

Building a local pole of expertise for building-based RES production - Brussels-Capital, Belgium

Population: 1,1 million inhabitants	Project signed on 24 July 2013	Grant from ELENA-EIB: EUR 1,350,000
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The Brussels-Capital region is strongly committed to mitigating its greenhouse gases emissions. The *Société du Logement de la Région Bruxelles-Capitale* (SLRB, Housing Company of the Brussels-Capital Region), the public company in charge of the region's social housing programme, is doing its share of the work within the VAMOS Vert. *Une Aide à la Maîtrise d'Ouvrage Sociale* (VAMOS, Green. An help to social project management) programme. Indeed, from the observation that there was a lack of capacity in integrating renewable energy to building renovation programmes, the SLRB undertook the project of developing an internal team that would bring this type of expertise to the region.

The project VAMOS thus aims at transforming Brussels' social housing sector on the long term by creating a new culture regarding the integration of renewable energy production in building retrofitting projects or construction. To do so, the programme is acting on two aspects: capacity building with project developers and financing mechanisms of the incremental costs of renewable energy production.

1. Business model: How the programme is implemented

Energy production in public housing: creating a long-term dynamic

The VAMOS project is undertaken by the SLRB in order to develop a local pole of expertise for integrating renewable energy sources to social housing projects. The VAMOS programme is expected to yield reduction of some 9,534 tonnes of CO₂ emissions, and 43.9 GWh of energy savings between 2013 and 2016. Besides, the programme aims at generating 1.3 GWh of electricity from renewable energy sources by the end of the period. This shall be done thanks to the mobilisation of some EUR 124 million in investment.

The SLRB oversees some 30 '*Sociétés Immobilières de Service Public*'¹ (SISPs). These SISPs manage the stock of social housing of the Brussels-Capital region, which includes retrofitting projects. They dispose of funds to undertake these actions, and have extensive knowledge of the potential of retrofitting actions in terms of energy savings. However, the SISPs do not have the expertise for integrating energy production in the buildings. Neither do they always have the funds necessary for this.

On this basis, the SLRB developed the VAMOS project that aims at:

- Capacity building for developing local expertise in mainstreaming energy production in public housing projects - be it for retrofitting or new constructions (see Organisation and Partnership);
- Setting up of financing mechanisms for integrating renewable energy in buildings.

Overall, VAMOS aims at mainstreaming the integration of renewable energy production in public buildings, alongside energy efficiency, beyond the year 2016. The project was conceived with the aim to develop a local pole of expertise in this domain.

Financing the implementation of the project

The SLRB usually undertakes massive investments. These investments are defined in *quadrennial investment plans*² that list the different investments to be realised by the SISPs in partnership with the SLRB. The retrofitting and construction projects undertaken by the SLRB already include an energy efficiency dimension. The VAMOS team concentrates on the projects of the 2014-2019 plan. The actions carried out within the scope of the project include:

- Feasibility studies for integrating renewable energy technologies in buildings;
- Development of renewable energy production and cogeneration in buildings;
- Support and assistance to the SISPs for integrating renewable energies in their projects.

¹ Local public housing companies

² *Plan d'investissement quadriennaux*: <http://www.slrbrb.be/page-daccueil/1/1/la-slrbrb/nos-missions/plans-dinvestissements>

The investment programme for VAMOS amounts to EUR 124 million, an expected leverage ratio of 92 compared to the EUR 1.35-million grant received under the ELENA-EIB facility. It covers three sectors – renovation, energy production, new-built – as follow:

Investment programme	Objective	Size of the investment (€ million)
Building renovation	EE	99.2
Cogeneration and renewable energy production	RES + EE	11.4
New-built	EE + RES	13.4
Total:		124

Financing for these projects mostly comes from the funds of the SISP's or the SLRB's budget. Indeed, these companies have to manage a large stock of public housing buildings and to some extent the construction of new buildings and have large investment capacities.

The projects are managed by the SISP's, but the SLRB provides both technical and financial assistance at different levels of the projects. For instance the SLRB can finance projects undertaken by a SISP in various ways, most notably loans.

However, to scale up the integration of renewable energy production in public housing buildings, the SLRB develops new financing instruments to help the SISP's in financing the additional costs caused by the installation of energy producing equipment within the buildings:

- VAMOS Revolving Fund: its role is to help the SISP's install cogeneration or renewable energy production in their buildings. The fund is set by the SLRB, and is to provide EUR 3 million over three years to the SISP's through 10 years loans. The lending period should be typically longer than the break-even price of the energy production equipment, allowing the SISP's to benefit from the action.
- ERDF subsidy of 50% of the installation of energy production or cogeneration unit. The SLRB is attempting to obtain a grant from the ERDF in order to subsidise the installation of cogeneration or renewable energy production units in buildings. The ERDF's support would then allow the SLRB to subsidise up to 50% of the installations of new equipment by the SISP's.
- Finally, the SLRB is in the early phase of experimenting with the development of third party financing for energy production in public housing. The modalities of the deployment of such a mechanism are under investigation by the VAMOS team, but should enable a wider development of renewable energy production in buildings thereafter.

2. Organisation & partnerships

To manage the implementation of the project VAMOS, the SLRB set up a team of two agents specialised in integration of renewable energy technologies in buildings. This team starts operating upon the SISP's request. The agents that compose this team are specialised on integrating energy production technologies in buildings.

The team serves as a link between the SLRB and the SISP's, and represents a local pole of expertise on the issue. It works with the project managers of building renovation and construction (from the SISP's or the SLRB) as well as with other services of the SLRB. The team has a wide array of missions:

- Take part in feasibility studies, issue calls for procurements and tender specification;
- Serve as a link between engineering consultancies and project managers;
- Bring internal expertise on energy production issues to the SLRB;
- Design a standard method for integrating energy production in public housing projects, in spite of a complex legislation.

The VAMOS team works in close cooperation with different partners:

- The 30 SISP's: owners of Brussels' public housing buildings and managers of retrofitting projects, the SISP's are local companies structurally independent from the SLRB and in charge of the management of Brussels' public housing buildings. They however are under the SLRB's authority. The project managers voluntarily join the VAMOS team to integrate renewable energy production to their projects.

- Engineering consultancies: the VAMOS team works with engineering consultants to undertake feasibility studies. The assistance of these private companies reduces the implementation costs of a project - by reducing the size of the permanent internal team. Yet, their main value is to give credibility to a project by providing an independent technical and financial evaluation of its viability.

3. Beneficiaries

Players	Impact of the programme
Social housing tenants	<ul style="list-style-type: none"> - More comfortable housing thanks to better insulation - Lower energy consumption and thus lower energy bills (excluding rebound effect) - Potentially reduced charges thanks to the redistribution of the benefits of the building's energy production
SISPs	<ul style="list-style-type: none"> - Investments in buildings preserve or increase their value - As public service companies, they are more interested in the well-being of their tenants than in financial profits
SLRB	<ul style="list-style-type: none"> - Gains expertise in integrating renewable energy in buildings - Brussels' social housing is more energy efficient, more sustainable

4. Results

Signed in September 2013, the VAMOS programme is still in its early phase. There have not yet been effective results in terms of energy production. Indeed, even the ongoing projects in which the team VAMOS was involved are merely about to start. However, the programme has been rather successful in attracting project managers. Indeed, the team has identified some **67 projects** so far. Of these, some 30 are still ongoing and receiving assistance from VAMOS and the SLRB to integrate renewable energy production³.

The success factors of the programme identified by the SLRB are:

- **The enthusiasm** of the actors of the sector - the success of VAMOS is dependent on the engagement of project managers;
- **Timing** - to be efficient, the integration of energy production in a project must intervene as early in the project as possible;
- The support from the ELENA-EIB facility: the cooperation with the European institutions made the SLRB's internal hierarchy more determined to make the programme successful. It also gave a **framework** to the programme that helped structure it.

5. Promotion

Being mostly directed to a set of targeted professionals, VAMOS did not benefit from a widespread communication from the SLRB's side. However, some actions have been undertaken, mostly to inform the project managers:

- Workshop directed to the SISPs in order to advertise the benefits and opportunity that VAMOS represents for them;
- Advertisement of the programme in the internal review of the SLRB: *SLRB Info*⁴.

The team puts most of its energy in the translation of the initiative in concrete results before engaging heavily in communication. Besides, once the team VAMOS has developed a third party investment mechanism, it will need to advertise it largely in order to attract investors.

6. ELENA-EIB technical assistance

A specificity of the VAMOS programme is the fact that the assistance from ELENA was not sought for a single project, but rather to build capacity on the long term. The SLRB's ELENA programme is partly defined by the

³ The SLRB does not have an estimate of the number of housing concerned by these projects. As an indicator, public housing projects in Brussels-Capital generally range from a dozen housing units for small projects to some 300 for big ones.

⁴ SLRB Info #63 and SLRB Info #71

tension between the construction sector's business model and the requirements of the ELENA-EIB facility. This was a source of difficulties for the SLRB in designing its project and the company had to design a way to mobilise sufficient amount of investment in the short term to reach the necessary leverage ratio, while still committing to capacity building on the long term. However, the grant provided under ELENA was crucial to the implementation of VAMOS. Indeed, prior to the programme, there was a dramatic lack of expertise on energy issues in the SLRB or the SISPs, and developing such a local pole of expertise required significant resources. The programme triggered the development of new cross-cutting skills on energy issues in the Brussels' social housing sector.

Despite this structural tension, that was finally overcome, the collaboration was rather positive between the European Investment Bank and the SLRB in the conception phase of the VAMOS programme. The EIB indeed provided an appreciated expertise, notably with feedback of constructive inputs for designing the business plan of "an enterprise that will last three years, and keep going on". The bank's support was quite appreciated by the SLRB, helping to develop the project before its implementation, building trust on a partnership dynamic. Thereafter, the link with the bank was more formal, and mostly became an important tool for asserting the value of the VAMOS programme to the partners and other internal services.

7. Key takeaways for other public authorities

- Although the three-year window of time limits the scope of quantified impact, the ELENA programme can provide the opportunity to create a **dynamic process with long-term consequences** for a local authority or public entity's business model.
- Beyond the perspective of the short term investment, this programme used ELENA for **capacity-building** in order to mainstream renewable energy production in its investment projects.

Challenges

The main challenges experimented in the implementation of VAMOS were:

- The complexity of the Belgium legislative framework for integrating energy production in buildings.
- The schism between the programme's long term view and the short term scope of the ELENA grant.

This last challenge notably results from some specificities of the building sector in which the SLRB is involved. In this sector the definitive approval of an investment can take up to three years. This corresponds to the duration of support under the ELENA-EIB facility, during which recipients are expected to produce the minimal leverage ratio of 20. It was challenging for the SLRB to adapt its project to this framework. Thus, the VAMOS team intervenes to integrate renewable energy sources in different ongoing projects of the EUR 60 million portfolio of projects handled by the SLRB, upon request by the project managers (SISPs).

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