



## ***NSR-project COBEN and how Stronghouse can learn from their results***

One of the points we've agreed upon in the September Partner Meeting in 2020, is to share results from other EU funded projects and where relevant reach out to ongoing EU funded projects. One of the EU funded projects is the NSR-project COBEN (<https://northsearegion.eu/coben#>), which started in 2017, and is a project co-funded by the NSR Programme 2014 - 2022. COBEN is just like Stronghouse a priority 2-project: *"Eco-innovation: Stimulating the green economy"*.

### **Description NSR-project COBEN**

*COBEN focusses on civic society as the key driver of the transition to renewables-based energy. The project aims to support a shift of energy value chains from centralized utilities to community-owned renewable energy enterprises that provide tangible economic, environmental and social benefits to enrolled citizens. Such benefits include profit sharing, rebates, investment in social services, community infrastructure and climate protection. A systematic process management approach involving local energy operations, innovation centres, municipalities, SME clusters and cooperatives not only mobilizes local energy potentials in representative NSR communities, but also demonstrates to later adopters how to make civic energy work. COBEN is about developing new energy projects in communities and developing tools and process approach to mainstreaming civic energy.*

*COBEN aim to make sustainable growth happen and is driven by seven clear objectives:*

- Promote the uptake of civic energy as the main player of energy transition
- Mobilize local energy potential in pioneering North Sea communities
- Shift energy value chains from centralized structures to communities
- Pilot the development of civic energy enterprises
- Deliver real benefits to citizens from civic energy enterprises and partnerships
- Make civic energy blueprints available for other communities to adopt
- Support transnational cooperation on local energy promotion

### **Description NSR-project Stronghouse**

*Energy renovation by individual homeowners is lagging. The impact of current support measures for the homeowners is limited, because these measures are fractured and insufficiently based on the concerns of individual homeowners. Stronghouse will adjust and redesign these measures based on a better understanding of the drivers that motivate homeowners - individually and on a neighbourhood level - to invest and reduce the environmental footprint of their homes. Together these redesigned measures support homeowners in their journey from initial interest, to planning, financing and contracting energy renovation. Stronghouse focusses first on analysing existing instruments on their impact.*

*Stronghouse focusses on four support measures:*

1. Instruments and tools that enable individual homeowners to invest in energy efficiency and renewable energies
2. Neighbourhood-approach to organize the necessary scale and drivers to invest
3. Market access for regional SMEs specialized in energy renovation for individual homeowners
4. Adoption strategies for implementing these instruments, approach and market access

## How Stronghouse can learn from the results of COBEN

*Stronghouse* wants to (re)design measures to motivate and facilitate homeowners – individually and on a neighbourhood level – to invest in energy renovation/retrofitting their homes. To invest and reduce the environmental footprint of 15.000 homes – and achieve a CO<sub>2</sub> reduction of at least 25 kiloton – Stronghouse wants to support homeowners in their (customer) journey from initial interest, to planning, financing and contracting energy renovation. Main goal is to reduce CO<sub>2</sub> but creating savings on energy bills is more motivating for homeowners to invest.

*COBEN* is about motivating and facilitating individual citizens to register with a local energy cooperative. It is a way to create a civic society as the key driver of the transition to renewables-based energy. COBEN is not a project to motivate and facilitate homeowners to invest in energy renovation/retrofitting their homes but to developed instruments and tools that enable individual homeowners to invest in solar energy. COBEN made it clear, that it is possible for individual homeowners generating community benefits from large scale solar parks. By formulating a clear goal – 20% or 50% citizens ownership of solar installations – it will make it easier to organize the necessary scale and drivers to invest.

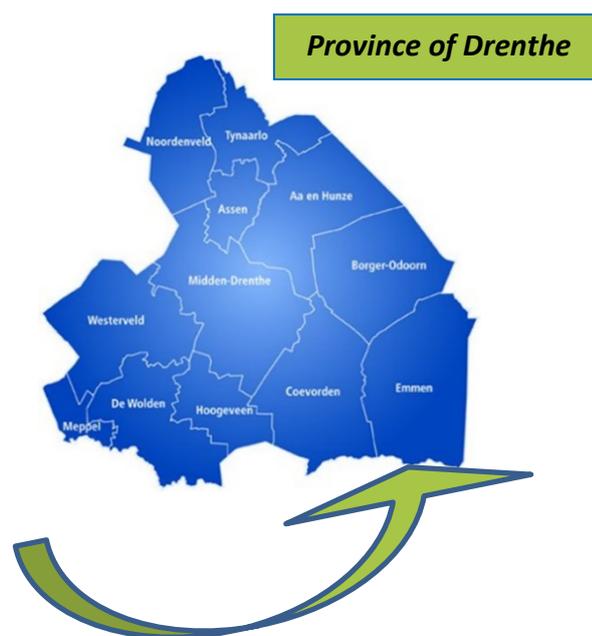
### COBEN – instruments and tools:

COBEN developed the *Civic Energy Cycle*, a **roadmap and process approach** that makes it easier for local initiatives to structure their mobilization and planning efforts more effectively. It's a first **key step to professionalizing civic energy**. For example: in the municipality of Emmen (Province of Drenthe) they started in 2018 with three pilot projects:

1. Set-up of a Collective Development Team to provide all needed expertise for the implementation of renewable energy projects
2. Start-up support to three solar energy cooperatives provided by the newly established service desk Locally Generated Emmen
3. Adoption of a spatial plan for large-scale solar energy by Emmen City Council

In 2020 Locally Generated Emmen has been established as a **support structure for local energy communities**, through which the expertise and manpower needed to get civic energy projects off the ground is organized and is focused on **generating community benefits from large scale solar parks** in the municipality of Emmen. There is a lot of **enthusiasm from residents to participate** in three civic energy projects and to invest in solar panels. **Local companies make their roofs available** for installing solar panels and work together with one of the three solar energy cooperatives in Emmen.

Emmen spatial planning directive (1 July 2019) stimulates **20% citizens ownership of new solar installations**. Installation of two new solar fields installed: Zonnige Start and Nieuw-Oranjepoort are ready for production now. Both installations are run by local energy cooperatives. Trigger for residents is, that **all members of the local energy cooperatives receive a discount on the energy tax until 2033**. For residents with little financial means it's extra attractive to participate, because they pay only €10 once.



Information and an informative video (in Dutch):

<https://www.lokaalopgewektemmen.nl/initiatieven/oranjepoort/> (37 hectares, 88.000 solar panels, 28 MWp which is enough to provide 8.500 residents with green electricity)

<https://www.lokaalopgewektemmen.nl/wp-content/uploads/2019/09/Emmen-19.09-lokaal-opgewekt-best.i-48170.pdf> (roadmap)

<https://youtu.be/tPZ7WeuyAa8>

### Article “A process approach to mainstreaming civic energy”

Written by Gerard McGovern and Thomas Klenke, published: 26 October 2018

<https://northsearegion.eu/media/7116/energies-11-02914.pdf>

It's about how should you go about developing new energy projects in communities. This process approach, Local Energy Planning (Table 1 below), may help to identify and prioritise opportunities:

**Table 1.** Civic Energy Phases, Process Stages, and Sub-processes: Itemization of key civic energy assignments allocated to the process stages of Figure 1 as sub-processes within a continuous improvement framework comprising of initiate, plan, do, check, act (VPDCA) phases.

VPDCA Phase	Process Stage	Sub-Processes
Initiation (V)	Civic Energy vision and policy assimilation	<ul style="list-style-type: none"> <li>■ Pre-analytic vision and motivation</li> <li>■ Targeted energy (supply) chain scope (energy sources, generation, distribution, consumption)</li> <li>■ Geographical dimensions</li> <li>■ Preliminary steering and facilitator functions</li> <li>■ Policy alignment and recruitment of political support</li> <li>■ Stakeholder engagement strategy</li> <li>■ Mission statement</li> </ul>
	Community stakeholder consortium	<ul style="list-style-type: none"> <li>■ Stakeholder enrolment</li> <li>■ Draft of energy generation-consumption supply chain</li> <li>■ Consensus on roles in energy delivery scheme/network</li> <li>■ Consortium structure and organisational set-up</li> </ul>
	Specification of targeted benefits	<ul style="list-style-type: none"> <li>■ Stakeholder consensus on targeted benefits</li> </ul>
Planning (P)	Selection of enablers	<ul style="list-style-type: none"> <li>■ Allocation of key process enablers KPEs (structures, knowledge, processes, activities) to each benefit</li> </ul>
	Feasibility assessment	<ul style="list-style-type: none"> <li>■ Multi-criteria feasibility studies</li> <li>■ Energy supply and demand data collection</li> <li>■ Market analyses</li> <li>■ Legal provisions/regulatory arrangements</li> <li>■ Risk assessment (including barriers, trade-offs)</li> <li>■ Energy model</li> </ul>
	Business model	<ul style="list-style-type: none"> <li>■ Selection/development of appropriate business model framework</li> <li>■ Key success factors and success criteria (internal/external)</li> <li>■ Installation of management structure</li> </ul>
Roll-Out (D)	Management	<ul style="list-style-type: none"> <li>■ Operational business plan</li> <li>■ Network contracts</li> <li>■ Business plan implementation</li> <li>■ Monitoring of results</li> </ul>
	Energy services delivery	<ul style="list-style-type: none"> <li>■ Infrastructure installation</li> <li>■ Infrastructure testing and commissioning</li> <li>■ Monitoring of energy flow</li> <li>■ Administration</li> </ul>
Reflection and Adoption (C, A)	Delivery of community benefits	<ul style="list-style-type: none"> <li>■ Installation of delivery mechanisms</li> <li>■ Monitoring via critical success criteria of business model</li> </ul>
	Assessment and optimization	<ul style="list-style-type: none"> <li>■ Energy delivery assessment</li> <li>■ Stakeholder assessment of achieved benefits</li> <li>■ Assessment of management performance</li> <li>■ Business Model review and adaptation</li> <li>■ Technical, organisational and entrepreneurial corrective measures</li> </ul>
	Adoption	<ul style="list-style-type: none"> <li>■ Re-alignment of targets/enablers (internal)</li> <li>■ Revision of mission statement</li> <li>■ Transfer consultation (external)</li> </ul>

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The COBEN business models are an example for all similar initiatives and therefore **involved in the Regional Energy Strategy Drenthe** (<https://energievoordrenthe.nl>) which aims on 49% CO<sub>2</sub> reduction in 2030. Alle municipalities in the Province of Drenthe strive to **50% (!!!) citizens ownership of new solar installations** (March 2021). Some initiatives have to wait till 2026 (or later), because of grid congestion problems in some areas in Drenthe.

### **What can Stronghouse learn from COBEN?**

- Active community participation: support of a large part of the local residents is an important and essential condition for success to realize new solar installations and other renewables-based energy in a neighbourhood.
- Formulate a clear goal: which will stimulate citizens ownership of new solar installations and other renewables-based energy in a neighbourhood.
- Apply a low entry rate: for residents with little financial means it's extra attractive to participate.
- Generate community benefits from large scale solar parks so the community is possible to invest in the quality of their own living environment (by formation of an area fund).
- A Local Energy Planning/phased approach: will help to identify and prioritise opportunities in new energy projects in a community/neighbourhood.
- Start local to convince your region: the COBEN-project in the municipality of Emmen was such a success, that the Province of Drenthe involved the COBEN business models in the Regional Energy Strategy Drenthe. The overall goal is increased to 50% citizens ownership of new solar installations.
- Involve local companies and stimulate them to make their roofs available for installing solar panels.

### **Extra: an example from Scotland:**

*The CARES Conference 2019 at Perth Racecourse, 8th - 9th May 2019 was about how to explore all things local and community energy and find out how you can get involved in Scotland's low carbon energy transition.*

A video: [https://youtu.be/NMUrIJFZ\\_MQ](https://youtu.be/NMUrIJFZ_MQ)