

LUXEMBURG

Local development

Location
Beckerich

Programming period
2007 – 2013

Axis / Priority
Axis 4 – LEADER

Funding (EUR)
Total budget 93 195
EAFRD 61 165
National/regional 22 330
Private 9 700

Project duration
2010 – 2012

Project promoter
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A restoration project of an old railway station became a model of energy-efficient renovation work and set the grounds for creating a eco cluster of specialized companies and technicians.

Summary

The municipality of Beckerich has been very active towards becoming energy self-sufficient. Milestones to this direction include a cooperative biogas plant and a district heating network with almost 200 homes and buildings connected, Luxembourg's first childcare centre designed for low energy consumption, etc.



In 2010, the municipality decided to redevelop an old railway station by converting the ground floor into a railway museum, while the first floor and attic would be converted into social housing. The project was chosen to become a model of energy-efficient renovation work for the LEADER area and set the ground for setting up the ClimEEC cluster, a 'one-stop-shop' offering reliable expertise on environmental construction and renovation of buildings.

Results

The ecological restoration of the old railway station, resulted to 80% of energy savings. The building was classified as 'Class B' in the energy performance categories.

18 companies and organizations now form the ClimEEC cluster, offering reliable expertise on environmental construction and renovation of buildings.

Since 2012 when public support through LEADER stopped, the cluster became self-financed by its members.

A housing allotment of 3 units was built by the cluster with energy efficiency solutions included in the selling price of the house, for example, solar panels allowing for >60% energy saving.

Lessons & Recommendations

- ❑ Such initiatives helped improve the area's attractiveness. In this case, in terms of real estate property management since thanks to the quality guarantee provided, ClimEEC customers can rely on adequate and meticulous execution of their orders during construction or renovation.
- ❑ The pioneering efforts of Beckerich made the municipality a popular destination for many visitor groups from all over the world due to its proactive commitment in environmental protection and energy efficiency.
- ❑ Scaling up at national level of such initiatives is a way to promote the engagement of the broader society into environmental objectives.

Context

The municipality of Beckerich is part of the LEADER area 'Atert-Wark', formerly known as 'Rendange Wiltz' during the 2007-2013 programming period. The LEADER area included 10 municipalities with a population of 16 600 inhabitants.

Beckerich has been very active towards becoming energy self-sufficient since it developed its first energy plan in 1997. The most important milestones it has achieved over the past two decades include a cooperative biogas plant, a municipal woodchip plant, a district heating network with almost 200 homes and buildings connected, Luxembourg's first childcare centre designed for low energy consumption, the country's first collectively owned solar panels on municipal roofs, a sports' hall with very low energy and water consumption, and the energy efficient, environmentally friendly refurbishment of many municipal buildings.

One of the municipality's properties is the old railway station. In 2010, the year of the publication of the EU Directive on the energy performance of buildings, the decision was taken to redevelop the site by converting the ground floor into a railway museum to be managed by a local NGO, while the first floor and attic would be converted into social housing. These new functions aimed at maintaining the original architecture of the building while keeping its heritage character. The project was chosen to become a model of energy-efficient renovation work for the LEADER area and set the ground for setting up the ClimEEC cluster project.

Objectives

The aim of the ClimEEC cluster was threefold:

- i. to promote local business eco construction expertise on the regional and international market;
- ii. to inform and raise awareness of potential clients on energy efficiency and eco-construction techniques;
- iii. to develop and increase the quality of professional services on ecological renovation at local and regional level.

CLIMEEC facilitates cooperation between the business sector and local/national authorities, improves corporate communication and promotes exchanges between cluster's members.

Activities

Using LEADER support, the municipality of Beckerich hired a part time cluster manager in 2010, with the aim of pooling local entrepreneurs and environmental specialists around a joint project. The refurbishment of the old railway station was used as a pilot action to test and train local entrepreneurs 'de vivo' and form the basis of a cluster on ecological expertise. The initial energy performance audit of this old building informed the technical decisions jointly taken by the cluster experts. In this case, the choice went on ensuring internal isolation with ecological materials (clay plaster on fiberboard panels). In order to measure the efficiency of the building, sensors were placed inside the walls to record the temperature changes. The pilot phase turned very successful as the building could be moved to 'Class B' in the energy performance categories.

Following this real-life experiment, the cluster organized an Energy Fair (Energiefoire) in April 2011. More than 800 people attended the fair and received targeted advice.

The cluster also developed a training programme covering health and security at work, functional evaluation of insulation systems, etc.

In 2012, the cluster was set up as a not for profit status. Since then, ClimEEC serves as a 'one-stop-shop' for its customers, with several reliable experts at disposal. It is a professional network gathering craftsmen and service providers of the building sector and environmental services at local level. Strict quality criteria, rigorous vocational training measures and specific environmental guidelines determine the registration of each individual company in the cluster. Every enterprise willing to join the cluster has to go through specialized audit before signing a contractual agreement that certifies the quality of its services.



Main Results

18 companies and organizations form the ClimEEC cluster, serving as a 'one-stop-shop' for its customers, offering reliable expertise on environmental construction and renovation of buildings.

Cluster activities are numerous and varied, from simple advisory services to finishing work applied on building sites. In the case of the renovation of the railway station, it served as a training location for some of the ClimEEC members. Training was provided on new and traditional isolation techniques, for instance when using clay. The learning opportunity was an asset for the local enterprises engaging into energy retrofitting.

Since 2012 (end of public support through LEADER), the cluster is self-financed by its members. The economic model is based on a rule of procedure endorsed by all members of the cluster: "Art.2: When the association, contacted by a customer, assigns a project to one of the cluster members, that company, once the project is achieved, has to return a sum corresponding to one half of one per cent (0.5%) of the fees invoiced".

The ecological restoration of the old railway station, resulted to 80% of energy savings (roof and cellar insulation, internal insulation of the cellar's slab with 10 cm wood fibreboards covered with clay plaster, replacing the window frames and doors, connecting the building to the heat network, installing controlled ventilation with heat recovery).

The cluster coordinated the construction of a passive

building for the local administration, and created its own certification classification for the construction of private households: Climhouse+, graded A on the energy performance grid.

The cluster coordinated the construction of a housing allotment of 3 units built with energy efficiency solutions included in the selling price of the house (i.e. solar panels allowing for >60% energy saving).

Key lessons

Such initiatives helped improve the area's attractiveness. In this case, in terms of real estate property management since thanks to the quality guarantee provided, ClimEEC customers can rely on adequate and meticulous execution of their orders during construction or renovation. The 'one-stop-shop' feature is a major asset for families willing to engage into construction or renovation projects.

On the institutional side, the pioneering efforts of Beckerich made the municipality a popular destination for many visitor groups from all over the world. The use of a municipal property – the old railway station – as a showcase example and training location was a strategic choice that positively boosted the credibility of the cluster.

In 2017, all of the 105 Luxembourg municipalities are now participating in the Climate Pact, among which the municipality of Beckerich. Further development of consumer information on energy efficiency is being driven by the national support scheme '[myenergy](#)', providing energy audits or energy advice to all customers

Additional sources of information

<http://aw.leader.lu/sites/ater-wark/files/download/2017-05/leader-re-wi-bd-bat-07-13.pdf>

<http://aw.leader.lu/fr/projets/climeec-oekeau-energie-cluster-mise-en-place-climeec>

<http://doc.ruraleurope.org/ProjetsCreatifs/6-Gare%20Noerdange.pdf>