiences are that people who live close to each other are very difficult to get into digital meetings. It is precisely the informal interaction and the social aspects of an energy group – with a snack and a drink – that attracts people.
- The offer to people must be sufficiently appealing. Initial tests show that people who have not yet taken action are very difficult to bring to the next steps. The offer or action must be very clear, concrete and financially attractive. One goal of the project is to find the right persuasion mechanisms.

- The aim is not just to reach people who do not need this project for further action. With the simultaneously individual and collective approach, we want to appeal to other people.

FINANCE

No investment has yet been made with individual people. However, a first collective investment has been made. It concerns a solar installation on the public roof of the Leuven police. Experience has shown that collective installations can be very useful as a way of attracting people.

METHODOLOGY

By first developing a support organization, we create a vehicle to drive change on a diverse set of issues. All building blocks to involve a large group of citizens in the project are being put in place mainly through tendering.



5. LICHT Leuven engages the city's citizens both young and old

NEXT STEPS

- Start a series of info moments, gathering contacts for the energy community.
- Launch a tender for energy scans.
- Launch a tender for energy monitoring.
- Create business models to be used for energy scans and the heat network.

SCCALE 203050

Sustainable Collective Citizen Action for a Local Europe (SCCALE) 20-30-50 intends to bring Europe closer to its citizens by fostering the creation of energy communities, taking full advantage of the favorable EU legal framework on citizen energy.

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