European Commission

Support Service for Citizen-led renovation projects - Phase II

Grunneger Power

1. Descriptive Analysis

1.1. Inspiring cases author and organisation

This inspiring case draft was prepared by Orestis Kouloulas from Th!nk E for the Citizen-Led Renovation (CLR) project (Phase II Support Service). The information presented in this document was provided by representatives of Grunneger Power, who kindly shared their experience and insights. We would like to sincerely thank them for their valuable contribution.

1.2 Name of CLR initiative and geographical scope

Grunneger Power is a citizen energy cooperative active in the municipality of Groningen (Northern Netherlands). In recent years, the cooperative has grown into one of the largest citizen energy cooperatives in the Netherlands, with over 3,300 members.

Its relevance for Citizen-Led Renovation lies in the way it combines citizen ownership with strong neighbourhood engagement and practical support that enables residents to take action on energy improvements and renovation-related measures. Grunneger Power supports neighbourhood initiatives through energy advice and coaching, and it also plays a citizen-facing role in Groningen's heating transition alongside the municipality and the public heat company WarmteStad.

1 Aerial photo of the Groningen area

1.3. Citizen-led renovation focus, services and technologies

Grunneger Power's approach combines several mutually reinforcing pillars that are directly relevant to citizen-led renovation and broader built-environment transition pathways:

- Citizen ownership through locally owned renewable generation.

A cornerstone of Grunneger Power's model is developing renewable energy projects that are fully in local hands, financed through citizen participation and structured so that benefits return to residents. A flagship example is Zonnepark Vierverlaten, which Grunneger Power describes as one of the largest cooperative solar parks in the Netherlands, with 7,777 solar panels and 100% ownership by residents, developed together with the Municipality of Groningen and Equans. The park supplies electricity to around 800 households. In addition, the cooperative is currently exploring the possibility of integrating a battery at the solar park.

A second key example is Zonnepark Meerdorpen, located at the edge of the wider Roodehaan solar field. Grunneger Power states that the park is fully owned by local residents and consists of around 2,250 solar panels. The cooperative also reports that nearly 100 residents invested via crowdfunding and that the park can supply the equivalent of electricity use for around 250 households.

- Rooftop projects that lower the barrier to participation.

In addition to solar parks, Grunneger Power has established Grunneger Power Opgewekt, a model for shared local solar rooftops ("zonnedaken") that enables participation for residents who do not have a suitable roof themselves. On each participating roof, around 100–200 solar panels are installed. Neighbourhood residents can participate from €1 and are involved in decision-making within the cooperative structure. Installation, operation and maintenance remain the responsibility of the cooperative, thereby avoiding technical and administrative burdens for participants. This approach increases the use of available rooftop space and enables residents to actively contribute to sustainable initiatives within their neighbourhood.

- Heating transition: citizen engagement in a public district heating network.

A distinctive element of Grunneger Power's work is its role in Groningen's heating transition. WarmteStad—the city's public district heating company—was founded in 2014 by the Municipality of Groningen and Waterbedrijf Groningen and operates a heat network in the northwest of Groningen, including neighbourhoods such as Paddepoel, Selwerd, Vinkhuizen, Kostverloren and Zernike. In this context, Grunneger Power acts as a citizen-facing intermediary, supporting owner-occupiers and private renters and strengthening residents' position in the transition by organising a residents' collective that continues to have a say in the public heat company after connection. In 2022, the first 14 owner-occupied homes were connected to the public heat network. In Selwerd-Zuid, more than 120 of the 200 homeowners signed an intention statement (over 60%), allowing the process to move forward to home assessments. In the current phase, approximately 150 additional owner-occupied homes are expected to be connected to the public heat network, with continued involvement and influence of residents.

- Neighbourhood support that links directly to renovation measures (energy advice, coaching, and “start with insulation”).

Grunneger Power provides practical neighbourhood-level support that helps residents take concrete steps on energy savings and renovation-related measures. Residents can request a home visit from a volunteer energy coach who is familiar with the neighbourhood and provides tailored guidance on suitable measures for the home. Grunneger Power also helps residents navigate relevant subsidies and schemes and uses an online dossier as a central place for follow-up, agreements, tips and documents.

In parallel, the cooperative runs Samen Besparen, which stimulates and supports residents across several Groningen neighbourhoods and villages to implement larger measures “such as insulation, a green roof or solar panels,” and connects residents to local initiatives and partners that help them move from intention to action.

Grunneger Power promotes insulation as a key first step and provides accessible guidance on common measures (e.g., floor, roof and cavity wall insulation, as well as HR++ glazing). The cooperative also points residents to relevant subsidy routes, including ISDE for homeowners and SEEH for owners’ associations (VvEs).

- Innovation: Local4Local and smart local energy systems.

Grunneger Power also positions itself as an innovation actor, notably through Local4Local and Joule4Joule, working towards a smarter local energy system that better aligns local supply and demand while keeping value within the community. In practice, the cooperative has monitored the electricity consumption of around 50 members using a dongle installed in the meter cupboard, connected to an online platform.

In February 2025, Grunneger Power launched its first “energy community” pilot, involving nearly 60 members. In parallel, a monitoring pilot is running as part of the Horizon Europe COMMUNITAS and RVO-MOOI Local4Local research projects, in which this group is administratively linked to the cooperative’s solar park. The aim is to increase awareness of the availability of locally generated solar electricity and to encourage consumption at times when solar production is highest, thereby improving the simultaneity within the energy community and optimising the use of locally generated energy.

1.4 Objectives, motivation, and establishment process

Grunneger Power presents itself as a cooperative built around the idea that the energy transition should be organised locally and fairly, with residents maintaining influence and ownership over projects in their area.

An important enabling factor in the establishment and growth of the cooperative was municipal support. In 2012, the Municipality of Groningen stated its intention to provide a subordinated loan of €200,000 to support the creation of a local sustainable energy company and the reinvestment of profits into local sustainability. This energy company is structured without shareholders, instead operating with members in the form of umbrella organisations and cooperatives. Over time, it has developed into a northern cooperative energy company through which energy cooperatives can supply

electricity. Members have direct influence through membership, and revenues flow back to the members—and thus to the region—rather than to external shareholders.

1.5 Key actors and stakeholders

Grunneger Power is a member-based energy cooperative. The General Assembly (ALV) is the central decision-making body, while the board is responsible for governance. Volunteers play an important role, particularly as energy coaches and through member committees. The organisation has approximately 15 full-time equivalent (FTE) staff.

From 2026 onwards, the operational organisations of Grunneger Power and the Groninger Energy Federation will merge into a working cooperative. This will create a strong provincial knowledge and service organisation capable of supporting the entire region. The two associations—Grunneger Power and the Groninger Energy Federation—will continue to exist separately, each with their own members.

External partners include, among others, the Municipality of Groningen, the Natuur- en Milieufederatie Groningen, Energie Samen, TNO, educational institutions, housing cooperatives, and WarmteStad.

1.6 Objectives, motivation and establishment process

Grunneger Power is organised as a cooperative association (U.A.) with a member-led governance structure consisting of a General Members' Meeting (ALV) and a board. The board sets policy at a strategic level and holds final responsibility for key elements such as the budget and investments, while the ALV approves these main policy directions.

The newly established working cooperative has approximately 20 full-time equivalent (FTE) staff and is supported by an active pool of volunteers. The solar parks Vierverlaten and Meerdorpen are organised as two separate limited liability companies (BV's).

1.7 Financing

Grunneger Power combines project-based financing with public support. At project level, this includes local investments and crowdfunding, as illustrated by projects such as Zonnepark Meerdorpen.

In addition, the cooperative receives both basic and project-based funding from the Municipality of Groningen. This support includes activities such as initiative development, support for the implementation of the district heating network rollout, and the organisation of a regional coordination platform ("Regiotafel"), where sustainable energy initiatives and cooperatives in the municipality collaborate closely, for example in developing neighbourhood-based approaches and contributing to local policy discussions.

Grunneger Power also benefits from provincial subsidies, including the multi-year Programme Energy Participation. Furthermore, the cooperative is involved in national and European innovation projects, including those supported through Energie Samen and Horizon programmes.

1.8 Customer journey

Residents typically engage with Grunneger Power through several low-threshold entry routes, depending on their needs and readiness to act. A common household-oriented pathway is the energy coach service: residents can request a home visit from a volunteer coach who provides tailored guidance on energy-saving measures and points to relevant subsidies and schemes. Follow-up is supported through an online (Hoom) dossier used as a central place for agreements, tips and documents.

Residents can also be reached through neighbourhood mobilisation via local activities and projects, including programmes such as Samen Besparen, which stimulate and support households to implement larger measures such as insulation, green roofs or solar panels, and connect residents to local initiatives and partners.

In neighbourhoods where the district heating network is being developed, Grunneger Power provides trajectory support and neighbourhood-specific information to guide residents through the process. In Selwerd-Zuid, more than 120 of the 200 homeowners returned an intention statement (over 60%), after which the next step was planning home assessments (“woningopname”).

Residents can also participate through innovation pilots such as Local4Local, where electricity consumption is monitored (e.g. via a dongle in the meter cupboard) to generate insights into usage patterns and support the development of local energy solutions.

Finally, residents may engage through an energy supply contract with the cooperative energy provider Energie VanOns, combined with membership of the cooperative, providing an additional entry point into participation in the local energy system.

2. Impact Analysis

2.1 Environmental, economic, and social benefits

Environmental impact

Grunneger Power contributes to decarbonisation through locally generated renewable energy and the development of sustainable heating solutions. Its solar parks include 7,777 panels at Zonnepark Vierverlaten and approximately 2,250 panels at Zonnepark Meerdorpen. In parallel, the district heating network is replacing natural gas in, among others, neighbourhoods with housing from the 1960s and 1970s.

In addition, thousands of residents have implemented insulation measures in their homes through the Samen Besparen programme. In the coming years, many more households are expected to follow, as all residents of Groningen are entitled to financial support under the “Nij Begun” programme, linked to compensation for past gas extraction. This programme provides subsidies of up to €40,000 for home insulation. The cooperative supports residents in accessing these measures by organising information sessions and implementing neighbourhood- and village-based participation approaches.

2 Zonnepark Vierverlaten

Economic impact

Economic value is retained locally through resident ownership. Revenues generated from energy projects flow back to participating members, reinforcing the local economic cycle and ensuring that benefits remain within the community.

In addition, the municipal subordinated loan provided by the Municipality of Groningen supported the development of the cooperative and contributed to local economic development. This public support helped strengthen the cooperative's capacity to implement projects while maintaining local ownership and value creation.

Social impact and inclusion

Grunneger Power's social impact is reflected in the multiple ways residents can participate in the energy transition. Participation takes place through membership, energy supply contracts, local co-investment in renewable projects (including crowdfunding), involvement in cooperative solar rooftop initiatives, and engagement in innovation pilots. These entry points provide residents with accessible and diverse opportunities to become actively involved.

In addition, the cooperative invests in the "soft infrastructure" of the transition. This includes energy coaching, neighbourhood-based programmes, and active involvement in the heating transition, all of which support residents in understanding, engaging with, and acting on energy-related decisions.

A concrete example of this participation is observed in Selwerd-Zuid, where more than 60% of homeowners submitted an intention statement in the context of the district heating transition. This illustrates the cooperative's role in enabling collective engagement and supporting residents throughout the transition process.

3. Highlights of drivers and success factors

3.1 Contextual, financial, and organisational factors

A key driver is scale combined with local legitimacy. Grunneger Power has been active since 2011 and has grown to over 3,500 members. This long-standing presence and strong membership base contribute to its credibility and enable sustained engagement with residents across the municipality.

Another important factor is the combination of technical and social knowledge related to the energy transition. Grunneger Power brings together expertise on both the technological aspects of energy systems and the social processes required to engage residents and support collective action.

The cooperative is locally embedded, independent, and democratically organised, which helps build trust among residents. This positioning enables Grunneger Power to act as a reliable and accepted actor in neighbourhoods, supporting participation and engagement in energy-related initiatives.

Public enabling conditions also play a key role. Support from the Municipality of Groningen, including the provision of a subordinated loan, has strengthened citizen-led initiatives without replacing their autonomy, helping to create favourable conditions for their development.

Partnerships are structured with clear roles and responsibilities while ensuring that residents retain a voice. For example, in the heating transition, WarmteStad provides the infrastructure, while the cooperative represents and safeguards the interests of residents.

Grunneger Power also benefits from a strong and broad network, including actors from government, politics, education, other cooperatives, housing associations, environmental organisations, and the national cooperative network. This network supports knowledge exchange, collaboration, and coordinated action.

In addition, there are strong collaboration structures between cooperatives and local sustainable initiatives. These partnerships allow actors to share knowledge, influence policy, and develop scalable approaches, supported in part by funding from the Municipality of Groningen.

Another success factor is the presence of multi-year basic funding from the Municipality of Groningen, formalised through a partnership agreement. This provides stability and continuity for carrying out a range of activities.

Finally, Grunneger Power combines a household-level approach with system-level innovation. On the one hand, it supports residents directly through coaching and neighbourhood-based activities. On the other hand, it engages in innovation through initiatives such as Local4Local, linking individual action with broader energy system developments.

4. Lessons learned and practical recommendations

4.1 Lessons learned and recommendations

A key lesson is the importance of combining local ownership, neighbourhood trust, and practical support. Ensuring that residents have ownership and influence, while also building trust at the neighbourhood level and providing concrete support, creates a strong foundation for engagement and long-term participation in the energy transition.

Another important recommendation is to organise structural financing and formalise collaborations. Stable and long-term financial arrangements, combined with clearly defined partnerships, help ensure continuity, allow organisations to plan ahead, and strengthen the overall impact of citizen-led initiatives.

Building strong partnerships is also essential. By bringing together different actors, it becomes possible to share knowledge, networks, and approaches, thereby increasing collective capacity and enabling more effective and scalable solutions.

Providing low-threshold participation opportunities is a crucial factor in broadening engagement. Models such as shared solar rooftops, where residents can participate from as little as €1, make it easier for a wider group of people to become involved in local energy initiatives.

Investing in household-level support is another key lesson. Measures such as energy coaching, access to subsidies, and neighbourhood-based programmes help residents take concrete steps and translate intentions into action.

Public financing can play an important role when used as a lever. It should support and accelerate citizen-led initiatives, while ensuring that control and ownership remain with residents and are not replaced by external actors.

Combining immediate action with system-level innovation is also highlighted as a success factor. The use of smart data and the development of local energy contracts illustrate how practical measures can be linked to broader system improvements.

Finally, a balanced combination of volunteer engagement and professional capacity is essential. Volunteers contribute to local embeddedness and community connection, while professional staff provide the expertise and continuity needed to ensure innovation and long-term organisational stability.

5. Where to learn more

Further information is available on the official website of Grunneger Power, where details can be found on its mission, membership structure, and overall approach. Additional insights can be obtained from the dedicated project pages of Zonnepark Vierverlaten and Zonnepark Meerdorpen, which provide information on the development and characteristics of these solar parks. Information related to local investment and participation is also available through project communication materials on crowdfunding and the "250 households" concept. Finally, the Grunneger Power Opgewekt page provides details on shared rooftop solar projects, including the low-threshold participation model starting from €1.