Model 26

COOPERATIVE CASE - PAJOPOWER

Pajottenland & Zennevallei – Belgium

OWNERSHIP	PRIVATE & CITIZENS
Program authority	Pajottenland & Zennevallei (Belgium)
Program Delivery unit	Pajopower cvba, a Belgian renewable energy cooperative
Implementation Models	Energy Performance Contracting (EPC) • Third party financing for EE in public buildings • Third party financing for LED street lights Other • EE facilitation service for private houses (subsidised)
Operating Services	Facilitation & Financing • EE facilitation service for private houses (subsidised) • Third party financing for EE in public buildings • Third party financing for LED street lights
Projects Financed	Energy Efficiency (building retrofits) Energy Efficiency (public lighting) Energy Efficiency (other) Renewable Energy
Ambition/targets	Up to 50% reduction of energy consumption. • Saving 81.000.000 l oil/m3 • Saving 300.000 tonnes of CO2 (10.000 households) • Saving 1000 kg nuclear waste • Investment capacity: 153.000.000 euro (75.000.000 euro energy savings + 78.000.000 euro energy production)
Beneficiaries	Public sector & Residential sector
Funding Vehicle	Citizens (Pajopower is a Belgian REScoop with local citizens)
Financial Instruments	Equity/Own funds, Grants, EPC financing

Summary

Pajopower cvba is a renewable energy sources cooperative (REScoop) based in Flanders, Belgium. The cooperative issues shares and invests in renewable energy and energy efficiency projects in “het Pajottenland” and “de Zennevallei”, two regions South of Brussels. All citizens are eligible to join the cooperative: after purchasing a share they become a co-owner of the projects and share in the profits. Pajopower reaches out for both local citizens and local municipalities and helps them to improve the energy efficiency of their houses and buildings. For private citizens they have set up a (subsidised) EE facilitation service, for public buildings they are using third party financing.

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:

<u>REScoops foster social acceptance for renewable energy</u>
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.

<u>REScoops keep the individual investment affordable</u>
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.

<u>REScoops benefit the local community</u>
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.

<u>REScoops keep money in the local economy</u>
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 of 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.

- Ecopower is a Belgian REScoop with over 48.000 members that uses the revenues of wind projects to pay the wage of a (part time) SEAP expert who works on behalf of the municipality. Not only does Ecopower link RES to EE, they also link municipalities to their local citizens.

How does Pajopower collaborate with private citizens & local municipalities on EE?

Pajopower was founded in 2014 as a Belgian cooperative that aims to support sustainable development at the local level (i.e. Pajottenland & Zennevallei). The cooperative gathers financial resources from local citizens (members) and uses these funds to invest in renewable energy and energy efficiency 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 in their municipality. One share costs 250 euro and is fixed for a period of 6 years. That's because the cooperative wants to avoid sudden fluctuations in its capital. Pajopower is democratically owned so: each member has one vote in the general assembly, regardless of the number of shares he or she owns.

1.Kyoto mobile – EE facilitation service for private citizens

In collaboration with its founder, the NGO "Kyoto in het Pajottenland", Pajopower sensitizes local citizens for a more rational use of energy in their private houses. The cooperative provides consultancy services by means of an independent energy expert who conducts energy audits upon request. The audit report prioritises the measures that are needed to improve the energy efficiency of the house. Measures typically include rooftop insulation, double glazing, heat pumps,

pellets, solar PV, etc. The energy experts calculate the investment that is needed, as well as the foreseen savings. This allows the expert to calculate the pay-back time for the initial investment. The expert also helps the citizens to find good contractors and leads them to potential subsidies for their investment. The expert finally monitors the construction works. Note that it's the citizens themselves who finance the investment, the facilitation service is subsidised. A similar EE facilitation service for private citizens will soon be replicated and upsized by Ecopower (Belgium) thanks to the REScoop MECISE project.

2. EE measures in public buildings
In collaboration with CORE, EnergieID, Efika and MOS Vlaams-Brabant, Pajopower is also taking action to improve the energy efficiency of public buildings, like local schools. The cooperative therefor uses the Third Party Financing model. The cooperative issues shares and uses these funds to finance the EE measures.

3. LED for public street lights
In a municipality South to Brussels Pajopower wants to replace convenient street lights by LED. The cooperative wants to use the Third Party Financing model.

The programme delivery unit

The programme delivery unit is Pajopower cvba. The cooperative issues shares and allows local citizens to take action on EE in their private houses and in public buildings. For the latter they use the third party financing model.

Legal structure	Renewable Energy Cooperative (REScoop) – Pajopower cvba
Shareholder description	The cooperative is democratically owned by local citizens.
Equity	Equity is 100% owned by local citizens.
Shareholders	Local citizens
Program dedicated staff	Unknown
Program operational costs	Unknown

Organization and partnerships

Pajopower – www.pajopower.be
Ecopower - www.ecopower.be
Beauvent – www.beauvent.be
Energent – www.energent.be
Bronsgroen – www.bronsgroen.be
CORE - www.thinkcore.be
REScoop.Vlaanderen - www.rescoopv.be
REScoop.eu - www.rescoop.eu
EFIKA - www.efika.be
Kyoto in het Pajottenland – www.kyotoinhetpajottenland.be
EnergieID – www.energieid.be
Milieuzorg op School – Vlaams-Brabant

Beneficiaries

Beneficiaries	Private citizens, local authorities, public bodies (schools), Pajopower
Type of projects	EE facilitation service for private houses Third party financing for EE measures in public buildings Third party financing for LED public street lights
Operational support	1. Facilitation service for private citizens: • Conducting energy audit • Prioritising EE measures that are needed • Calculating Investment, IRR and payback time • Identifying contractors (and organising collective purchase) • Coordinating construction works • Monitoring investments 2. Third party financing for EE measures in public buildings 3. Third party financing for LED street lights
Financial support	Unknown

Funding mechanism

Program delivery unit funding	Pajopower cvba
Projects Funding	Subsidised - EE facilitation service for private houses Third Party Financing - EE facilitation service for public buildings Third Party Financing - LED for public street lights
Funding Vehicle	Cooperative
Fund size	2M euro
Fund type	N/A
Fund sources	N/A
Financial Instruments	Equity

Results

So far 1.250 buildings have been retrofitted by Pajopower cvba. That corresponds to a total investment of nearly 4 million euro. The breakdown can be found hereafter.

Financiële en ecologische resultaten acties	Aantal renovaties	Energie-besparing in kWh	Energiebesparing /gezin	Energiekost-besparing in €	Energiekost-besparing/gezin	CO2-uitstootreductie in ton CO2	CO2-uitstoot-reductie/gezin	Gemiddelde investering/ renovatie	Totale investering
Samenaankoop dak-, zoldervloerisolatie	435	1.957.500	4.500	156.600	360	517	1,19	2.500,00	1.087.500,00
Samenaankoop zonne-energie	85	272.000	3.200	100.640	1.184	20,67	0,24	8.000,00	680.000,00
Samenaankoop PV 2016	170	595.000	3.500	85.000	500	179	1,05	6.000,00	1.020.000,00
Samenaankoop HR++-glas	150	600.000	4.000	48.000	320	158,40	1,06	2.400,00	360.000,00
Samenaankoop muurisolatie	410,00	1.705.600,00	4.160,00	136.448,00	332,80	450,28	1,10	2.040,00	836.400,00
Totaal	1.250,00	5.130.100,00	4.104,08	526.688,00	421,35	1.324,63	1,06		3.983.900,00

Contact details

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Factsheet

General Info

Country	Belgium
Model Name	Cooperative Case – Pajopower cvba
Date of creation	2014

Model Description

Ownership	Private & Citizens
Program authority	Pajottenland & Zennevallei (Belgium)
Program delivery unit	Pajopower cvba, a Belgian renewable energy cooperative
Operating services	Facilitation & Financing • EE facilitation service for private houses (subsidised) • Third party financing for EE in public buildings • Third party financing for LED street lights
Implementation model	Energy Performance Contracting (EPC) • Third party financing for EE in public buildings • Third party financing for LED street lights Other • EE facilitation service for private houses (subsidised)
Types of projects financed	Energy Efficiency (building retrofits) Energy Efficiency (public lighting) Energy Efficiency (other) Renewable Energy
Beneficiaries	Public Sector & Residential Sector
Geographical coverage	Pajottenland & Zennevallei (Flanders, Belgium)

Financial Mode Description

Project funding	Equity/Own Funds, Grants, EPC Funding
Project funding vehicle	Citizens (Pajopower is a Belgian cooperative with local citizens)
Financial instruments	Equity/Own Funds, Grants, EPC Funding
Repayment model	Energy Performance Contracting

Project risk Profile

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

Model Requirements

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

Investment volume since creation	See table
Size of project (or project portfolio)	See table
Level of average energy savings	See table

Development maturity

Development/implementation stage	EE facilitation service for private houses – implementation stage Third party financing for public buildings – implementation stage LED street lights – development stage
Operational development maturity	Mature
Financial development maturity	Mature

Model Qualification

Level of establishment	Unknown
Growth of potential	Large
Scalability of the model	High
Replicability of the model	High
Impact on public balance sheet	High

Sources

www.pajopower.be

www.citynvest.eu