

Model 25

COOPERATIVE CASE - ECOPOWER

Eeklo, Asse, Beersel – Belgium

| OWNERSHIP | PRIVATE |
|------------------------------|--|
| Program authority | Municipality of Eeklo, Asse & Beersel (Belgium) |
| Program Delivery unit | Ecopower cvba, a Belgian renewable energy cooperative |
| Implementation Model | Other <ul style="list-style-type: none">• Production of renewable energy• Supply of renewable energy to local citizens• Energy efficiency (public and private retrofits)• Execution of Sustainable Energy Actions Plans - CoM |
| Operating Services | Financing |
| Projects Financed | Renewable Energy; Energy efficiency (public retrofits); Other (energy efficiency - private retrofits) |
| Ambition/targets | Up to 50% reduction of energy consumption |
| Beneficiaries | Residential sector & Public sector |
| Funding Vehicle | Private (Ecopower is a Belgian REScoop with over 48,000 local members) |
| Financial Instruments | Private equity – Ecopower issues shares and allows local citizens to invest in RES and EE at the local level. |

Summary

Ecopower cvba is a Belgian renewable energy sources cooperative (REScoop) with 48,000 members. The cooperative issues shares and invests in renewable energy production installations such as wind turbines and solar PV. All citizens are eligible to join the cooperative: after purchasing a share they become a co-owner of the installations and thus share in the profits. Members are also given the opportunity to buy green electricity from local sources at a fair price. Ecopower now reaches out for local municipalities that have signed the Covenant of Mayors (CoM) but face difficulties in writing their Sustainable Energy Action Plans (SEAP). Moreover, Ecopower uses the revenues of wind projects in Eeklo, Asse and Beersel to pay the monthly wage of a (part-time) SEAP expert who works on behalf of the local municipality to initiate RES and EE projects at the local level.

How does it work?

How do REScoops collaborate with local municipalities on EE ?

REScoop is short for renewable energy cooperative and refers to a business model where citizens jointly own and participate in renewable energy or energy efficiency projects. We also refer to REScoops as community power or community energy initiatives. REScoops and local municipalities typically serve the same stakeholder: citizens. REScoops do not necessarily have the legal statute of a cooperative, but rather distinguish themselves by the way they do business. They typically respect 7 principles that have been duly outlined by the International Cooperative Alliance:

1. Voluntary and Open Membership
2. Democratic Member Control
3. Economic Participation through Direct Ownership
4. Autonomy and Independence

5. Education, Training and Information
6. Cooperation among Cooperatives
7. Concern for Community

All citizens are eligible to join a REScoop. After purchasing a cooperative share and becoming a member or co-owner of local RES and EE projects, members share in the profits and often are given the opportunity to buy the electricity at a fair price. In addition, Members can actively participate in the cooperative: they can decide in what and where the REScoop should invest, and are consulted when setting the energy price.

REScoops are leading the energy transition to energy democracy, and make it possible for citizens to actively participate in renewable energy and energy efficiency projects. The REScoop model has many advantages for both the climate, citizens and local authorities:

REScoops foster social acceptance for renewable energy

Local opposition to renewable energy projects (typically wind turbines) decreases when citizens are given the opportunity to invest in and co-own the production installations in their neighbourhood. This is especially true when local citizens are involved from the very start of the project. Stakeholder involvement and direct citizen participation foster social acceptance for renewable energy. Local citizens do not only share in the profits, they also have access to clean energy at a fair price.

REScoops keep the individual investment affordable

Not everyone has a roof suitable for solar panels, nor does everyone have the financial capacity to make such a considerable investment. REScoop production installations are typically owned by a large group of citizens, keeping the individual investment affordable.

REScoops benefit the local community

REScoops have a clear concern for the community. They usually share part of the profits with their members and use the rest to develop new projects or benefit the local community as a whole. Some REScoops for example have financed the construction of a local sustainable concert hall, while others constructed a charging point for electric bicycles. Thus, all citizens benefit from the projects and the profits that they generate.

REScoops keep money in the local economy

REScoops use local energy sources and include local citizens. Thus they keep money within the local community that would otherwise be lost. In addition, REScoops stimulate local employment and boost the local economy.

REScoops take action on energy efficiency

The revenues that result from renewable energy projects are often used to finance energy efficiency measures in public buildings. Some REScoops have paid for insulation material for public buildings, while others have constructed a sustainable concert hall.

- Odenwald (Germany) - The renewable energy cooperative was set up by local citizens in 2009 with the support of the local municipality. The REScoop now raised 10 million euro and invested 36 million euro in renewable energy and energy efficiency projects. The green electricity is supplied to about 3.000 members. Part of the profit was used to finance the construction of a new kinder garden and a local house of energy. The latter is a passive building where local citizens get information on how to improve the overall energy efficiency in their public buildings.
- Villers-le-Bouillet (Wallonia, Belgium) - The local municipality supported the start-up of a local REScoop that now develops renewable energy and energy efficiency projects.
- Ghent (Flanders, Belgium) - The municipality actively supported the setup of Energent, a Belgian renewable energy cooperative. The local REScoop is developing renewable energy and energy efficiency projects in the local area. Similar to Ecopower, Energent is initiating energy

efficiency measures in the private houses of their members. The cooperative coordinates the whole process from start to end and the measures are financed by the members.

- Saerbeck (Germany) - The local municipality of supported the setup of a local REScoop in the community. Through the cooperative, the municipality and its citizens have financed a local energy park and benefit in the form of energy security, stable prices and financial participation. The energy network is run by the municipality that also manages its own wind park.
- Moulins du Haut Pays is a Belgian REScoop that was set up to erect 2 large wind turbines in Dour (Belgium). About 75% of the shares are in hands of local citizens, people who live close to the project. The local municipality of Dour owns the remaining 25% of the shares. This implies that 25% of the profits can be used by the local municipality to finance energy efficiency measures in public buildings.
- Pajopower (Belgium) reaches out for both local citizens and local municipalities and helps them to improve the energy efficiency of their private houses and public buildings. For citizens they have set up an EE facilitation service, for public buildings they are using the energy performance contracting model. Pajopower is now working on a project that replaces public street lights by LED.

How does Ecopower collaborate with local municipalities on EE?

Ecopower was founded back in 1992 as a Belgian cooperative with three main objectives.

1. To invest in renewable energy production installations

Ecopower gathers financial resources from local citizens (members) and uses these funds to invest in renewable energy projects. In an ideal scenario the decisions about these investments and the cooperative involve as many people as possible. Not only because they have a financial stake in the cooperative, but also because they have a personal interest in the development of a sustainable future. Members can buy one or more shares but there is a limit of 20 shares per person. One share costs 250 euro and is fixed for a period of 6 years. That's because they want to avoid sudden fluctuations in their capital. The cooperative is democratically owned so that each member has one vote in the general assembly, regardless of the number of shares he/she owns. Since Ecopower is a registered cooperative under Belgian law, it is obligated to limit the annual dividend to a maximum of 6% per share. The financial surplus can then be used to finance less profitable projects. Today Ecopower now owns 20 wind turbines (Eeklo, Gent, Gistel, Doornik/Dour, Waimes, Mesnil, Essen-Kalmthout, Asse), 3 hydro power installations (Overijse, Rotselaar, Schoonhoven), 1 cogeneration installation (Eeklo) and 322 decentralised PV installation on roof tops of local schools and private houses. These installations produce about 73 million kWh per year. In 2014 Ecopower also constructed a factory that produces wood pellets for residential heating. This production facility has a production capacity of 40.000 tonnes/year.

2. To supply clean energy from local renewable sources to the members

In 2003 Ecopower obtained a license to supply energy in Flanders, the Dutch speaking region of Belgium. Members thus have the opportunity to buy clean energy from their jointly owned production installations and use it in their private houses. The same applies to the wood pellets. Ecopower does not make a profit on these activities. The electricity is sold at cost price. In 2015 Ecopower supplied 94 million kWh to 41.000 customers.

3. To promote energy efficiency and REScoop business model

Ecopower promotes energy efficiency and strongly believes that the greenest kWh is the one that can be saved. If members use energy in a more efficient and rational way, it simply allows the cooperative to serve more citizens with the same amount of energy. Ecopower recently noticed that the average consumption of their members is decreasing year after year. Over the past 8 years the average consumption went down with about 40%. Other European REScoops have found a similar trend. In REScoop Plus - a Horizon 2020 project (Grant Agreement 696084 under

H2020-EE-2015-3 Market Uptake) – the REScoops are now analysing this trend with support from two universities.

Ecopower is now reaching out for local municipalities in Flanders (Belgium). Many local authorities have signed the Covenant of Mayors (CoM) and are currently writing their Sustainable Energy Action Plans (SEAP). However, lack of expertise, time and resources often make it hard for them to initiate real RES or EE projects in their local communities. Ecopower therefore offers help to keep the energy transition in the hands of the local citizens. In Eeklo, Asse and Beersel – three municipalities in the Flemish region – this approach resulted in successful collaborations with the municipality. Ecopower insisted on bringing a wide range of stakeholders (e.g., citizens, environmental organisations, advisory committees, the local municipality council, etc.) to the table to design the local SEAP. Cooperative wind turbines that allow direct participation by local citizens have been included therein. All citizens are eligible to join Ecopower by means of purchasing one or more cooperative shares. This way they co-own the projects and share in the profits. Ecopower also uses part of the revenues to pay the wages of a (part-time) SEAP expert. He or she works on behalf of the local municipality to initiate other RES projects or EE measures in public buildings and private houses.

The programme delivery unit

The programme delivery unit is Ecopower cvba. The cooperative issues shares and allows local citizens to participate in the RES projects. They share in the profits and can use clean energy from local sources in their private houses. The revenues of the RES projects are then used to pay the wage of a (part-time) energy expert who works on behalf of the local municipality to initiate other RES projects or EE measures in public buildings.

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| Legal structure | Renewable Energy Cooperative (REScoop) – Ecopower cvba |
| Shareholder description | Local citizens directly own the RES projects |
| Equity | Equity is owned by local citizens |
| Shareholders | Local citizens |
| Program dedicated staff | N/A |
| Program operational costs | N/A |

Organization and partnerships

Ecopower - www.ecopower.be
 REScoop.eu - www.rescoop.eu
 REScoop.Vlaanderen - www.rescoopv.be
 Municipality of Asse – www.asse.be
 Municipality of Eeklo – www.eeklo.be
 Municipality of Beersel – www.beersel.be

Beneficiaries

| | |
|----------------------------|--|
| Beneficiaries | Multiple societal stakeholders: citizens, local authorities, Ecopower, land owners |
| Type of projects | Renewable Energy Energy Efficiency |
| Operational support | Project Management and planning through the project delivery unit |
| Financial support | Unknown |

Funding mechanism

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|--------------------------------------|---|
| Program delivery unit funding | Ecopower cvba |
| Projects Funding | RES projects finance potential EE measures. |
| Funding Vehicle | Cooperative |
| Fund size | Not applicable |
| Fund type | Not applicable |
| Fund sources | Not applicable |
| Financial Instruments | Equity |

Results

-Eeklo (Flanders, Belgium)

- Development of Sustainable Energy Action Plan (SEAP) was made in 1999
- Selection of Ecopower for development of 2 wind turbines in 1999
- Construction of 3 wind turbines in 2001 and 2002
- Selection of Ecopower for development of 2 additional cooperative wind turbines in 2011
- Part-time energy expert working on behalf of the municipality
- Main advantages for citizens:
 - Social acceptance for wind energy
 - Share in the profits
 - Access to clean energy from local sources
- Main advantages for local municipality:
 - Profits stay within local community
 - Energy expert working with citizens and municipality on SEAP
 - EE measures in public buildings
 - Feasibility for local district heating network

-Asse (Flanders, Belgium)

- Development of Sustainable Energy Action Plan (SEAP) in collaboration with Ecopower
- Construction of 4 cooperative wind turbines on private land
- Part-time energy expert working on behalf of the municipality
- Main advantages for citizens:
 - Social acceptance for wind energy
 - Share in the profits
 - Access to clean energy from local sources
- Main advantages for local municipality:
 - Profits stay within local community
 - Energy expert working with citizens and municipality on SEAP
 - EE measures in public buildings and private houses
 - Further development of local RES projects

-Beersel (Flanders, Belgium)

- Development of Sustainable Energy Action Plan (SEAP) in collaboration with Ecopower
- Construction of 2 cooperative wind turbines on public land
- Part-time energy expert working on behalf of the municipality
- Main advantages for citizens:
 - Social acceptance for wind energy
 - Share in the profits
 - Access to clean energy from local sources
- Main advantages for local municipality:
 - Profits stay within local community
 - Energy expert working with citizens and municipality on SEAP
 - EE measures in public buildings and private houses
 - Further development of local RES projects

Contact details

Ecopower cvba
 Posthoflei 3 bus 3
 2600 Berchem
 Belgium
info@ecopower.be
 +32 3 287 37 79

Factsheet

General Info

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|------------------|-----------------------------|
| Country | Belgium |
| Model Name | Cooperative Case – Ecopower |
| Date of creation | 1992 |

Model Description

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|----------------------------|--|
| Ownership | Private ownership & Citizens |
| Program authority | Municipalities of Asse, Beersel and Eeklo (Belgium) |
| Program delivery unit | Ecopower cvba, a Belgian renewable energy cooperative |
| Operating services | Financing |
| Implementation model | Other <ul style="list-style-type: none"> • Production of renewable energy • Supply of renewable energy from local RES sources • Energy efficiency (public and private retrofits) • Execution of Sustainable Energy Actions Plans - CoM |
| Types of projects financed | Renewable Energy Energy efficiency (public retrofits) Other (energy efficiency - private retrofits) |
| Beneficiaries | Residential Sector Public Sector |
| Geographical coverage | 3 local municipalities in the Flemish region: Beersel Asse Eeklo |

Financial Mode Description

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|-------------------------|---|
| Project funding | Citizens - Private funding through REScoop (Ecopower) |
| Project funding vehicle | Citizens (through Ecopower, a Belgian cooperative) |
| Financial instruments | Equity (Ecopower issues shares and allows local citizens to invest in RES and EE at the local level). |
| Repayment model | The EE measures are financed through the RES revenues |

Project risk Profile

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|------------------|----------------------------|
| Performance risk | Property owner |
| Resource | Unknown |
| Financial risk | Property owner (own funds) |

Model Requirements

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|----------------------|---|
| Staff Requirements | Unknown – it depends upon the size of the project |
| Equity Requirements | Unknown – it depends upon the size of the project |
| Funding Requirements | Unknown – it depends upon the size of the project |

Model Key indicators

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|--|-----------------|
| Investment volume since creation | 50 million euro |
| Size of project (or project portfolio) | 50 million euro |
| Level of average energy savings | Unknown |

Development maturity

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|----------------------------------|--------|
| Development/implementation stage | Mature |
| Operational development maturity | Mature |
| Financial development maturity | Mature |

Model Qualification

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|--------------------------------|------------------|
| Level of establishment | Well established |
| Growth of potential | Large |
| Scalability of the model | High |
| Replicability of the model | High |
| Impact on public balance sheet | High |

Sources

www.rescoop.eu

www.citynvest.eu