

**infinitesolutions**  
FINANCING ENERGY TRANSITION IN CITIES

# Financing schemes increasing energy efficiency and renewable energy use in public and private buildings

## COMPARATIVE STUDY



*March 2014*



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*This study was prepared in the framework of the **INFINITE Solutions project** (INnovative FINancing for Local SusTainable Energy Solutions) led by **Energy Cities** and supported by the Intelligent Energy Europe programme.*

*Between March 2014 and February 2017, eleven Energy Cities' members carry out peer coaching activities aiming at developing the expertise of local staff and at replicating two proved financing schemes tested by the cities of Stuttgart (DE) and Delft (NL) in learning local authorities:*

- **Agueda (PT), Almada (PT), Udine (IT), Koprivnica (HR)** – are committed to implement sustainable energy measures in the public sector. They will create a revolving fund linked to internal contracting (intracontracting) financing scheme already tested in the city of Stuttgart (DE).
- **Brussels-Capital Region (BE), Frederikshavn (DK), Riga (LV), Parma (IT) and Bordeaux Métropole (FR)** – are committed to implement actions in the private residential sector (mainly condominiums). They will create a revolving fund linked to soft loans financing scheme.

***The city of Stuttgart** will set up a public financial engineering support service for private contracting dedicated to the owners of residential buildings who wish to refurbish their homes according to high energy efficiency standards.*

*More information on the project: [www.energy-cities.eu/infinitesolutions](http://www.energy-cities.eu/infinitesolutions)*

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# Introduction

*What are the solutions to the municipal budget cuts? How can the cities finance their energy transition? What can we do to make it a driving force to boost the local economy and job creation? What are the new financial cash flows for this new economy?*

One of the solutions is to **rethink financing solutions**, and the local authorities that are engaged in energy transition are the best placed to do so!

Many cities have voluntarily committed to reducing CO<sub>2</sub> emissions on their territories, notably by increasing energy efficiency and the use of renewable energy sources. Nearly 6,500 cities are committed to the objective to meet and **exceed the European Union 20% CO<sub>2</sub> reduction objective by 2020**. They have already developed their Baseline Emissions Inventories and Sustainable Energy Action Plans and thus are well aware of the energy flows on their territories, energy saving potential and the cost-effectiveness of the planned measures.

The next step is to secure their financing sources and here both the **private and public sector** play a key role. Governments at all levels (European, national, regional and local), financial institutions, businesses, citizens and other local stakeholders should channel part of their funds to measures that help achieving our common energy and climate goals. Local authorities' role is to motivate and coordinate players on their territory.

For its part, the **European Union** increased the amount allocated to energy efficiency and renewable energy projects in its 2014-2020 budget, giving a signal that a shift towards a low carbon economy is one of its top priorities. This could be a significant boost for local energy transition. However, the European Commission also announced that the EU budget should be spent in a more sustainable way and announced a progressive **move from grants to loans and innovative financial instruments**, in particular for projects that are viable on the current market.

Many front-running Covenant signatories **dedicate their human resources to financial engineering** and creation of **innovative financing schemes** that will help them keep the money spent on energy near home. They strive for sustainable, long-term financing solutions capable to generate large-scale investments.

**Indeed, financing energy transition will require strong technical, financial, legal and coordination skills and expertise in local authorities.**

Many different players at all levels of governance have already tested and implemented successful innovative financing schemes. However, the existing and emerging financing solutions remain isolated and not well known. **Energy Cities** – the European association of local authorities in energy transition – aims at strengthening the skills of local authorities in this field and facilitating the exchange of their experiences so that successful schemes can be more easily replicated all over the EU and beyond.



Thus, Energy Cities identified **9 existing local, regional and national financing schemes** aiming at increasing energy efficiency and renewable energy use in **public and private buildings**, which are usually the biggest energy consumer at local level. They are presented in this study.

The financing schemes have been selected with the aim to present a **myriad of different solutions** that are implemented to address the same problem:

- **Local investment funds** (Almada in Portugal, Amsterdam in the Netherlands and Region Centre in France).
- **Local public and semi-public companies** (Ile de France and Rhône-Alpes Regions in France).
- **Revolving funds linked to grants and soft-loan schemes** (Lithuania, Estonia, Brussels-Capital Region, Delft in the Netherlands).

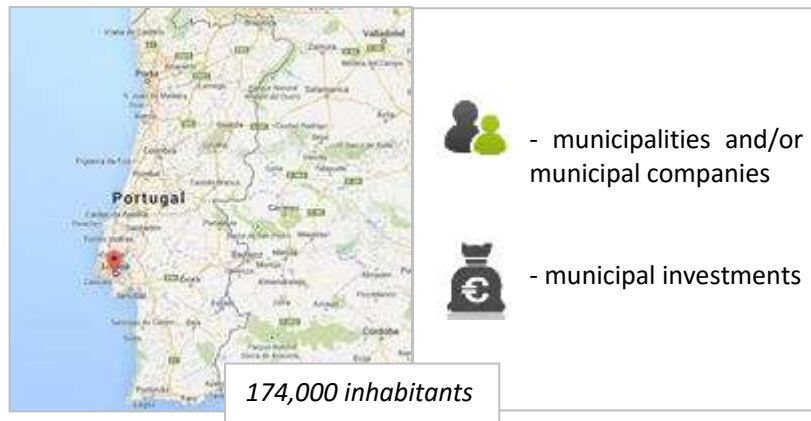
We hope that this study will inspire many European cities that wish to rethink their financing solutions for the implementation of ambitious local sustainable energy action plans!

## Overview of the financing schemes

Financing schemes	Type of beneficiaries 	Type of financial support provided 
The Less Carbon Climate Fund <i>Almada (PT)</i>	municipalities and/or companies	municipal investments
The Amsterdam Investment Fund <i>Amsterdam (NL)</i>	private housing owners, SMEs & businesses, community organisations /associations / NGOs	loans seed funding
The Brussels Green Loan Scheme <i>Brussels-Capital Region (BE)</i>	private housing owners	grants loans guarantees
Regional Investment and Guarantee Fund & Regional Schemes Targeting Private Housing <i>Centre Region (FR)</i>	municipalities and/or companies, SMEs & businesses, community organisations /associations / NGOs, private housing owners	grants loans guarantees
Energy Saving Fund and Soft Loans Scheme <i>Delft (NL)</i>	private housing owners, community organisations /associations / NGOs	loans
Kredex Revolving Fund <i>Estonia</i>	private housing owners	grants loans
A semi-public company: Energies Posit'IF <i>Ile de France Region (FR)</i>	private housing owners	loans
JESSICA Holding Fund <i>Lithuania</i>	private housing owners	grants loans
Local Public Company – SPL OSER <i>Rhône-Alpes Region (FR)</i>	municipalities and/or companies	loans

# The Less Carbon Climate Fund

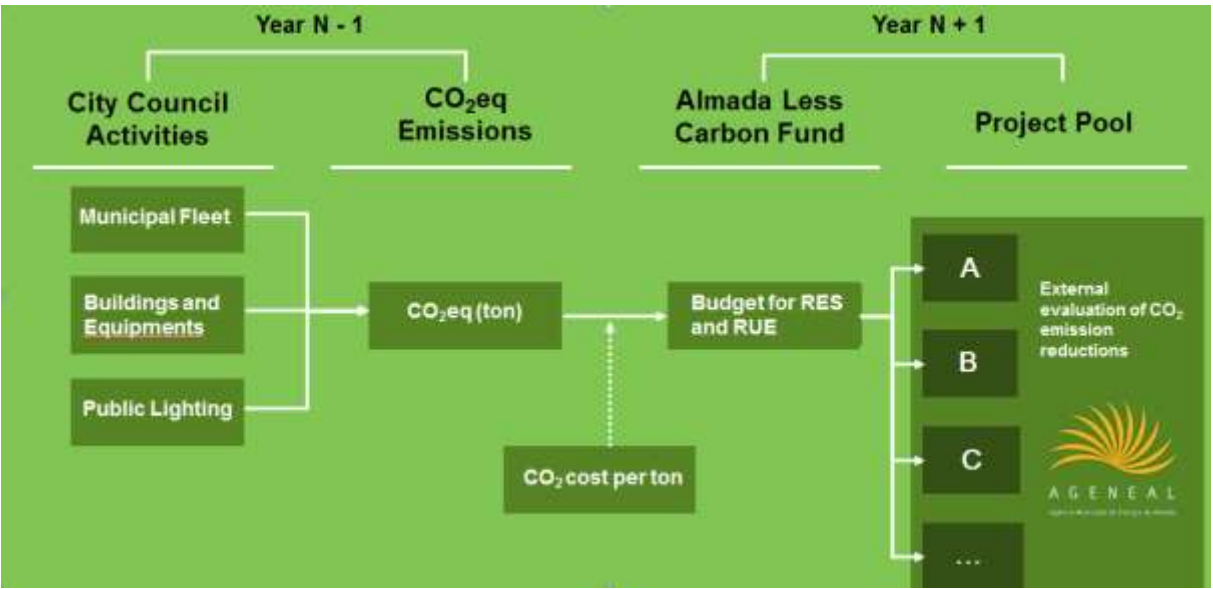
## Almada, Portugal



### 1. The financing scheme at a glance

Almada’s municipality range of competences and responsibilities imply the development of activities aiming at reducing energy consumption and greenhouse gas emissions (GHG). In 2009, Almada’s City Council created the **Almada Less Carbon Fund** in order to reduce its carbon footprint via investments in energy efficiency and renewable energy. The financial sources of the fund are based on a simple economic valuation and monetisation of the GHG generated by the City Council’s regular activities which feed the fund. The fund is a voluntary scheme of the municipality and it is a one-of-a-kind initiative in Portugal.

### 2. Business model - How is the financing scheme implemented?



#### Description

First of all, the CO<sub>2eq</sub> annual emissions attributed to the city council’s activities are calculated. Secondly, a price per ton of CO<sub>2eq</sub> is defined and applied to the global emissions. The final sum that results from the calculation is included within the next year’s municipal budget in a specific budget line – Almada Less Carbon Fund - exclusively dedicated to investments in energy efficiency and renewable energy. In 2009 when the scheme was launched, the value of **10€ per ton of CO<sub>2</sub>** was used, based on the average price of Certified Emission Reductions (CER) in the Framework of the Clean Development Mechanism and also within the range of Verified Emission Reductions (VER) price. The collapse of the carbon market made

this parameter useless as a price reference. So the price has been adjusted annually based on the market evolution but also the price defined in the literature as optimum for carbon reduction technologies deployment (i.e. ~25€ ton/CO<sub>2</sub>).

The Almada Less Carbon Fund ensures that costs associated with CO<sub>2eq</sub> emissions from the City Council's activities are internalised and that they contribute to CO<sub>2eq</sub> compensation within the organisation.

Date of creation	2009												
Fund size	<p>Initial fund size: 140,000 EUR (evaluation of the CO<sub>2</sub> emissions for the first year 2008)</p> <p>Annual budget: in EUR</p> <table border="1"> <thead> <tr> <th>2009</th> <th>2010</th> <th>2011</th> <th>2012</th> <th>2013</th> <th>2014</th> </tr> </thead> <tbody> <tr> <td>140,000</td> <td>150,000</td> <td>160,000</td> <td>190,000</td> <td>500,000</td> <td>500,000</td> </tr> </tbody> </table> <p>Total size of the Fund (by 2014): 1,640,000 EUR</p>	2009	2010	2011	2012	2013	2014	140,000	150,000	160,000	190,000	500,000	500,000
2009	2010	2011	2012	2013	2014								
140,000	150,000	160,000	190,000	500,000	500,000								
Financial sources	Municipal budget line which internalizes the compensation of the previous year's municipal CO <sub>2</sub> emissions												
Fund character	Budget line												
Operational costs of the scheme	Unknown												

### Organisation & partnerships

- **Almada Municipality:** management of the fund, decision-making and approval of proposed investments
- **Local Energy Management Agency of Almada (AGENEAL):** technical support for project identification, analysis and implementation. AGENEAL identifies a pool of projects and measures that need to be implemented and then develops a set of selection criteria that must be met. These include cost estimates, return on investment evaluation and GHG emissions reduction potential. AGENEAL also runs an independent evaluation to guarantee that the principles of additionality and sustainability are followed and ensures the monitoring and evaluation of the projects in order to quantify the real equivalent CO<sub>2</sub> emission reductions achieved.

### 3. Beneficiaries - How do they benefit from the scheme?

Beneficiaries:	Municipality / municipal enterprises
Type of projects financed:	Municipal investments in energy efficiency and RES featured in the city Sustainable Energy Action Plan (developed in the frame of the Covenant of Mayors initiative)
Type of financial support provided	Municipal investment



## 4. Results

### Projects financed so far

- Tele-management system for the public lighting - energy consumption of public lighting dropped by about 40% on almost 1200 light points which is a reduction of nearly 0,6 GWh and 300 tons of CO<sub>2eq</sub>. The estimated savings including maintenance and electricity cost are about € 80,000 / year.
- Solar hot water in 100% city-owned sports facilities - resulted in a reduction of natural gas consumption of about 0.5 GWh and financial savings of nearly €40,000.
- 100% LED traffic lights
- Energy-efficient lighting and HVAC systems in municipal buildings
- Energy certification of municipal buildings
- Electric vehicles for the municipal fleet
- Efficient lighting in historical monuments
- Use of biomass waste from parks and gardens for heat production

Some of these projects were co-financed by the EU Structural Funds (50%) and the Almada Less Carbon Climate Fund (50%).

### Key success factors

- The fact that the funding operates on a cross sectorial/department basis means that all departments can benefit from the fund. They can invest in projects without using their own budget lines which is a huge motivation for them. Moreover, they take advantage of AGENEAL support.
- The strategy of coordinating the Almada Fund with EU Funds and programmes (in particular Structural Funds, Intelligent Energy Europe Programme, etc.) has been extremely successful and has allowed for development of several projects with a clear financial benefit for the municipality. Further benefits include better environment, improved resource efficiency, management procedures, etc.
- As some specific sustainable energy measures are part of larger infrastructure refurbishment or construction projects, it allows AGENEAL to screen and propose technical improvements for projects where it normally would not have any interference.

## 5. Promotion

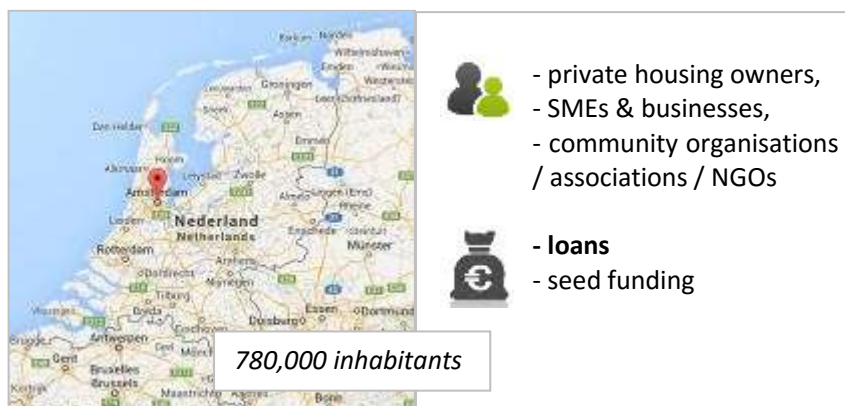
- The fund is communicated internally in several high-level administration meetings and disseminated through all the municipal departments.
- Since it is an internal mechanism, there is little external communication towards the broader public, although the fund is mentioned when a certain beneficiary project is promoted.
- The fund is widely promoted towards peer local authorities in Portugal and internationally via conferences, project meetings, best-practice databases, publications, etc.

### More information

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# The Amsterdam Investment Fund

## Amsterdam, the Netherlands

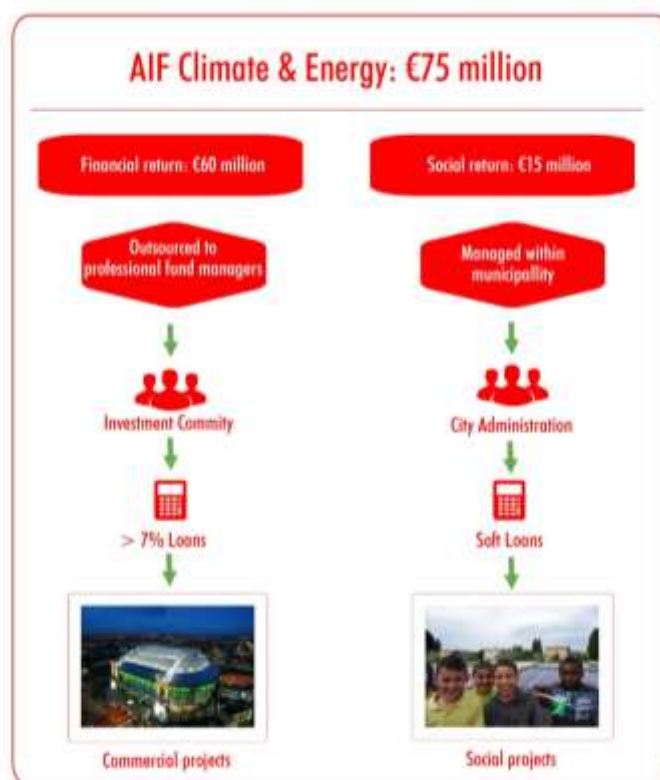


### 1. The financing scheme at a glance

The city of Amsterdam has a long-term Energy Strategy with a vision up to 2040. In 2011, the city set up a **€75 million** fund, the **Amsterdam Investment Fund**, aimed at supporting projects in the fields of climate, sustainability and air quality. The main goal of these investments is to reduce CO<sub>2</sub> emissions, energy bills for citizens and businesses, and to create a healthy city environment. In other words, this financial instrument was created to accelerate the energy transition of Amsterdam.

The fund invests in financially-sustainable and profitable projects implemented by local businesses, residents, housing associations, and knowledge and community organisations. It provides them with **soft loans, not subsidies**. The fund is **revolving**, which means that any profits will be reinvested in the coming 15 years. Although banks often deem sustainable investments as being too high-risk, especially in the initial stages of a project, the city's involvement in project funding encourages them to provide further financing.

### 2. Business model - How is the financing scheme implemented?



## Description

In 2010, the city of Amsterdam sold its shares in NUON, a former local utility company. A part of the profits made from this sale was used to set up the **Amsterdam Investment Fund (AIF)**. The aim of the fund is to preserve its value while ensuring immediate social impact. To make this possible, the fund is divided into **two parts** that differ greatly in financial and social return targets and thus investment conditions:

- **20% of committed funds are available for ‘social projects’** - investments that have a primarily focus on social benefits of CO<sub>2</sub> reduction and/or a contribution to the Amsterdam Energy Strategy. Project promoters can get **soft loans** from the fund. This part of the fund is managed by the **Climate and Energy Program Office of the City of Amsterdam**.
- **80% of committed funds are available for ‘commercial projects’** - investments with a focus on financial return in addition to CO<sub>2</sub> reduction. These are mainly large-scale commercial investments. This fund invests under regular market conditions, with higher interest rates. This means that **no soft loans are available** and there is a strong focus on financial return. The (potential) financial return of this part of the fund is used to invest in future (more social) project. The municipality has outsourced the management of this part of the fund to a **professional fund manager**.

The revolving character of the fund means that a large part of the investments will flow back to the fund and any profits will be reinvested in the coming 15 years.

<b>Date of creation</b>	2011
<b>Fund size</b>	Initial fund size: €75 million (committed) €15 million (20%) - for social projects €60 million (80%) - for commercially viable projects Annual budget: not applicable
<b>Financial sources</b>	City of Amsterdam - revenues from the sale of shares in ‘N.V. Nuon Energy’ – a former local utility company that provides electricity, gas, and heat in the Netherlands
<b>Fund character</b>	Revolving - any profits will be reinvested in the coming 15 years.
<b>Operational costs</b>	<p><u>General:</u></p> <ul style="list-style-type: none"> <li>• Staff (annually): 2 full-time workers</li> <li>• Communication, legal, others costs: € 50,000</li> </ul> <p><u>Incidental:</u></p> <ul style="list-style-type: none"> <li>• European tender for selection of a fund manager: € 150,000</li> </ul> <p><u>Financial return (professionally-managed fund)</u></p> <ul style="list-style-type: none"> <li>• Start-up costs of € 250,000</li> <li>• Management fee of 1.5% per year on the actually invested capital of the fund</li> <li>• Performance fee of 0.5 % for project investments: -&gt; a realised (at completion of a project) average annual net financial return of &gt; 7% per year and. -&gt; a social outcome of at least 45kg of CO<sub>2</sub> savings per project euro invested.</li> <li>• The performance fee is 0.5% per year on the actual capital invested in the project investment.</li> </ul>

## Organisation & partnerships

- **The City of Amsterdam:** has set up the Amsterdam Investment Fund and decides on policy priorities, beneficiaries and type of financial support. It manages 20% of the Fund and selects 'social projects' that will be supported.  
The city launched a public procurement tender and selected a Fund Manager to deal with the 'commercial projects financed via the Amsterdam Energy & Climate Fund.
- **Professional fund manager "E3":** selected via EU-wide public procurement to manage "Amsterdam Energy & Climate Fund". E3 consists of four consortium partners (EWIC, Premium Fund Management, Libertus Energy Finance and Innax – ESCO) who have a strong and long experience in selecting and managing sustainable project investments and investing in innovative companies.
- **An independent investment committee** comprises 4 experts who have competences and experience in the field of investments, public sector financing, energy efficiency and renewable energy. They take all investment decisions under the "Amsterdam Energy & Climate Fund" and fulfil a 'watchdog' mission. The committee has to follow the established rules (in Dutch <http://www.akef.nl/wp-content/uploads/2013/09/ReglementIC-en-profielschets.pdf>)

### 3. Beneficiaries - How do they benefit from the scheme?

More and more people in Amsterdam recognise the need and added value of sustainable energy. They wish to contribute to a sustainable, renewable and healthier environment in their own street, business, or in the entire city. Likewise, more and more are people, organisations and companies that want to start, or already even have developed an idea or project to save energy or to produce renewable energy. The Amsterdam Investment Fund is available for all good investment proposals by residents, businesses, and knowledge and community organizations.

**Criteria:** each project must contribute to the Amsterdam Energy Strategy 2040.

<b>Beneficiaries</b>	Residents, businesses, knowledge institutions and community organisations
<b>Type of projects financed</b>	Projects with a link to sustainability, improving the environment, aimed at saving energy, generating renewable energy or improving air quality in Amsterdam.  Projects that offer strong social returns and contribute to the energy transition or CO <sub>2</sub> savings.
<b>Type of financial support provided</b>	<p><b>Social initiatives – soft loans:</b> The AIF finances residents, community organizations and businesses that are seeking funding for a sustainable social initiative benefitting all contributing parties without a primary commercial focus. The majority of the projects are selected in a tender procedure where projects are ranked on their effect (CO<sub>2</sub> reduction) per Euro invested. <b>Amount lent:</b> up to € 500.000 per project <i>For unique projects a higher maximum is possible</i> <b>Interest rate:</b> 1.99%</p> <p><b>House owners – soft loans:</b> The city provides soft loans - known as the Amsterdam Energy Loan - to house owners to improve energy efficiency of their homes. Thanks to lower energy bills, property owners are able to pay the loan back. <b>Interest rate:</b> 2%</p> <p><b>Startups – seed funding:</b> The city helps start-ups in the field of sustainable energy via <b>Rockstart</b>, the start-up acceleration company that supports the growth of new, innovative growth companies in the first 1,000 days. It provides the most promising start-ups</p>

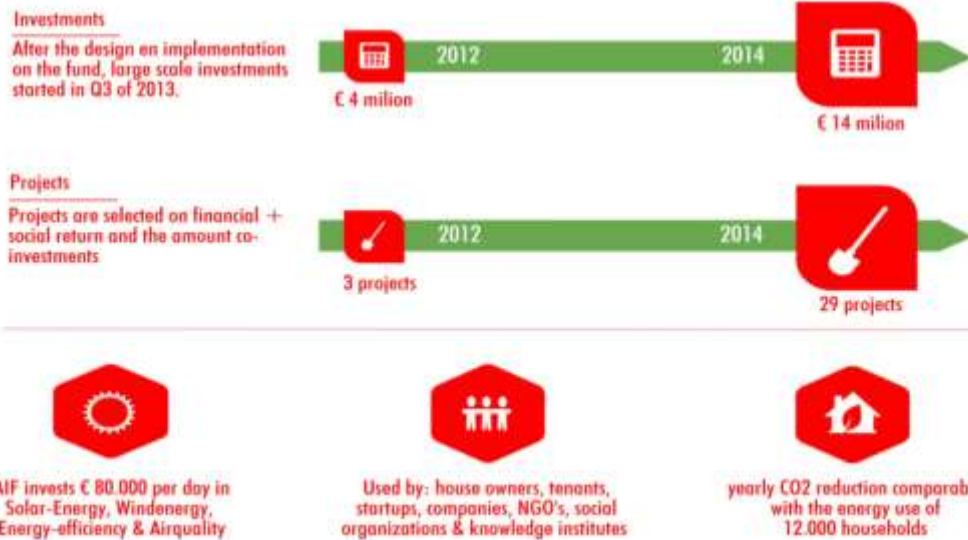
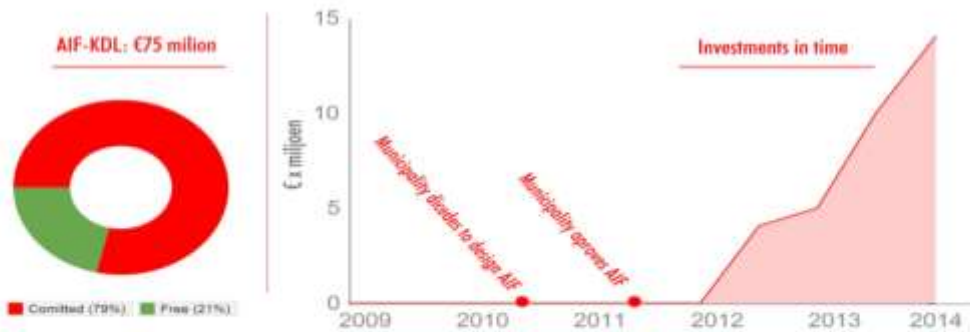
<b>Type of financial support provided</b>	<p>worldwide with access to capital, resources and networks - infrastructure critical for success.</p> <p>The Rockstart Smart Energy Program, which started in January 2014, supports 10 start-ups selected from 130 applications from 39 different countries via:</p> <ul style="list-style-type: none"> <li>• Seed Funding: up to €20,000</li> <li>• In kind investment of €55,000 (office, legal &amp; fiscal support, mentoring, events, international road trip, deals)</li> <li>• Intensive coaching by 80 mentors: successful entrepreneurs, industry executives &amp; specialists</li> <li>• Pitching in front of 200+ investors &amp; VIPs at Demo Day</li> <li>• International road trip taking start-ups to smart energy hot spots, meeting potential investors, customers, start-ups &amp; partners</li> </ul> <p>More info: <a href="http://rockstart.com/accelerator/smart-energy-program/">http://rockstart.com/accelerator/smart-energy-program/</a></p> <p><b>Companies – loans (mostly subordinated)</b></p> <p>Companies seeking funding for financially and sustainably-viable energy projects can use the Amsterdam Climate and Energy Fund. The fund provides loans under normal market conditions. This means that no soft loans are made and that there is a strong focus on financial return.</p> <p>Amount lent: min. €0.5 – max. €5 million  Interest rate: 7-12% per year, plus risk margin (depends on project, includes fee for fund manager = 1.5%)  Maturity: max. 15 years</p>
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## 4. Results

The Amsterdam Investment Fund has so far financed **29 projects** in the field of climate, sustainability and air quality for a total of **€14 million**. The fund currently invests around **€80,000 per day**. The diversity of projects is important in terms of budget and target groups: from an investment in the largest solar system in the Netherlands in the Ajax Football Stadium to the installation of HR+ glass in social housing projects.

### Two examples of financed projects

- **Amsterdam football stadium** – ArenA: 4,200 solar panels covering about 7,000 m<sup>2</sup> were installed on the roof of the arena in the first half of 2014. This is the second largest sunroof in the Netherlands. The panels are expected to generate 930,000 kWh annually, which covers about 10% of the current electricity demand of the ArenA. The expected CO<sub>2</sub> reduction to be achieved over the project life time is more than 15,000 tons. The total funding is nearly **€1.6 million**.
- **OrangeGas**: the company installs new green gas tank locations in and around Amsterdam thus improving its market position in the capital. Four sites are already operational. In 2014, the construction of 7 more locations is foreseen. The CO<sub>2</sub> reduction to be achieved over the project lifetime is estimated at 200,000 tons. This investment is worth **€3.75 million**. Green gas, a green variety of natural gas, is a cheaper and cleaner alternative to petrol and diesel. This gas is produced from organic waste and sewage sludge in the Netherlands. Green gas is CO<sub>2</sub>-neutral and emits little nitrogen. Moreover it emits less engine noise than fossil fuels.



### Key success factors

- Availability of the initial budget which is under the control of the municipality
- The fact that the municipality has control over the initial budget has helped avoiding complex and time-consuming procedures with often restrictive criteria related to getting the funds from the EU or national funding programmes, financial institutions or private investors
- The legislation related to the creation of the fund was rather neutral – neither supporting nor prohibitive
- Investments in energy efficiency projects are unique as they ensure a ‘cash-back’ in the form of saved money

### 5. Promotion

A budget of €10,000 has been made available for communication and promotional activities.

The fund is promoted via:

- A dedicated website: [www.amsterdam.nl/aif](http://www.amsterdam.nl/aif)
- Community / local newspapers
- Social media (Twitter, Facebook, etc.)
- Informal network of companies, associations, NGOs
- Communication by the city on the funded projects which generate lots of media attention – for example, media (incl. national TV) were invited to a launching event at the Amsterdam Football Stadium Arena

### More information

[www.iamsterdam.com/amsterdam%20climate%20energy%20fund](http://www.iamsterdam.com/amsterdam%20climate%20energy%20fund)  
[www.amsterdam.nl/aif](http://www.amsterdam.nl/aif)



# The Brussels Green Loan Scheme

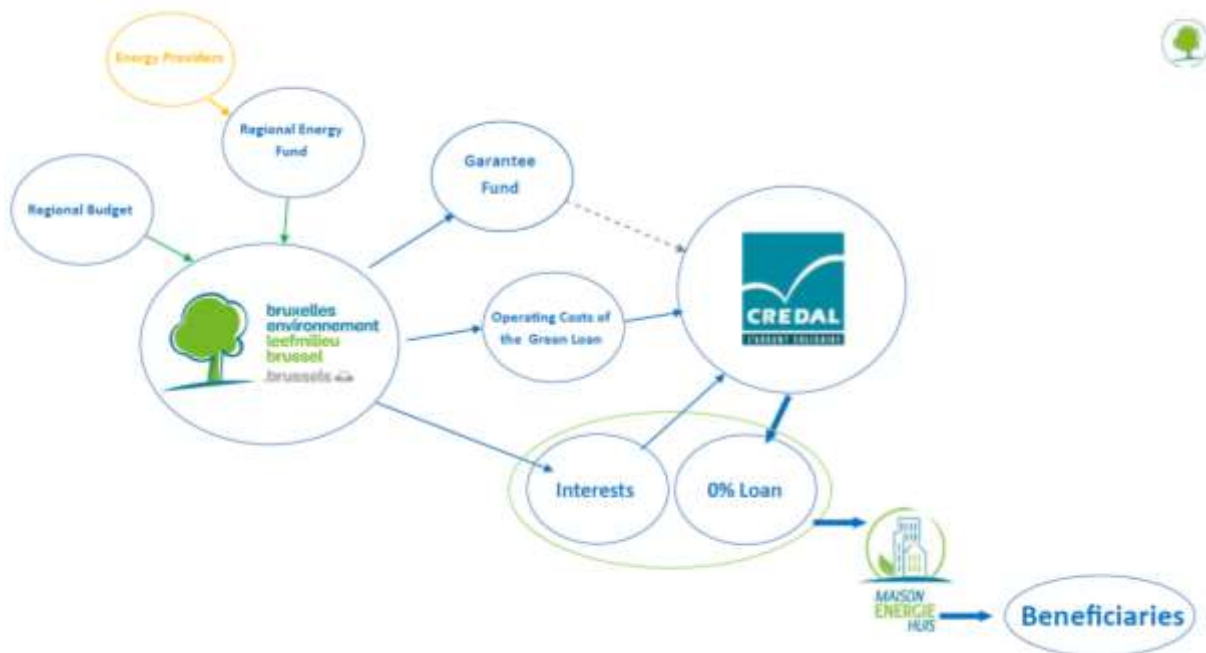
## Brussels-Capital Region, Belgium



### 1. The financing scheme at a glance

Buildings are responsible for 72% of the energy consumed in the area of Brussels-Capital Region. Since 2004, the Brussels Region has experimented different tools to improve the energy performance of buildings on large-scale in order to test and demonstrate the capacity of the city's stakeholders and citizens to make use of them. One of the tools is the **Brussels Green Loan Scheme** for Brussels' residents – private housing owners and/or tenants.

### 2. Business model - How is the financing scheme implemented?



#### Description

#### The business model is based on the:

- Partnership between the Regional Administration Brussels Environment (Brussels Institute for Environmental Management – IBGE) who is the manager of the Regional Energy Fund and the Regional Budget and a banking institution (Credal)
- Energy House which is a front office for the applicants
- Combination of loan, subsidy and guarantee funds

**Regional Energy Fund** – € 200,000 per year is used to subsidize interest rates to attain soft loans. About 200 loans are subsidized at an average rate of 3.5 %.

**Regional Budget** - € 124,000 per year is paying for the Scheme running costs and guarantee.

<b>Date of creation</b>	2008
<b>Fund size</b>	<p><u>Initial fund size:</u> € 88,000 euros (including €26,000 for the guarantee)</p> <p><u>Annual budget:</u> since 2013, an annual budget of € 324,000 disbursed as follows:</p> <ul style="list-style-type: none"> <li>• € 200,000 for interest subsidy</li> <li>• € 24,000 for guarantee</li> <li>• € 100,000 for operational costs (staff, running costs and a small budget for promotion)</li> </ul> <p>The loan itself is financed by the bank.</p>
<b>Financial sources</b>	<ul style="list-style-type: none"> <li>• Regional Energy Fund (fed by the gas and electricity providers): 62%</li> <li>• Regional budget: 38%</li> </ul>
<b>Fund character</b>	Revolving
<b>Operational costs of the scheme</b>	<ul style="list-style-type: none"> <li>• € 100,000 (staff, running costs and a small budget for promotion)</li> </ul> <p><i>The Energy House is not included. The scheme was launched in 2008. The Energy House was launched in 2013 and the Brussels Green Loan is only a small part of its mission.</i></p>

### Organisation & partnerships

- **Regional Administration Brussels Environment:** manages the scheme and the subsidies (1 person from the 'Energy Department – Unit of Support to private individuals' is responsible)
- **Banking institution – CREDAL** (a cooperative society which provides loans to social economy actors and microcredits to small enterprises): verifies that beneficiaries meet the eligibility criteria, handles the financial analysis of the customers' situation and makes the decision on whether the loan will be provided or not.
- **Energy House:** is the initiative of the Brussels-Capital Region, it's coordinated and financed by the Regional Administration Brussels Environment. It provides non-commercial, impartial and free-of-charge technical assistance to citizens interested in energy renovation of their homes. It acts as a front office for the Scheme - providing information and administrative support for the preparation of loan requests.
- **The Government of Brussels-Capital Region** decides which eligible projects approved by the banking institution will be financed.

### 3. Beneficiaries - How do they benefit from the scheme?

<b>Beneficiaries</b>	<p>Building/house owners - occupants, landlords, tenants (in agreement with their landlords)</p> <p><u>Beneficiaries - eligibility criteria:</u></p> <ul style="list-style-type: none"> <li>• 1-person household: annual taxable net income of max. € 30,000</li> <li>• Couple (married or cohabitants): annual taxable net income of max. € 60,000</li> </ul> <p>+ € 5,000 if the applicant is &lt; 35 years old + € 5,000 per dependent</p> <p>The income limits of beneficiaries were set up quite high. In fact, one of the objectives was also to stabilise young middle-class households with children and encourage them to stay in the Region rather than 'emigrate' to individual houses in the suburbs outside the Region.</p>
<b>Types of projects</b>	<p>Energy efficiency measures in private residential housing such as:</p> <ul style="list-style-type: none"> <li>• Building envelope: roof, wall and floor insulation, super insulating glazing, controlled mechanical ventilation</li> </ul>

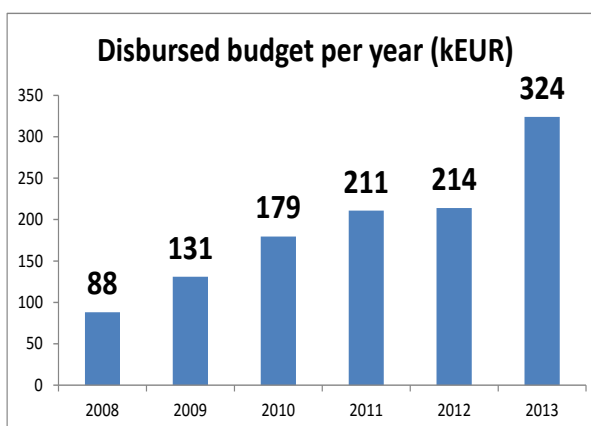


	<ul style="list-style-type: none"> <li>• Equipment: gas condensing boiler, thermostatic controls</li> <li>• The loan covers the costs of the technologies/materials and the installation (labour costs) with an upper limit of € 20,000.</li> </ul>
Type of financial support	<p><b>Zero-interest loans:</b>  Max. amount lent: € 20,000 – a consumption credit  Interest rate: 0%  Maturity: determined by Belgian law  Guarantees: Regional warranty in case of no repayment  Maximum duration: 84 months (7 years)  Maximum monthly instalment: €238.01/month</p> <p><b>Guarantees:</b>  Covering the loss (loan) + administrative costs. Granted after validation of the (subsidy) committee.</p> <p><b>Grants:</b>  The green loan is linked to the regional energy grants for insulation and heating system. See the summary table.  The amount of grant depends on the beneficiary's income (lower income = higher support) and is not related to the energy performance achieved.</p>

#### 4. Results

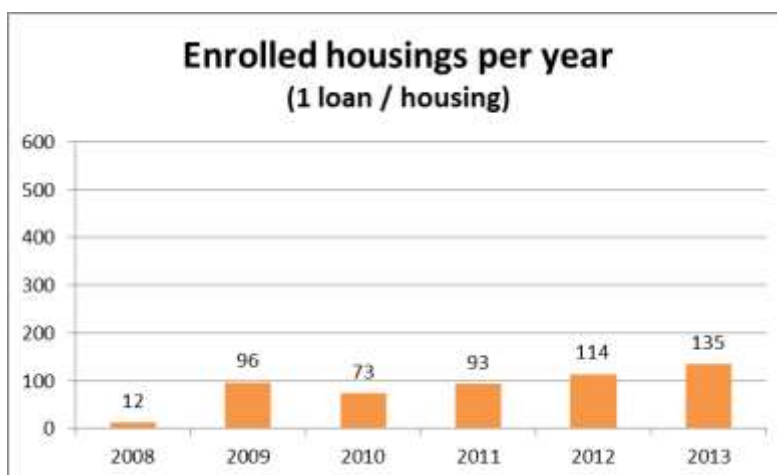
- Total amount of loans disbursed by the bank to date: **€4,524,848**
- Implemented measures comprise:
  - Building envelope : 85%
  - Technical building systems : 15%

The Brussels Green Loan was launched in 2008. The initial objective was to disburse 500 loans per year. However, this objective has not been achieved as between 2008 and 2013 (6 years) only 523 loans have been disbursed. Out of this, only 1 loan has not been repaid.



The scheme was evaluated in 2012 - two surveys have been carried out in order to:

1. **Identify the causes of the scheme's underuse** by eligible beneficiaries. It turned out that 55% of respondents did not know about the scheme. Out of the 45% respondents who knew about it, 82% did not consider applying for a loan for various reasons (mainly because they believed they were not eligible or did not need it) and 18% considered to apply.
2. **Show the beneficiaries' satisfaction** which was extremely encouraging with 90% satisfied users. Statistics showed that the average monthly income of a person benefitting from the scheme was €1,356.



Following the results, Brussels region decided to improve its communication and promotion activities. The first step was to **change the name of the Scheme** from "The Social Green Loan" to more appropriate and

attractive “The Brussels Green Loan”. The second step was to **involve the Energy House** in its activities and assign it a specific mission of a unique front office for applicants.

Brussels Region considers enlarging this instrument thus giving access to loans to all inhabitants of the Region at reduced or zero-interest rate (depending on the income) in the near future and **develop a commercial model of the scheme**.

#### Key success factors

- The Scheme was launched via a public call for projects. Two banks showed interested and one of them (Credal) applied and was selected.

#### Main obstacles

- Scheme management within the regional administration:
  - Specific procedures have to be followed to select the partners (time consuming, strictly supervised, etc.). The project development/improvement takes time.
  - The Green Loan Scheme is one regional project among others and is considered to be a small project for the communication department so it's not a priority. Unsuitable tools have been used to promote the scheme.
- National legislation concerning consumption credits is strict. For instance, advertising is strictly regulated.

### 5. Promotion

After the 2012 survey the name of the scheme changed from “The Social Green Loan” to more appropriate and attractive “Brussels Green Loan”. A new communication campaign was launched. In parallel, a new ‘one-stop-shop’ for citizens was set up – the Energy House – along with 6 local ‘outposts’ in the Region. Energy House experts support potential beneficiaries at every step of their project:

- Measures to be implemented incl. selection of technologies and materials,
- Evaluates applications and analyse them,
- Provides Information about grants and loans,
- Supports the Scheme’s administration

A large advertising campaign included:

- **Displaying big posters** in crowded places (metro stations) - which turned out to be inefficient for this type of “product”.
- **Radio advertisements** - efficient but difficult regarding the legislation on consumption credit (a lot of information must be communicated in the commercial if you want to mention the 0% interest rate)
- **Articles in several publications** - efficient if realized on a regular basis (every two months for example, each time in a different publication).
- **Contacts made with and information provided to opinion leaders/partners** - not efficient as the Green Loan Scheme isn’t their main mission. The Energy House receives an intensive support to develop itself as “front office” for the Green Loan.

#### More information

<http://www.bruxellesenvironnement.be/pretvertbruxellois>

<http://www.credal.be/pretvertbruxellois>

# Regional Investment & Guarantee Fund, Regional Schemes Targeting Private Housing Centre Region, France



2.5 million inhabitants

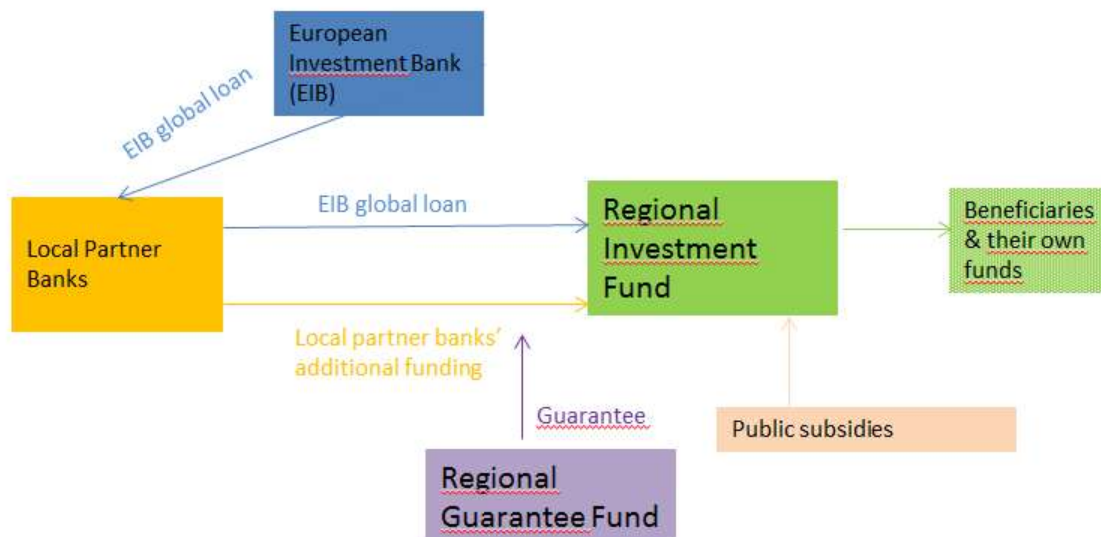
- municipalities and/or municipal companies,
- SMEs & businesses,
- community organisations / associations / NGOs
- private housing owners

- grants
- loans
- guarantees

## 1. The financing scheme at a glance

One of the political priorities of the region Centre in France for the years 2010-2014 was to make out of the region the 'eco-region for all'. After adoption of the Agenda 21, the region started to define its long-term vision and developed a Territorial Climate Plan with an objective to reduce the greenhouse gases emissions on the territory by 40% by 2020. To enable the Climate Plan implementation, the region set up an **'Investment Fund for Green Economy'** and the **'Regional Guarantee Fund'** supporting sustainable energy projects in local authorities in enterprises via **soft loans and guarantees**. It also supports home owners of individual houses and condominiums via soft loans, zero-interest loans and grants.

## 2. Business model - How is the financing scheme implemented?



## Description

The Region aims at supporting renewable energy production and energy renovation of existing buildings via two financing instruments:

### The Investment Fund for Green Economy – ‘Preveo’

Several partner banks contribute to the Investment Fund:

- **The European Investment Bank (EIB)** which is committed to finance 50% of envisaged investments in 2012-2015 by the release of a credit line of € 150 million. This credit line is disbursed by the local partner banks if the project value is lower than € 25 million. For the projects of higher value, an approval of the EIB is necessary.
- **Local partner banks** - Banque Populaire Val de France, Caisse d'Epargne, regional banks Crédit Agricole de la Touraine et du Poitou, Centre Ouest, Centre Loire et Val de France - which will provide additional funding of at least equivalent value.

Leverage of at least **€ 300 million** is thus obtained to encourage decentralized renewable energy production (solar, wind, biomass, geothermal and biogas) on the one hand, and the construction of low energy buildings or energy renovation of existing buildings on the other hand.

### The Regional Guarantee Fund

This Fund was set up in partnership with **OSEO** to support Very Small Enterprises (VSE) and Small & Medium Enterprises (SME). OSEO is a public company which provides financing to French SMEs with the aim to support their creation, growth, innovation, foreign investments as well as creation of new jobs.

Date of creation	2012
Fund size	<u>Initial fund size:</u> The Investment Fund ‘Preveo’: €300 million The Regional Guarantee Fund: unknown  <u>Annual budget:</u> not applicable
Financial sources	<b>The Investment Fund:</b> <ul style="list-style-type: none"><li>- European Investment Bank - €150 million</li><li>- Local commercial banks (Crédit Agricole, Caisse d’Epargne et Banque Populaire) - €150 million</li></ul> <b>The Regional Guarantee Fund:</b> <ul style="list-style-type: none"><li>- Region Centre</li><li>- Oséo</li></ul>
Fund character	Revolving
Operational costs of the scheme	Unknown

## Organisation & partnerships

- **The Region Centre:** takes political decisions, initiates the creation of the Funds, develops strategies and plans, supervises the management of the Funds, contributes to both Funds
- **EIB and local partner banks:** contribute to the Funds, manage and disburse the Funds
- **OSEO:** contributes to and manages the Regional Guarantee Fund

Internally, within the regional administration, the following actors have been involved in the Funds set up and operation:

- **Political committee:** political representatives (vice-presidents) responsible for finance, economic development, environment & energy and innovation
- **Technical committee:** a project team comprised of administrative staff responsible for finance and budget, energy efficiency, legislation
- **Project Director:** responsible for the management of the project team, reporting to the Political Committee and ensuring link between the both committees

### 3. Beneficiaries - How do they benefit from the scheme?

<b>Beneficiaries:</b>	Any client without restriction on the legal status with the exception of physical persons: craftsmen, businesses of all sizes and in all sectors of activity (VSE, SMEs, large companies), local authorities, associations, social housing organisations, etc.
<b>Types of projects:</b>	<ul style="list-style-type: none"> <li>Decentralised renewable energy production in the region: solar, wind, biogas, biomass, geothermal</li> <li>Energy renovation of existing buildings achieving minimum 20% energy consumption reduction</li> <li>Construction of new low energy buildings achieving the label “BBC Effinergie +”</li> </ul>
<b>Type of financial support</b>	<p><b>Soft loans:</b> Loans at preferential rates are offered to beneficiaries. The interest rate is lower than the actual market rates at the date. The interest rates vary depending on the duration of the loan and type of project. The Regional Guarantee Fund significantly improves the financial conditions for the VSE and SME.</p> <p>Other tools set up by the Region to support certain beneficiaries:</p> <ul style="list-style-type: none"> <li>A Mutual Fund</li> <li>Equity investments in SMEs</li> </ul>

#### The beneficiaries follow this procedure:

- **They contact one of the local partner banks** and check whether they are eligible for the financial support.
- If the beneficiary is eligible, the bank helps him establish the most appropriate financing plan, taking into account type of the project and financial situation of the beneficiary. If the project is accepted, the bank offers a soft loan to the beneficiary.

The Regional Guarantee Fund managed by OSEO provides guarantee for 50% of the loan granted by the local partner banks (excluding the EIB loan). The Region implement a simple and practical procedure: no additional action is to be taken by the beneficiaries since the guarantee request will be addressed to OSEO directly by local partner banks.

### 4. Results

The first ‘Preveo’ soft loan was signed in April 2013 between the Caisse d'Epargne and the Beauval ZOO, in partnership with the Centre Region and the European Investment Bank. A loan of €2 million was granted on a total investment of € 2.3 million for the construction of a biogas plant. The Centre Region and OSEO guarantee part of the loan. This project will reduce the gas consumption by 40%, green electricity will be sold to the EDF and fertilizers will be provided to local farmers.

### 5. Promotion

The Region communicates about the funds and other complementary schemes via:

- Brochures, leaflets (see page 21), newsletters, press releases, etc.
- Energy Info Centres (Espaces INFO Energie)
- Website (in French): <http://energies-centre.regioncentre.fr>

## Complementary regional schemes targeting private housing /citizens

Support programme	<b>ENERGETIS: energy audits for housing</b>
Beneficiaries	Any resident - owner or tenant - of a single dwelling located in the Centre region and built before 2001.
Types of projects	Energy audit carried out by an independent professional selected and approved by the Region.
Type of financial support	<b>Grant: €350</b> The total cost of energy audit in 2013 was € 550. The grant is disbursed in form of a cheque that is accepted by the auditor.
More info	<a href="http://energies-centre.regioncentre.fr/home/aides/pour-les-particuliers/energetis.html">http://energies-centre.regioncentre.fr/home/aides/pour-les-particuliers/energetis.html</a>



Support programme	<b>Isolaris'Centre: zero-interest loan for energy renovation of buildings</b>
Beneficiaries	Individual house owners or condominiums
Types of projects	Energy renovation works (incl. wall insulation, solar thermal, geothermal) implemented by a professional craftsman or company under the condition of achieving a certain energy performance.  The support is complementary to the national financing scheme : <ul style="list-style-type: none"> <li>• If renovation works include a package of at least 2 measures, beneficiaries can benefit from the national 'Eco-zero-interest-loan'</li> <li>• If renovation works include one single measure, beneficiaries can apply for Isolaris zero-interest loan</li> </ul>
Type of financial support	<b>Zero-interest loan</b>
More info	<a href="http://energies-centre.regioncentre.fr/home/aides/pour-les-particuliers/Isolaris-Centre.html">http://energies-centre.regioncentre.fr/home/aides/pour-les-particuliers/Isolaris-Centre.html</a>



Support programme	<b>Energy audit for condominiums</b>
Beneficiaries:	Condominiums
Types of projects	Realisation of energy audit under the following conditions: <ul style="list-style-type: none"> <li>• Compulsory convention between the condominium and local 'Energy Info Point' which accompanies the beneficiaries in decision making process</li> <li>• Condominiums respect technical specifications developed by the national energy agency (ADEME) and the Region</li> </ul>
Type of financial support	<b>Grant: up to 40% of total costs (and max. €12,000)</b>
More info	<a href="http://energies-centre.regioncentre.fr/home/aides/pour-les-particuliers/Isolaris-Centre.html">http://energies-centre.regioncentre.fr/home/aides/pour-les-particuliers/Isolaris-Centre.html</a>

### More information

<http://energies-centre.regioncentre.fr/home/aides/pour-les-particuliers/Isolaris-Centre.html>



# The Delft Energy Saving Fund

## Delft, the Netherlands



- private housing owners,
- community organisations / associations / NGOs,



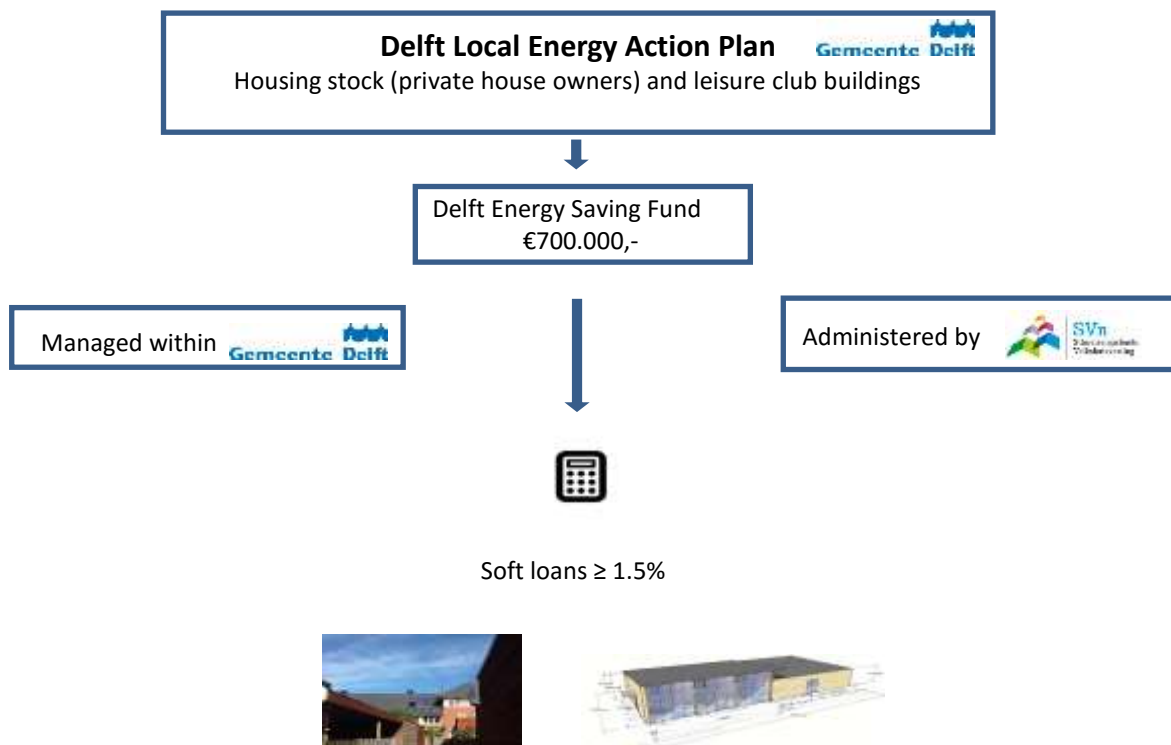
- loans

100,000 inhabitants

### 1. Financing scheme at a glance

Set up by the municipality of Delft in 2006, the Delft Energy Saving Fund is part of a wide range of instruments supporting local projects aimed at energy savings and generating renewable energy. Its creation was enabled by the introduction of the “**Delft financial energy regulation**” - a specific local regulation which was at that moment part of the ‘Delft subsidy regulation’ as required by the Dutch general Administrative Law Act. This fund provides the citizens and non-profit organizations with the possibility to get a **favourable low interest loan of about 1.5%** to invest in renewable energy systems such as heat pump or solar panels and/or energy saving measures. The fund operates as a revolving fund. The payment term equals the pay-back time of implemented energy measures. The fund will revolve after a certain time via the loan payments (credit instalments) flowing back to the Fund.

### 2. Business model - How is the financing scheme implemented?

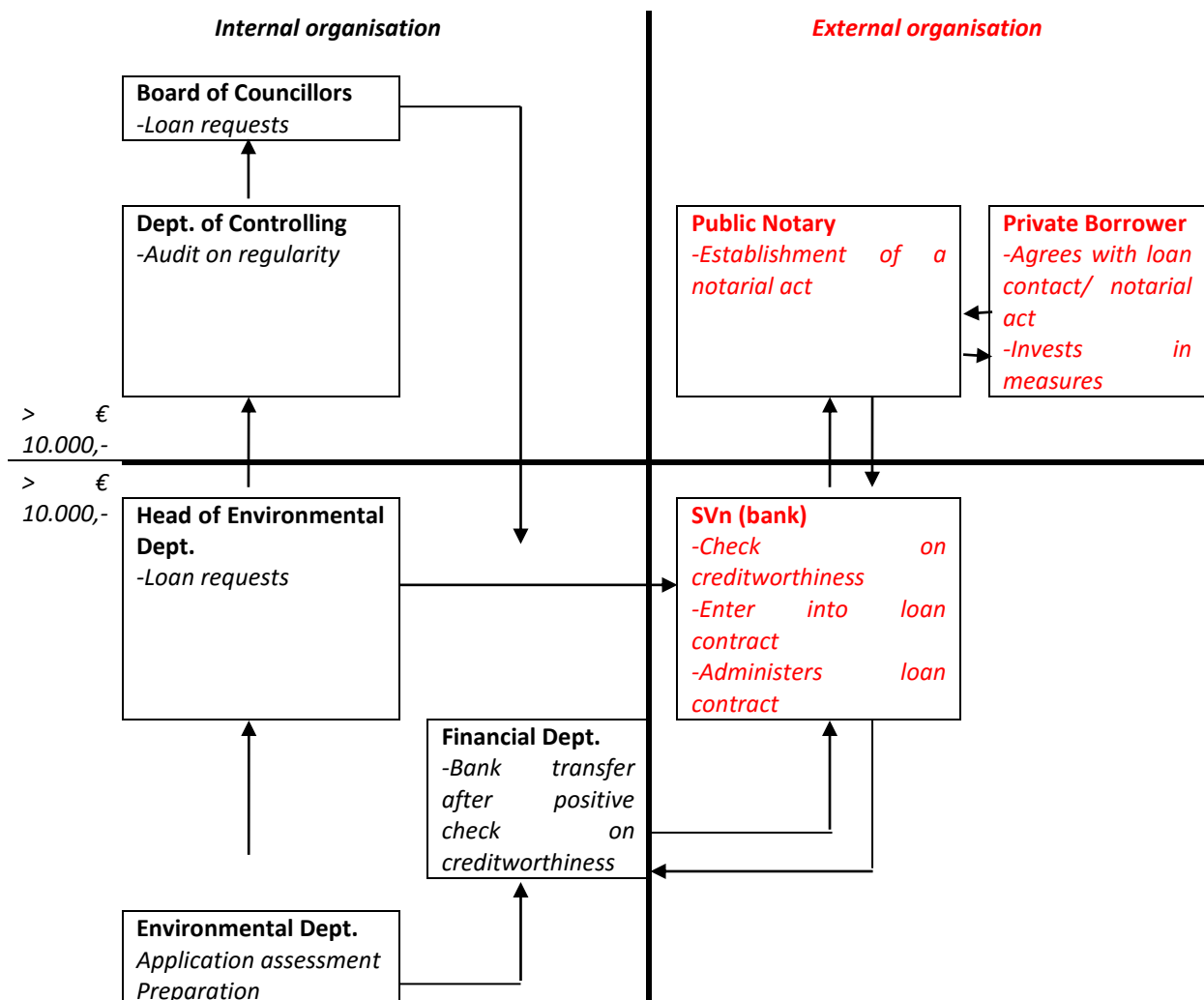


## Description

The Delft Energy Saving Fund is funded 100% by the **Delft municipality** which itself had to borrow the money from the Bank for Dutch Local Authorities. The Fund was launched in 2006 with €200,000 and 2% interest rate provided to beneficiaries. The soft loans scheme is managed by the executing bank - **Stichting Volkhuysvesting Nederland (SVn)**. Municipality pays the bank from the Fund some 1.5% for the management costs. In 2013, some € 500,000 was injected in the Fund and the conditions for the use of the Fund changed. Interest rate offered to beneficiaries is 4 % under the market rate which is in average 1.5% (this is also a fixed minimum rate) for 10 years maturity.

Date of creation	2006
Fund size	<b>Period 2006-2013:</b> a budget of €200,000 approved by the City Council <b>Period 2013-2016:</b> a budget of €500,000 approved by the City Council
Financial sources	Municipal budget
Fund character	Revolving
Operational costs of the scheme	The management fee for the bank is paid from the Fund. Operational costs are part of the operational budget of the Delft Local Energy Action Plan: - Staff: 0.5 full time person, - Communication costs

## Organisation & partnerships





- **The municipality of Delft:** sets up the Delft Energy Saving Fund and decides on policy priorities, beneficiaries and type of financial support. It manages 100% of the Fund and approves eligible projects to be financed by the SVn bank.
- **SVn bank:** administers the loans - checks on creditworthiness, contracts the loans and receives monthly payback.

### 3. Beneficiaries - How do they benefit from the scheme?

<b>Beneficiaries:</b>	Citizens – house owners and non-profit organizations
<b>Type of projects financed:</b>	Energy saving measures Renewable energy heating and green electricity production
<b>Type of financial support provided</b>	<p><b>Soft loans:</b></p> <p>Amount lent:</p> <ul style="list-style-type: none"> <li>• Private house owners: € 1,500 - € 10,000</li> <li>• Non-profit organizations : € 1,500 - € 50,000</li> </ul> <p>Interest rate: 4% below the market rate, with a minimum of 1.5% (this has also been an average for several years)</p> <p>Maturity: 10 years</p> <p>Guarantees: no guarantees (if there's no repayment the Fund value decreases and less projects can be supported)</p> <p>Insurance: not applicable</p> <p>Grace period: not applicable</p> <p>Self-financing: not applicable</p> <p>Maximum monthly instalment: depends on the size of the loan (min. € 14.38/month up to € 480/month (interest + instalment))</p>

### 4. Results

Between 2006 and 2013, 15 households and 1 sports club applied for a loan, at 2.75% interest rate. Since the new conditions apply from 2013 (interest rate 4% below market rate), another 7 applications were granted (6 households and 1 sports club).

In the period August 2010 – July 2013 the Delft soft loans scheme was combined with a subsidy system. Private house owners could receive subsidy when they reduced their energy consumption by more than 10% (measured by an EnergyIndex). The maximum subsidy could reach 50% of investment with a maximum of € 1,850. Since the 'Delft subsidy regulation' was cancelled after July 2013, the amount of applications for the soft loans increased.

#### Key success factors

- The main obstacle remains the awareness of house owners who are not convinced that investing in energy saving measures is profitable.
- For Delft, it was a success to find a legislative solution for the creation of the soft loans scheme. In 2006, the revolving fund was part of the 'Delft subsidy regulation'. In 2008 a national law obliged Delft to adopt a new regulation which did not cover the Fund as it was not providing subsidies. It took 5 years to convince the Controlling department that the low interest loan is a kind of subsidy, so since 2013 the Fund is under the Subsidy regulation again.
- Another challenge for the Environmental department was to convince the Controlling and Financial department to set up the revolving fund although it makes the municipality's balance sheet more complex.

- Nowadays there are even several revolving funds within the municipality. Due to the economic crisis the city council found out that revolving funds make it possible to achieve a maximum result with limited budget.

## 5. Promotion

- In 2006 the city launched a wide communication campaign but realised it was quite difficult to promote a loan (as a municipality, do you want your citizens to have debts?) - it was not a success. There is no **specific communication plan** for promoting the Delft Energy Saving Fund. Together with the former subsidy regulation, the Fund is promoted within the Delft Climate Plan.
- In 2009, a campaign **Bring Energy in Your House** was launched. Energy saving advisors and suppliers of energy saving materials visited all Delft neighbourhoods and as a result the municipality noticed extra interest for the soft loans.
- The **most powerful communication tools** were internet and meetings in the neighbourhoods. The City of Delft also has a website 'EnergieLoket' dedicated to energy savings and it's combined with a back-office. It is an important instrument to reach Delft inhabitants and SMEs. During the campaign Bring Energy in your House, the EnergieLoket functioned as the communication portal and informed inhabitants about both - the subsidies and soft loans scheme



## More information

[www.energieloket.info](http://www.energieloket.info) (in Dutch)

[www.delft.nl/Gemeenteloket/l/Lening\\_Energiebesparingsfonds](http://www.delft.nl/Gemeenteloket/l/Lening_Energiebesparingsfonds) (in Dutch)

[www.svn.nl/producten/Duurzaamheidslening/Delft/Paginas/HoeKomJeInAanmerking.aspx](http://www.svn.nl/producten/Duurzaamheidslening/Delft/Paginas/HoeKomJeInAanmerking.aspx) (in Dutch)

# The KredEx Revolving Fund

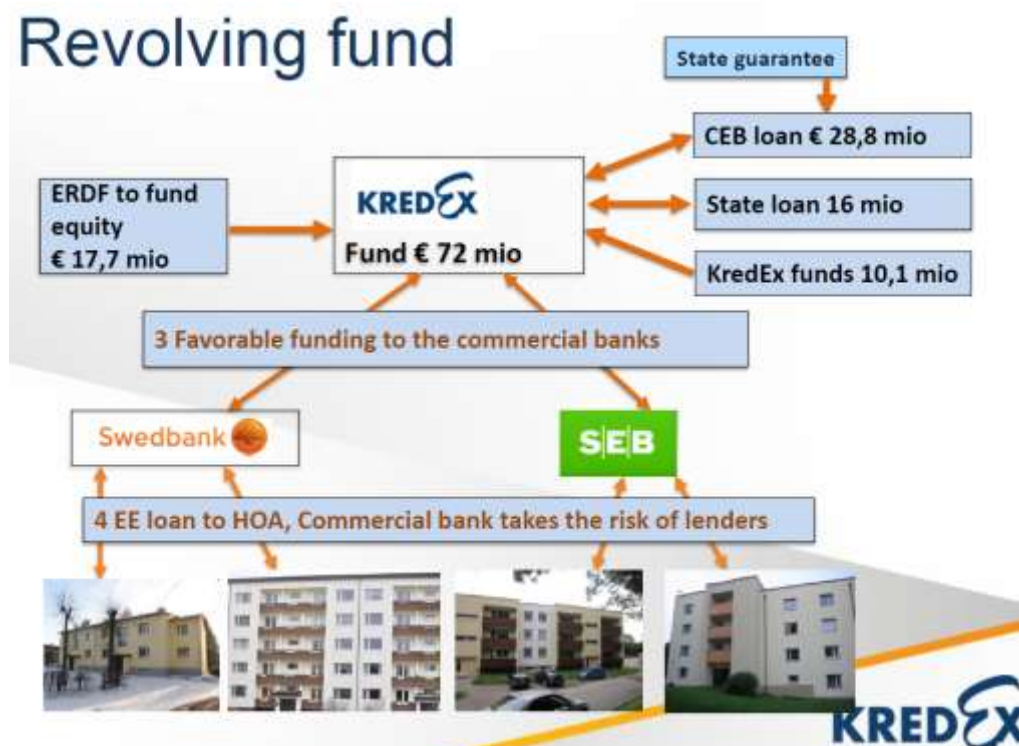
## Estonia



### 1. The financing scheme at a glance

Most buildings in Estonia are energy inefficient. The average annual heating energy used in the buildings today is about 200 kWh/m<sup>2</sup> compared to the industrial nations with a similar climate which is about 150-230 kWh/m<sup>2</sup>. Energy refurbishment loans for citizens, in particular multi-family apartment buildings, are available in Estonia since 2002. In 2009, a **KredEx Revolving Fund** was set up by KredEx - a financing institution that operates as a private company but is owned and governed by the national government – Ministry of Economic Affairs and Communications. KredEx Revolving Fund provides **soft loans for multi-family apartment building owners** who wish to reduce energy consumption and increase energy efficiency of their homes. Further financial sources, coming in particular from the EU structural funds (ERDF) and the sale of CO<sub>2</sub> emissions allowances are available for the owners in form of **grants**.

### 2. Business model - How is the financing scheme implemented?



## Description

In 2007 KredEx came up with the idea to set up a Revolving Fund, inspired by the KfW (German public bank) housing energy refurbishment programme. It eventually managed to get a political support from the Ministry of Economic Affairs and Communications and Ministry of Finance and the first negotiations with potential investors could start.

The following **public and private institutions decided to contribute to the capital of the Fund**, which was at that time considered quite risky (no other country in Eastern Europe had similar experiences):

- **The Council of Europe Bank (CEB)** – provided a loan of €28.8 M. It was selected out of several international financial institutions' offers as it proposed the most interesting interest rates. The loan has to be paid back.
- **Estonian government** – provided a loan of €16 M (in 2013). The loan has to be paid back.
- **KredEx** – provided €10.1 M from the profits of its financial operations.
- **European Regional and Development Fund (ERDF)** – the European Commission agreed that the state of Estonia allocates €17.7 M via the ERDF which was a result of difficult negotiations (at that time housing was eligible for the ERDF financing under very difficult terms and EU funds were mainly disbursed as grants not loans).

The Fund was set up in 2009 with the initial capital of €49 M. In 2013, the capital was increased up to €72.6 M.

**The KredEx staff costs** related to the setting up of the Fund were quite low (€200,000) comparing to the final value of the Fund. KredEx kept these costs low as nearly whole expertise is available 'in-house' (no external consultants needed). However, the staff costs were significantly increased due to difficult negotiations with the European Commission (in relation to the use of the ERDF). They would be even higher if the Fund was managed by the European Investment Bank as is the case in the frame of the JESSICA initiative. KredEx operational costs are not very high neither as the partner banks manage the loans. It would not be the case if KredEx had to disburse the funds in form of grants - this would require more internal administration.

<b>Date of creation</b>	2009
<b>Fund size</b>	<u>Initial fund size:</u> €49 million (2009) increased up to €72.6 million in 2013. For the moment no further funding is foreseen.  <u>Annual budget:</u> not applicable
<b>Financial sources</b>	<ul style="list-style-type: none"> <li>• European Structural Funds (European Regional Development Fund) – €17.7 million (25%)</li> <li>• CEB loan - €28.8 million (40%)</li> <li>• State loan – €16 million (22%)</li> <li>• KredEx funds – €10.1 million (13%)</li> </ul>
<b>Fund character</b>	Revolving
<b>Operational costs of the scheme</b>	<ul style="list-style-type: none"> <li>• KredEx staff costs – related to the setting up of the scheme (preparation, negotiations, etc.): €200,000 for two years</li> <li>• KredEx operational costs – related to the running of the scheme: €50,000 / year -&gt; 1 full-time person equivalent (lawyers, accounting, marketing, etc.)</li> <li>• Promotion of the scheme: €150,000 / year</li> </ul> <p><i>KredEx covered its risks within the contracts with banks, so it did not foresee any incidental costs</i></p>

## Organisation & partnerships

- **KredEx** – is a financing institution set up by the Ministry of Economic Affairs and Communications. It's acting as a private company. Its financial experts were responsible for the design of the scheme (terms, beneficiaries, etc.), negotiations with the partners (CEB, European Commission, local commercial banks) and relations with the beneficiaries of the Fund (Builders associations, Union of Housing Associations) together with the representatives of the above mentioned Ministry.

- **CEB** – provided the loan to KredEx and thus contributed to the initial capital of the Fund.
- **State / Ministry** – took a political decision to create the Fund and use the ERDF for this purpose. It also provided a loan to KredEx.
- **Local commercial banks (SEB, Swedbank)** – manage the loans, take decisions on the projects that will be financed, bear the full risk (non-payments) together with final beneficiaries. Swedbank covers up to 75% of the Estonian financial market for multi-apartment buildings. The banks’ main motivation was to get access to more clients (especially in the beginning of the financial crisis). They have also had very good experiences with financing energy refurbishment of multi-family buildings prior to 2009 (reliable clients, no late payments or payment defaults).
- **Builders associations & Union of Housing Associations** – get information about the Fund but do not actively participate in the set-up of the financing scheme.

Tender for the commercial banks was based in the following **selection criteria**:

- Rating
- Respond to credit institutions’ act and have license
- Budget over 1 billion euro
- Bank has at least 1 year experience with financing multi-apartment buildings
- Bank accepts loan-maturity for 20 years and fixed interest rate for 10 years

### 3. Beneficiaries - How do they benefit from the scheme?

The objective is to finance energy refurbishment of multi-apartment buildings of at least 3 apartments built before 1993 via **soft loans** at interest rate fixed for 10 years. The beneficiaries are supposed to pay their monthly instalments from the savings made on their energy bills. Energy savings must achieve at least 20% for the buildings up to 2000 m<sup>2</sup> or 30% for bigger buildings.

The financing scheme also offers a **grant component** for:

- Independent energy audit (including monitoring after the renovation) and project design documents which are compulsory
- Grant for reconstruction depending on the level of energy savings achieved

The grants are not paid from the KredEx Revolving Fund but from a **separate budget** coming from the ERDF (€ 3 M) and the sale of CO<sub>2</sub> emission allowances by Estonia to Luxembourg and in the European trade market (€ 40 M).

<b>Beneficiaries</b>	Multi-family buildings owners
<b>Types of projects</b>	Energy efficiency measures in multi-apartment residential buildings
<b>Type of financial support</b>	<p><b>Combination of:</b></p> <ul style="list-style-type: none"> <li>• <b>Grant for energy audit and project design documents (50%)</b></li> <li>• <b>Grant for reconstruction (&lt;35% – do more get more!)</b></li> </ul> <p><b>15%</b></p> <ul style="list-style-type: none"> <li>• fulfill the terms for renovation loan,</li> <li>• energy saving 20 or 30%, according to the size of the building</li> <li>• Energy label E, energy consumption &lt; 250 kWh/m<sup>2</sup></li> </ul> <p><b>25%</b></p> <ul style="list-style-type: none"> <li>• roof, facade, windows (U 1,1) heating system,</li> <li>• energy saving at least 40%</li> <li>• Energy label D, energy consumption &lt; 200 kWh/m<sup>2</sup></li> </ul> <p><b>35%</b></p> <ul style="list-style-type: none"> <li>• roof, facade, windows (U 1,1) heating system, heat-recovery ventilation system,</li> <li>• energy saving at least 50%</li> <li>• Energy label C, energy consumption &lt; 150 kWh/m<sup>2</sup></li> </ul>
<b>Type of financial support</b>	<ul style="list-style-type: none"> <li>• <b>Loan for reconstruction (&lt;85%)</b></li> </ul> <p><b>Max. amount lent:</b> 1.35 M per building (banks’ requirements)</p>

**Interest rate:** 3,5% (2013), before up to 4,5% fixed for 10 years, average 4%; fixed interest rate  
**Maturity:** up to 20 years, annuity loan (average maturity = 17 years)  
**Guarantees:** No collateral is needed, credit against cash flow  
**Insurance:** building should be insured during the loan period  
**Grace period:** 1 year  
**Self-financing:** 15% (grant or own funds or loan)  
Maximum monthly instalment: no limit (banks' decision)

## Average loan amount €/building



## 4. Results

In 2009, when the Fund was launched, KredEx' objective was to finance at least 1,000 buildings. By the end of 2013, 798 buildings were renovated as follows:

- 415 buildings used reconstruction grant and KredEx soft loan,
- 185 buildings used only KredEx loan,
- 198 buildings used only reconstruction grant.

The home owners' interest in the scheme grew in 2010 when a renovation grant was introduced.

The whole budget (€ 72.6 M) has been nearly spent in the beginning of 2014. However, about 20,000 buildings in Estonia would need to be refurbished. Further increase of the KredEx Revolving Fund capital is not foreseen for the moment.

The scheme is also linked to the EU Cohesion Policy rules – the ERDF budget has to be spent by the end of the programming period 2007-2013 (+2 years). If the State takes a political decision, further ERDF funds could be invested in the Fund in 2014-2020.

### Example: Sõpruse pst 202, Tallinn

- 11 375 m² (162 ap. 2012-2013)
- Investment € 2 062 000, 181 €/m²
- Grant 35% € 721 600, 63 €/m²
- Credit € 1 340 000, 20 years
- Expected savings 65% –500 MWh

- Triple windows
- Brought to the frontage of facade
- Heating system
- Ventilation system
- Facade, roof





### Key success factors

- Political decision by the Ministry of Economic Affairs and Communications to create the Fund was crucial.
- The Fund is revolving so the loan instalments go back to the Fund. However, the CEB and State loans have to be paid back first.
- Legal framework supporting the functioning of the Fund was already in place as since 2002 it has been possible for multi-apartment buildings to take a loan from commercial banks against cash flow (no collateral needed).
- Combination of different financing options (soft loan + grant) and an incentive for high energy savings via higher financial support are a key to success.

### Main obstacles

- Preparation took a long time – 2 years.
- Many different partners to negotiate with (international banks, local ministries, local commercial banks) – this has to be done in parallel!
- Even with active awareness raising and marketing activities targeting final beneficiaries, it takes couple of years for them to be as active as you expect.
- No actual opportunity to persuade end-beneficiaries, only raise awareness and motivate.
- Economic situation in the country can change dramatically and influence the behaviour of end-beneficiaries.

## 5. Promotion

- Campaigns since 2006
- Info days/seminars/workshops - to end beneficiaries, builders, energy auditors, project designers, municipalities
- Advertisements in newspapers/magazines
- Internet (website, banners, news, articles)
- Direct mails
- Leaflets/booklets
- Cooperation with banks
- Energy week (since 2010)



### More information

[www.KredEx.ee](http://www.KredEx.ee)

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## A semi-public company: SEM Energies Posit'IF Ile de France Region, France



### 1. The financing scheme at a glance

Energy consumption is one of the major challenges for the inhabitants of the Ile-de-France region where 700,000 people see themselves spending more than 10 % of their revenues on energy bills. Energy prices have increased by 30% in ten years while 94% of this energy comes from non-renewable energy sources produced outside the region. In 2013, the Ile-de-France Region took a strong political decision and launched a **public-private operator** whose aim is to **facilitate energy renovation of multi-residential buildings (condominiums) and social housing organisations**, deployment of renewable energy technologies and innovative financing. The operator has a status of a **semi-public company** (in French: Société d'Economie Mixte – SEM) called **Energies POSIT'IF**. The status of a semi-public company requires 51 to 85% of the capital to be held by public authorities and at least one private person to contribute to the capital (this can be another SEM).

Energies POSIT'IF proposes a global solution for condominiums and social housing operators - organisational, legal, financial and technical engineering services tailor-made for each building and type of owner. In some cases the SEM can provide financing for the approved projects. In technical terms, the renovations aim at achieving the label « BBC Effinergie rénovation » (low energy retrofit) which is 104 kWhep /m<sup>2</sup> / year in Ile-de-France.

### 2. Business model - How is the scheme implemented?

#### Description

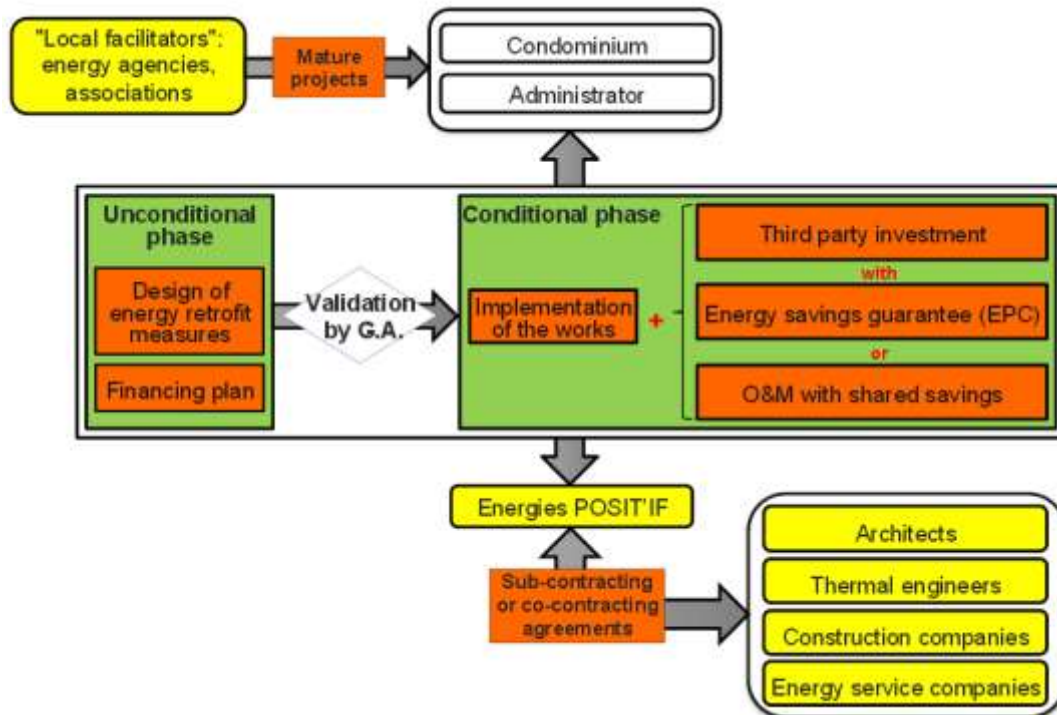
**SEM Energies POSIT'IF** is a semi-public company endowed with a starting capital of **€5.32 million**. The contributing shareholders are:

- **Public authorities:** 11 local and regional authorities and 3 inter-municipal energy management cooperation organisations (85 %)
- **Private partners:** 2 financial institutions - la Caisse des Dépôts et Consignations et la Caisse d'Épargne Île-de-France (15 %)

**The objective of the SEM** is to accompany the condominiums and social housing organisations in various phases of ambitious energy renovation projects and providing them with **organisational, technical, legal and financial engineering services**.

**La SEM guarantees the energy performance of the building** after renovation and, in some cases; it pre-finances a part or a whole investment while securing its own financial sources via a bank loan.

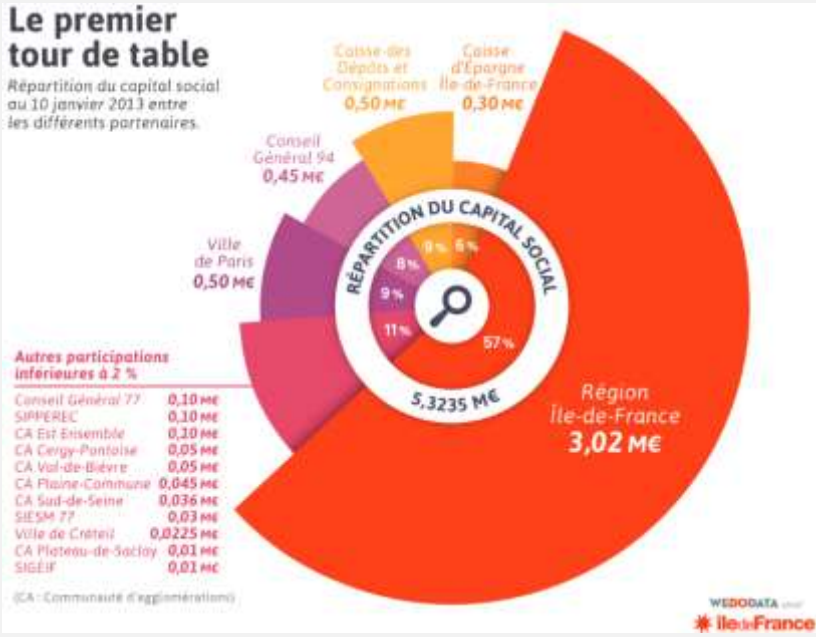




In terms of financings, there are **two cooperation models** between the condominiums and the SEM:

1. **SEM provides its financial engineering services to the condominiums.** It develops a global financing plan for the building energy renovation which consists of individual financing plans adapted to each home owner. Individual financing plans can include self-financing of the apartment owners, grants and subsidies (national, regional or local) for which they are eligible and a bank loan. Condominiums can also take a collective loan involving all interested home owners. The condominiums are in direct relation with the banks via a globally structured contract. They pay the SEM for the renovation works as well as a fee to for its services. The SEM acts as an intermediary between the condominiums and technical partners that carry out the renovation works (e.g. the SEM pays the suppliers for the works). However, it does not provide any additional financial sources.
2. **SEM provides its financial engineering services and additional financing sources to the condominiums.** In this case, the SEM develops a global financing plan for the condominiums; it seeks the third-party financing sources (in form of a bank loan) on behalf of the condominiums and provides them with additional financial sources from its own budget. It acts as an intermediary between the condominiums, technical partners and banks. The condominiums are in direct contact only with the SEM, they pay monthly (or semestrial) instalments and a service fee to the SEM. The SEM then pays back to the banks.

The beneficiaries reimburse the renovation costs through regular payments (instalments) which take into account the financial savings generated thanks to reduced energy consumption. However, the payments are not always equal or lower than the financial savings achieved. The condominiums may decide to pay higher instalments and so shorten the pay-back period or, in some cases, the instalments are high due to too high renovation costs that include measures that do not generate (or generate too little) energy savings.

Date of creation	2013																						
Capital	<u>Initial capital:</u> €5.3 million for the period 2012-2014 In the long term (2014-2020), the capital should be increased up to €15.5 million <u>Annual budget:</u> no annual budget allocated to the SEM																						
Financial sources	Region Ile-de-France, the city of Paris, nine local authorities, three inter-municipal energy management cooperation organisations, deux banques - la Caisse des Dépôts et Consignations et la Caisse d'Epargne Ile-de-France   <p><b>Le premier tour de table</b> Répartition du capital social au 10 janvier 2013 entre les différents partenaires.</p> <p><b>RÉPARTITION DU CAPITAL SOCIAL</b> 5,3235 ME</p> <ul style="list-style-type: none"> <li>57% Région Ile-de-France 3,02 ME</li> <li>8% Caisse des Dépôts et Consignations 0,50 ME</li> <li>6% Caisse d'Epargne Ile-de-France 0,30 ME</li> <li>8% Conseil Général 94 0,45 ME</li> <li>9% Ville de Paris 0,50 ME</li> <li>11% Autres participations inférieures à 2%</li> </ul> <p><b>Autres participations inférieures à 2 %</b></p> <table border="1"> <tr><td>Conseil Général 77</td><td>0,10 ME</td></tr> <tr><td>SUPPEREC</td><td>0,10 ME</td></tr> <tr><td>CA Est Ensemble</td><td>0,10 ME</td></tr> <tr><td>CA Cergy-Pontoise</td><td>0,05 ME</td></tr> <tr><td>CA Val-de-Bievre</td><td>0,05 ME</td></tr> <tr><td>CA Plaine-Commaire</td><td>0,045 ME</td></tr> <tr><td>CA Sud-de-Seine</td><td>0,036 ME</td></tr> <tr><td>SIEM 77</td><td>0,03 ME</td></tr> <tr><td>Ville de Cretail</td><td>0,0225 ME</td></tr> <tr><td>CA Plateau-de-Saclay</td><td>0,01 ME</td></tr> <tr><td>SIGEIF</td><td>0,01 ME</td></tr> </table> <p>(CA = Communauté d'agglomérations)</p> <p>WEDODATA Ile-de-France</p>	Conseil Général 77	0,10 ME	SUPPEREC	0,10 ME	CA Est Ensemble	0,10 ME	CA Cergy-Pontoise	0,05 ME	CA Val-de-Bievre	0,05 ME	CA Plaine-Commaire	0,045 ME	CA Sud-de-Seine	0,036 ME	SIEM 77	0,03 ME	Ville de Cretail	0,0225 ME	CA Plateau-de-Saclay	0,01 ME	SIGEIF	0,01 ME
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CA Plateau-de-Saclay	0,01 ME																						
SIGEIF	0,01 ME																						
Fund character	Revolving																						
Operational costs of the scheme	Unknown																						

## Organisation & partnerships

### SEM Energies Posit'IF:

- Employs the staff of four – a director, technical expert, financial expert, project manager
- Coordinates different partners and companies carrying out the renovation works (architects, consultancies, construction companies and craftsmen).
- Develops technical and financial plans for each renovated building, making sure all legal aspects and individual owners' needs are taken into account.
- Seeks third-party financing and pre-finances certain projects.
- Establishes cooperation with various partners who wish to support the activities carried out by the SEM (professional organisations and associations, public authorities, local and regional energy agencies, etc.).

### SEM Board of Directors:

- Consists of 3 persons – SEM director, technical and financial expert
- Takes decisions on the investments

### SEM shareholders: depending on the capital invested, shareholders are represented in:

- The Supervisory Board which defines the SEM strategy, priorities and budget.
- The Investment Committee which gives its opinion on the large projects submitted to the committee by the Board of Directors if the total investment exceeds a certain threshold.

**Stakeholders:** Structured partnerships have been developed with professional stakeholders in:

- The building sector – with companies that meet the necessary qualification, expertise and commitment criteria for ensuring the quality of energy retrofits such as QUALIBAT or the “Renovactif”- association supported by the Fédération Française du Bâtiment.
- The energy efficiency and renewable energies sectors: CLER, Syndicat des Energies Renouvelables.

Today, architects and engineering companies contact SEM Energies Posit’IF spontaneously to provide joint offers to condominiums.

**Key figures**

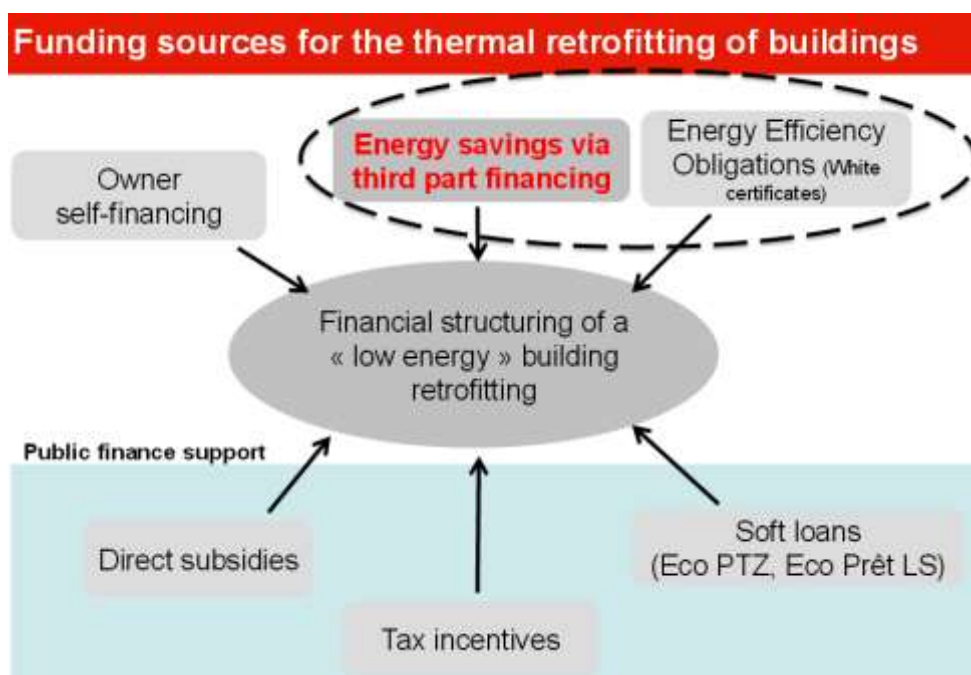
- Average cost of works per condominium is €3 million.
- Number of contracts signed with condominiums per year: 10 to 15 -> objective to refurbish 1,000 housing units in 2014
- Total contracts value over 3 years: €60 to 90 million
- Contracts duration: 15-30 years
- Internal Rate of Return in multifamily buildings: 4-9% over 15-20 years

**3. Beneficiaries - How do they benefit from the scheme?**

<b>Beneficiaries</b>	Residents, social housing operators
<b>Types of projects</b>	<ul style="list-style-type: none"> <li>• <b>Deep renovation of residential multifamily buildings and social housing</b></li> <li>• <b>Renewable energy heating and green electricity production</b></li> </ul>
<b>Type of financial support</b>	<p><b>Soft loans</b>            Amount lent: between 20,000 – 30,000 per apartment  <b>Interest rate: 3.5-4.5%</b>            Maturity: 15-20-25 years            Guarantees: legal guarantee imposed by law            Insurance: no insurance screening of individual owners            Self-financing: 100% of investment can be covered by the loan (financial contribution from beneficiaries is not compulsory)            Maximum monthly instalment: variable, depending on each project</p>

**A financing plan** usually looks like this:

- Owners’ self-financing (incl. individual or collective loans): 50%
- Financing from Energies Posit’IF: 35%
- Grants (incl. sale from energy saving certificates) pre-financed by Energies Posit’IF: 15%



## 4. Results

- In February 2014, a condominium “Verrières Joli Mai” in Meudon-La-Forêt is the first one to sign a first-phase contract with SEM Energie Positif. The five concerned buildings consist of **904 apartments** and expected energy savings should achieve 40%. Another condominium of **216 apartments** in Chelles is about to be refurbished with expected energy savings of 60%. In total, these two investments are worth **€10 million**.
- Six other condominiums of **500 apartments** plan to sign the contract with SEM in 2014. The potential investment reaches **€12.5 million**.
- Finally, about 15 more condominiums of about 2,700 apartments showed interest to cooperate with the SEM and are now in the first phases of the project preparation (energy audit, consultations with energy advisors). The investment could reach **€75 million**.

### Key success factors

- **Strong political decision** of the initiator (region Ile-de-France) and its partners to launch and continuously support the SEM.
- **Continuous dialogue with national public authorities** (ministries, national energy and environment agency – ADEME, members of Parliament, etc.) interested in the SEM creation and operation that allowed for overcoming certain legislative and fiscal barriers hindering the energy renovation in condominiums and social housing.
- **Presence of crucial actors on the concerned territory** such as local energy info points or consultants and local energy agencies which hugely facilitate the project promotion, awareness raising of home owners and first phases of the project implementation (technical advice, energy audits, etc.)

## 5. Promotion

- **Partners** - Local energy info points, local energy agencies and SEM partners
- **Meetings** with national institutions
- **Leaflet** for final beneficiaries (in French): [http://www.energiespositif.fr/wp-content/uploads/2014/03/Energies-POSITIF-2014\\_plaquette.pdf](http://www.energiespositif.fr/wp-content/uploads/2014/03/Energies-POSITIF-2014_plaquette.pdf)
- **Website:** [www.energiespositif.fr](http://www.energiespositif.fr) (in French)
- Newsletters: [www.energiespositif.fr/?page\\_id=450](http://www.energiespositif.fr/?page_id=450) (**bi-monthly, in English and French**):

### More information

[www.energiespositif.fr](http://www.energiespositif.fr)

# JESSICA Holding Fund Lithuania

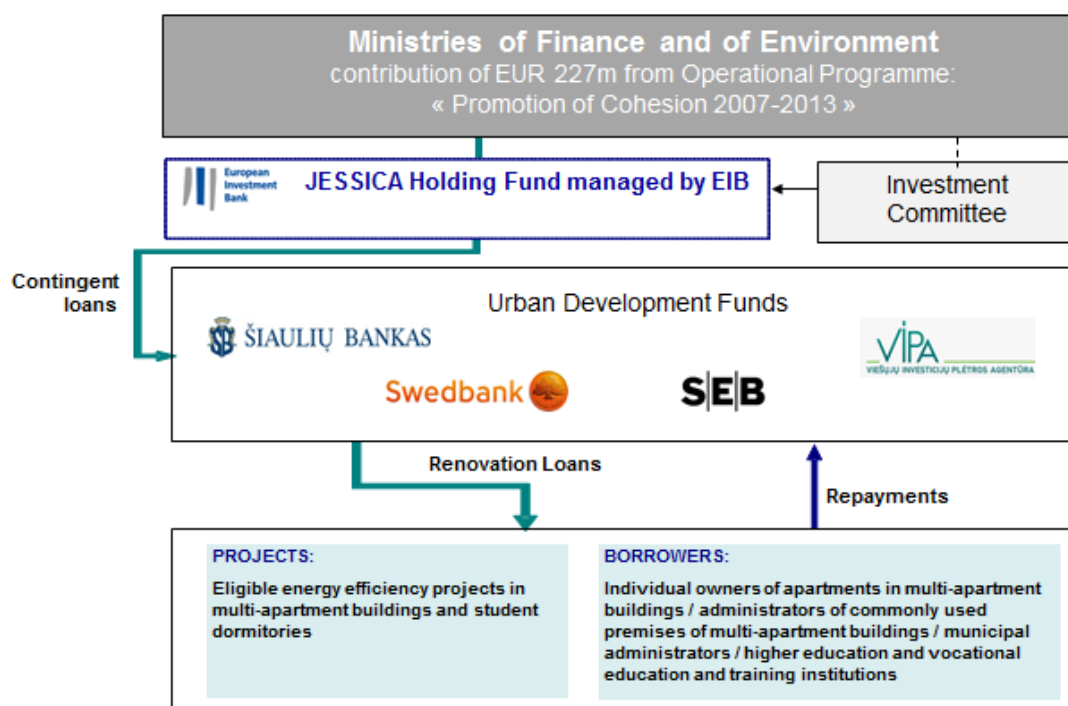


## 1. The financing scheme at a glance

In Lithuania, there are more than 38,000 multi-apartment blocks and 24,000 (more than 800,000 apartments) of them need to be refurbished. 66 % of population lives in multi-apartment buildings built before 1993 with average energy consumption of about 160 kWh/m<sup>2</sup>. Apartments are 97% privately owned, only 3% represents municipal rental stock. 65% of multi-apartment buildings are served by district heating systems and average energy savings of 50% have been achieved in multi-apartment buildings renovated under the governmental renovation programme.

The Lithuanian government's **JESSICA Holding Fund (Fund)** was established by signing an agreement between the Ministry of Finance, the Ministry of Environment of Lithuania and the European Investment Bank (EIB) in June 2009. The JESSICA Holding Fund size is € 227 million. The Fund aims at providing loans and grants to residents for energy refurbishment of multi-family residential buildings and Lithuanian higher education and vocational training institutions for the renovation of student accommodation.

## 2. Business model - How is the financing scheme implemented?



Date of creation	2009
Fund size	€227 million
Financial sources	<ul style="list-style-type: none"> <li>European Structural and Cohesion Funds (European Regional Development Fund) – Operational Programme ‘Promotion of Cohesion 2007-2013’ -&gt; € 127 M = 56%</li> <li>The Lithuanian national co-financing (contribution funded from the EIB framework facility signed with the Ministry of Finance in early 2009 as co-financing for Lithuania’s overall 2007-2013 Cohesion funding programme) -&gt; € 100 M = 44%</li> </ul>
Fund character	Revolving
Operational costs of the scheme	Confidential

### Organisation & partnerships

- **Ministries of Finance and of Environment:** contribute to the Fund with national co-financing and European Regional Development Fund. They appoint the members of the “Investment Committee” which is supervising the Fund manager.
- **EIB** (selected without procurement procedure): manages the Fund. It carries out important analytical tasks and prepares legal and technical procedures such as:
  - Pursuit of the investment strategy;
  - Develop financial products;
  - Preparation of selection criteria and selection of Urban Development Funds (UDFs) / financial intermediaries, negotiation and signing agreements with UDFs;
  - Monitoring and control of JESSICA operations;
  - Review of the relevant EU and national legal acts.
- **Financial intermediaries aka Urban Development Funds:** assess creditworthiness, verify projects compliance, award, administer and report on loans.
- **Housing and Energy Saving Agency (HESA):** provides the following services facilitating multi-apartment buildings renovation:
  - Consults with apartment owners, administrators, municipalities and other interested parties;
  - Prepares and promotes standardised structural and design elements for renovation projects;
  - Evaluates, supervises and approves technical aspects of the renovation projects;
  - Administers state supports mechanisms;
  - Liaises with the Fund intermediaries in Lithuania on project compliance issues.
- **Administrators of common used premises of the multi-apartment buildings:** submit project proposals on behalf of multi-family buildings residents.
- **Higher education and vocational training institutions:** submit project proposals in case of dormitories renovation.

### 3. Beneficiaries - How do they benefit from the scheme?

Beneficiaries	Home owners and students
Types of projects	Energy efficiency measures including renewable energy
Type of financial support	<b>Soft loans</b> <u>Multi-apartment buildings renovation:</u> Amount lent: no limits defined Interest rate: fixed for entire loan period at 3% p.a. Maturity: up to 20 years Guarantees: no third party guarantee requirements Insurance: no loan insurance requirements Grace period: 2 years, during construction
Type of financial support	Self-financing: financial intermediary may require a down payment (not more than 5%) Maximum monthly instalment: determined for each multi-apartment building

	<p><u>Student dormitories renovation:</u>  Amount lent: no limits defined  Interest rate: fixed for entire loan period at 3% p.a.  Maturity: up to 20 years  Guarantees: no third party guarantee requirements  Insurance: no loan insurance requirements  Self-financing: financial intermediary may require collateral depending on the risk level of final recipient  Maximum monthly instalment: 15% of total investment into energy efficiency measures</p> <p><b>Grants</b></p> <p><u>Multi-apartment buildings renovation:</u></p> <ul style="list-style-type: none"> <li>• 100% grant to prepare renovation documentation (from national funds)</li> <li>• Exceptional 100% subsidy on all expenses for low-income persons</li> <li>• 15% JESSICA loan rebate for where minimum energy efficiency level is met (class "D" level, heat energy consumption is reduced at least by 20% ) + 25% grant from Climate Change Programme, i.e. sale of assigned amount units (AAUs) (in case energy efficiency class D is achieved and heat energy consumption is reduced at least by 40%)</li> </ul> <p><u>Renovation of student dormitories:</u></p> <ul style="list-style-type: none"> <li>• Grants in a form of investment for energy efficiency measures – up to 15% of the costs</li> <li>• Grants for non-energy efficiency measures – up to 15% of the costs</li> </ul>
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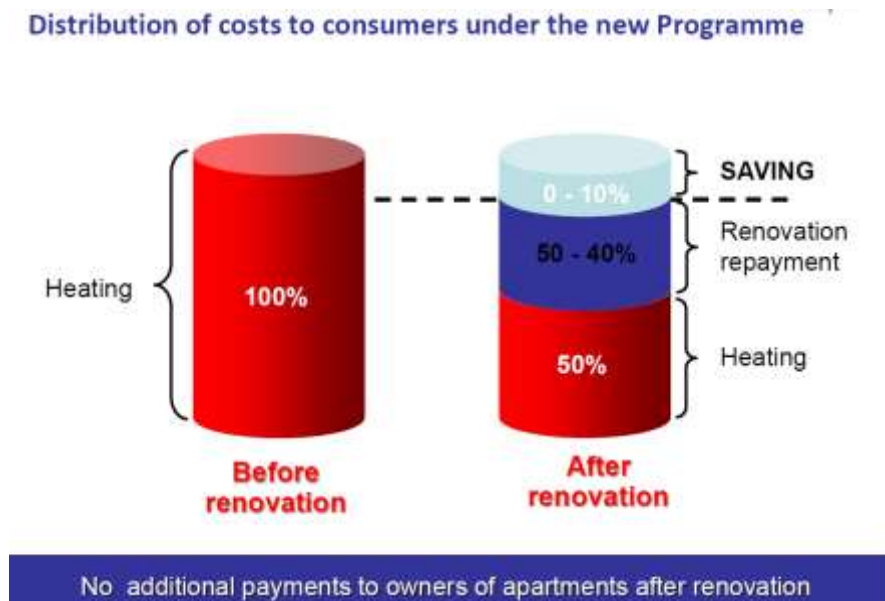
Several features, such as borrowers, interest rate or maximum monthly instalment of renovation loan are specified in legal acts. However, main financial parameters of renovation loan had been listed in JESSICA calls for expression of interest to select financial intermediaries.

**Beneficiaries of multi-apartment buildings renovation can opt for two procedures:**

1. **Home-owners on their own initiative prepare investment projects**, take loans and implement renovation works:
  - Projects are implemented by the Administrator appointed by the home-owners.
  - Loan is taken by the Administrator on behalf of home-owners.
  - Home-owners together with Administrator are organising procurement.
2. Investment projects are implemented based on the **Energy Efficiency Programme approved by the municipalities**
  - Investment projects are initiated by the municipalities.
  - Projects are implemented by the Programme Administrator appointed by the municipality.
  - Loan is taken by the Programme Administrator.
  - Programme Administrator is organising procurement and takes all the responsibilities related to the renovation implementation and its financial management.



Usually, distribution of costs to home-owners under the programme implemented by the municipalities is the following:



#### 4. Results

- In 2013, municipalities provided to the Ministry of Environment the list of more than **1,500 multi-apartment buildings** which could be renovated under the scheme. Out of these, the Ministry selected 914 projects to be implemented at the first stage. On 30 July 2013 the Ministry has announced the second call for the municipalities to present the second list of multi-apartment buildings that should be renovated. In September 2013, municipalities provided a **second list of 1,683 multi-apartment buildings** of which 100% were approved for implementation by the Ministry of Environment.
- As at the **beginning of 2014**, the renovation project pipeline appears to be building-up with more than **3,000 projects**. Out of these, almost 1,500 have already had their investment plans approved by HESA (totalling around €350 million) and about 1,000 have already taken a collective apartment owners' decision to go on with the renovation.
- Financial intermediaries have by now **approved financing for almost 800 buildings** totalling some €160 million and signed financing agreements with around 200 Administrators.
- Typical energy savings reach 50%, one project saves in average 0.22 GW.
- Increased scope of renovation projects is expected to have a substantial positive effect on Lithuanian economy with respect to the development of construction sector and employment rate growth.

##### Key figures:

- Major part of investments (60.4 %) goes to external walls insulation and 10.6 % to windows replacement.
- Average investment for one apartment ~ €5,800
- Average expenses for 1 m<sup>2</sup> heated area ~ €107
- Average investment for refurbishment of a multi-apartment building ~ €290,000



### Key challenges

- Time needed to get the programme “off the ground”
- Voting majority needed to implement the renovation programme in case of multi-apartment buildings renovation
- Turning the apartment owners into borrowers (possibly) against their will
- Reluctance of apartment owners to undertake a new “loan based” renovation programme and the initial distrust in the governmental programmes
- Low-income people getting full subsidies were declining the renovation
- Knowledge and acceptance by financial intermediaries
- Constant however necessary amendments to the legal basis
- Increase/decrease of state support
- Possible state aid issues – scheme needs to be put in place
- Involvement of municipalities and capacity of municipal administrators to implement renovation projects
- Time needed to put in place the elements needed for student dormitories renovation as well as higher education institutions’ and vocational training institutions’ readiness to prepare and implement the projects
- Accounting and tax issues
- Awareness raising campaigns

### 5. Promotion

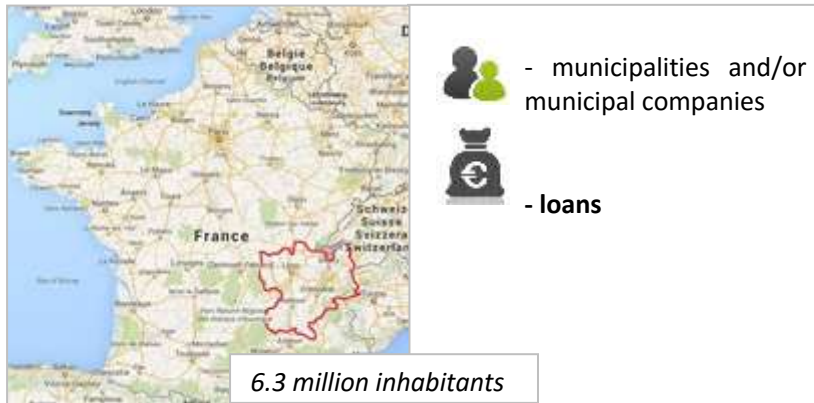
- The Fund and its intermediaries continually assist the ministries and co-finance the broader governmental public relations campaign on energy efficiency modernisation of multi-apartment buildings.
- Among the most efficient and popular promotion tools are: articles, booklets, radio programmes, information on internal portals, handbooks, events for main stakeholders, information on CDs, etc.
- **Website** dedicated on multi-apartment buildings renovation: [www.atnaujinkbusta.lt](http://www.atnaujinkbusta.lt)

### More information

[www.betalt.lt](http://www.betalt.lt)

# Local Public Company – SPL “OSER”

## Rhône-Alpes Region, France



### 1. The financing scheme at a glance

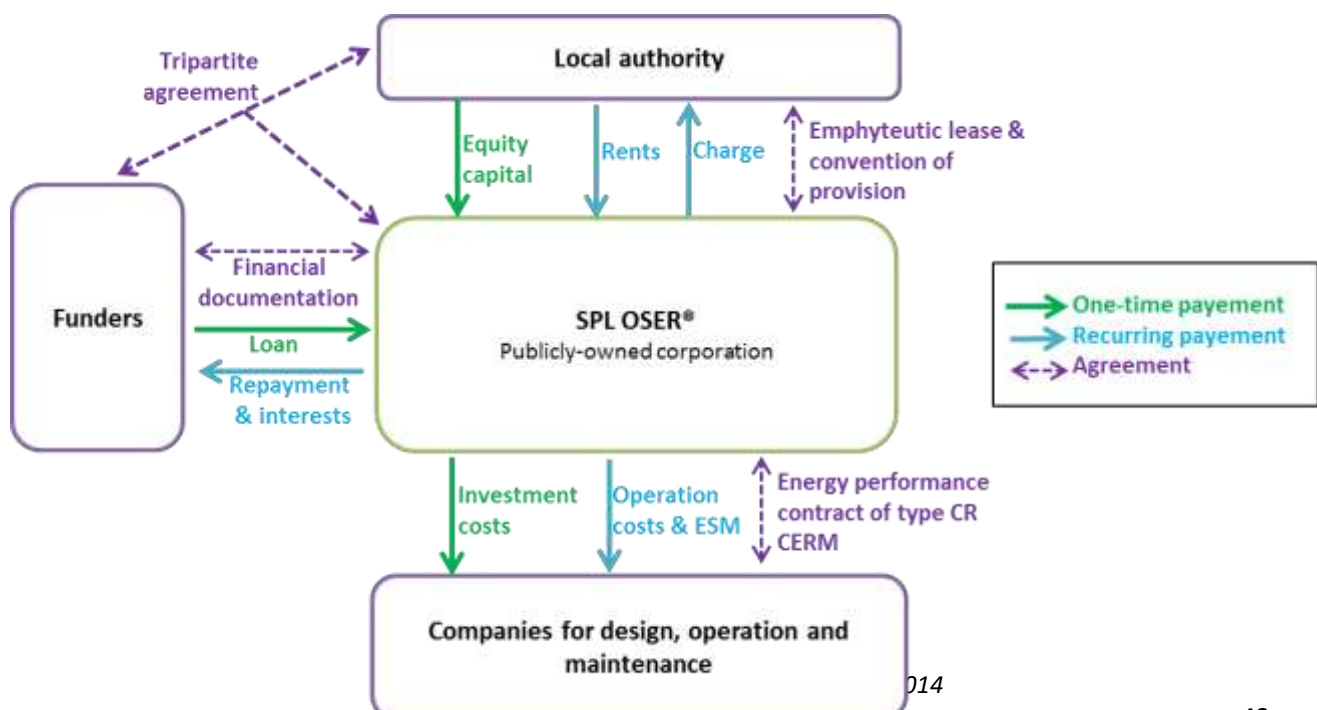
In December 2012, the region Rhône-Alpes and some of the local authorities situated on its territory decided to set up a Regional Energy Services Operator (OSER) in order to manage large scale energy refurbishments of public buildings. The region opted for a legal form called “Local Public Company” (in French: “Société Publique Locale” - SPL) with the equity capital of € 5.3 M - integrally public. The SPL-OSER shareholders are the region and participating municipalities.

The operator SPL-OSER aims at meeting three objectives:

- Carry out energy renovation of public buildings while providing a global offer to its clients - including design, implementation, operation and securing third-party financing for the projects.
- Propose financial, legal and technical engineering assistance to develop financing by third-party investors.
- Pool skills and resources of large and small local authorities.

The SPL shareholders have all entrusted their buildings renovation to the SPL - to date the portfolio comprises 25 buildings.

### 2. Business model - How is the financing scheme implemented?



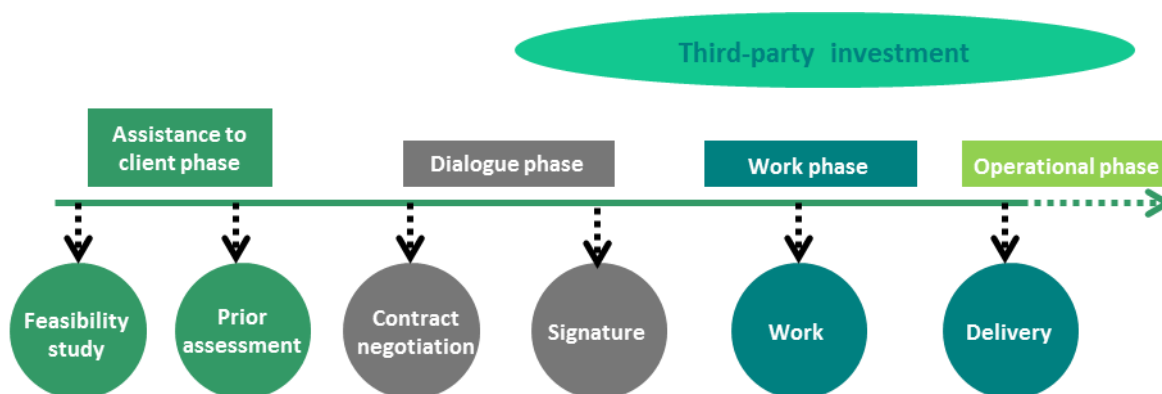
The SPL-OSER intervenes only on public buildings of its shareholders - within their field of competence and on their territory. Several modes of intervention are possible:

- Project development assistance
- Project management
- Third-party financing

As a counter part for its services, SPL-OSER receives from the client an established rent for the duration of the building operation.

When SPL-OSER intervenes, no public procurement is carried out as the contracts are implemented 'in-house' (without competition). SPL-OSER can also support its shareholders in organising public procurement for their projects in case an external contractor is involved in the project implementation.

If a client opts for the third-party financing, the project will be implemented according to the following scheme:



Date of creation	December 2012																											
Capital	<p><u>Initial capital:</u> €5.3 million</p> <p><u>Annual budget:</u></p> <p>€ 500,000 – operational costs</p> <p>€ 15 M – investment costs</p>																											
Financial sources	<p><b>Own capital resources:</b> 11 founding shareholders – all local authorities from the region and Region Rhône-Alpes.</p> <table border="1"> <thead> <tr> <th>Shareholders</th> <th>Amount</th> </tr> </thead> <tbody> <tr> <td>Ville de Bourg-en-Bresse</td> <td>42 000 €</td> </tr> <tr> <td>Ville de Chambéry</td> <td>50 000 €</td> </tr> <tr> <td>Ville de Crans Gevrier</td> <td>18 000 €</td> </tr> <tr> <td>Ville de Grigny</td> <td>9 000 €</td> </tr> <tr> <td>Ville de Montmélian</td> <td>5 000 €</td> </tr> <tr> <td>Ville de Meyzieu</td> <td>30 000 €</td> </tr> <tr> <td>Ville de Romans</td> <td>35 000 €</td> </tr> <tr> <td>Ville de Saint Fons</td> <td>17 000 €</td> </tr> <tr> <td>Ville de Saint-Priest</td> <td>41 000 €</td> </tr> <tr> <td>Le SIEL (inter-municipality energy management organisation of the Loire department)</td> <td>50 000 €</td> </tr> <tr> <td>Région Rhône-Alpes</td> <td>5 000 000 €</td> </tr> <tr> <td><b>Total</b></td> <td><b>5 297 000 €</b></td> </tr> </tbody> </table>		Shareholders	Amount	Ville de Bourg-en-Bresse	42 000 €	Ville de Chambéry	50 000 €	Ville de Crans Gevrier	18 000 €	Ville de Grigny	9 000 €	Ville de Montmélian	5 000 €	Ville de Meyzieu	30 000 €	Ville de Romans	35 000 €	Ville de Saint Fons	17 000 €	Ville de Saint-Priest	41 000 €	Le SIEL (inter-municipality energy management organisation of the Loire department)	50 000 €	Région Rhône-Alpes	5 000 000 €	<b>Total</b>	<b>5 297 000 €</b>
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	Each new member has to make a minimum contribution to the capital of SPL-OSER which is defined as € 1 per capita and has a possibility to increase the contribution (annually or one-off).
Fund character	N/A
Operational costs of the scheme	<b>3-years business plan (2013-2015):</b> Office and staff costs (4 to 5 persons - director, financial officer, two technical officers, assistant): € 500,000

## Organisation & partnerships

### Governance:

- **President and majority shareholder:** Region Rhône Alpes
- **Board of Directors:** 9 members (proportionally to their capital contributions) - takes decisions on investments after the consultation with the Investment Committee.
- **Investment Committee:** consultative opinion of 15 members out of which 5 representatives of 'small shareholders' and 5 organisations with technical expertise.
- **SPL-OSER staff:** 5 employees – Executive Director, Administrative and Financial Director, 2 technical officers responsible for management of energy refurbishment and 1 assistant experienced in administration and management of public procurement, markets and consultations.

President of the Board of Directors has political responsibility while Executive Director is responsible for operational issues.

Any local authority from the Region can become a shareholder and benefit from SPL-OSER services provided that it recognizes the statutes and the shareholders charter. The latter document specifies the SPL-OSER strategic plan, the operation of various governance bodies and majority rules as well as the role of Investment Committee and consultative role of involved partners and experts. Apart from the entry capital (€ 1 per capita), local authorities have to allocate a specific budget for each investment financed via third-party financing.

### 3. Beneficiaries - How do they benefit from the scheme?

The beneficiaries are the shareholders of the SPL-OSER. SPL is an Energy Services Operator – it provides its services not grants or loans to the beneficiaries. Thanks to a global contract and third-party investment, it optimizes technical and financial aspects of energy renovation operations. To optimize the operation financially, SPL-OSER provides a tailor-made financial plan for each operation, mobilizes grants (if available) and negotiates the loans with financing institutions.

Beneficiaries	Local authorities
Types of projects	<b>Energy refurbishment of public buildings</b> Energy performance of public buildings after renovation should achieve the low energy standard (French reference: BBC Effinergie) of $\pm 80$ kWh/m <sup>2</sup> /an.
Type of financial support	About <b>€ 50 M will be invested</b> in retrofitting operations of some <b>20 public buildings in the first 3 years</b> of SPL-OSER operation. Investments will be financed through: <ul style="list-style-type: none"> <li>• <b>Soft loans (50%):</b> European Energy Efficiency Fund (Deutsche Bank) for short-term loans for investments pre-financing; Caisse des dépôts et consignation for long-term loans for the duration of the contracts (20 years)</li> <li>• <b>Own resources, various funding programmes and "ordinary" loans (50%)</b></li> </ul>
Type of financial support	SPL-OSER carries out investments from € 0.5 M to € 10 M

	<p><b>Saving accounts – “Livret A”</b></p> <p>Maturity: 20 years</p> <p>Guarantees: 100% ensured by the client local authority</p> <p>Insurance: N/A</p> <p>Grace period: None</p> <p>Self-financing: 10% of the investment</p>
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**Advantages** for the SPL-OSER shareholders are:

- Pooling and sharing the technical and financial expertise
- Additional operational resources for local authorities
- Synergies between the region, local authorities – their elected representatives and staff
- Simplified and centralised financial procedures and management
- Regular spending over time, expenditure forecasting, secured savings thanks to energy performance contracting.

#### 4. Results

**Key success factors**

- 19 ongoing projects
- Adaptation of the national legislation specifically related to fiscal and organisational issues of local public companies. The Region Rhône Alpes was lobbying the relevant Ministry together with other interested French regions.

#### 5. Promotion

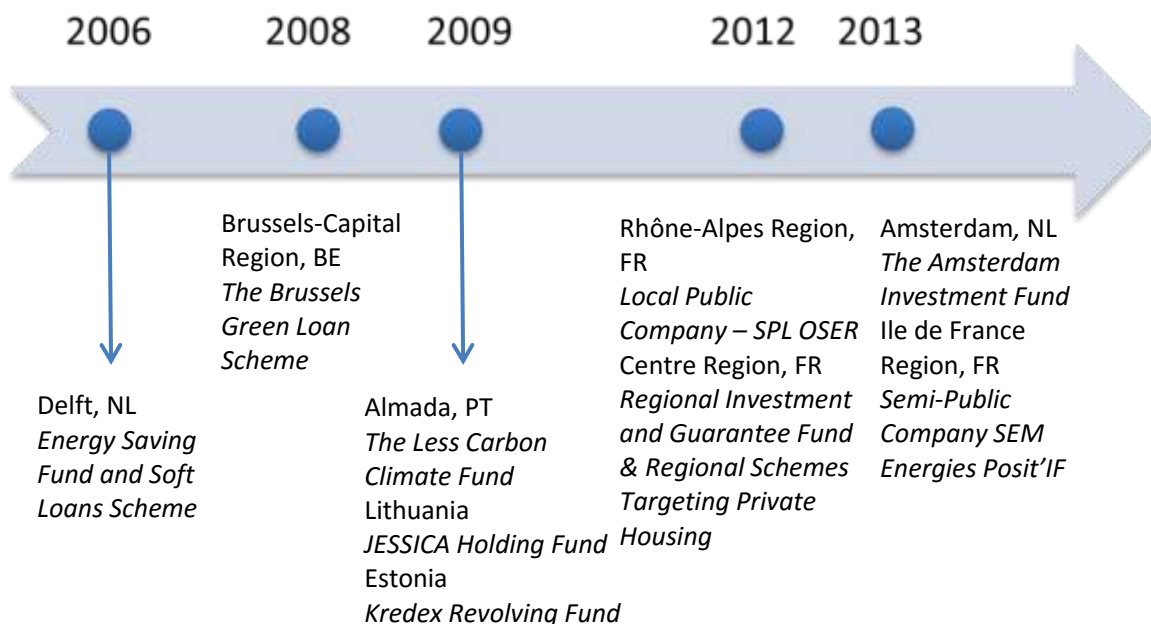
- The promotion activities target participating local authorities (shareholders)
- Communication tools used by the Region: press, SPL website, institutional leaflets and publications, direct relations between political representatives.

**More information**

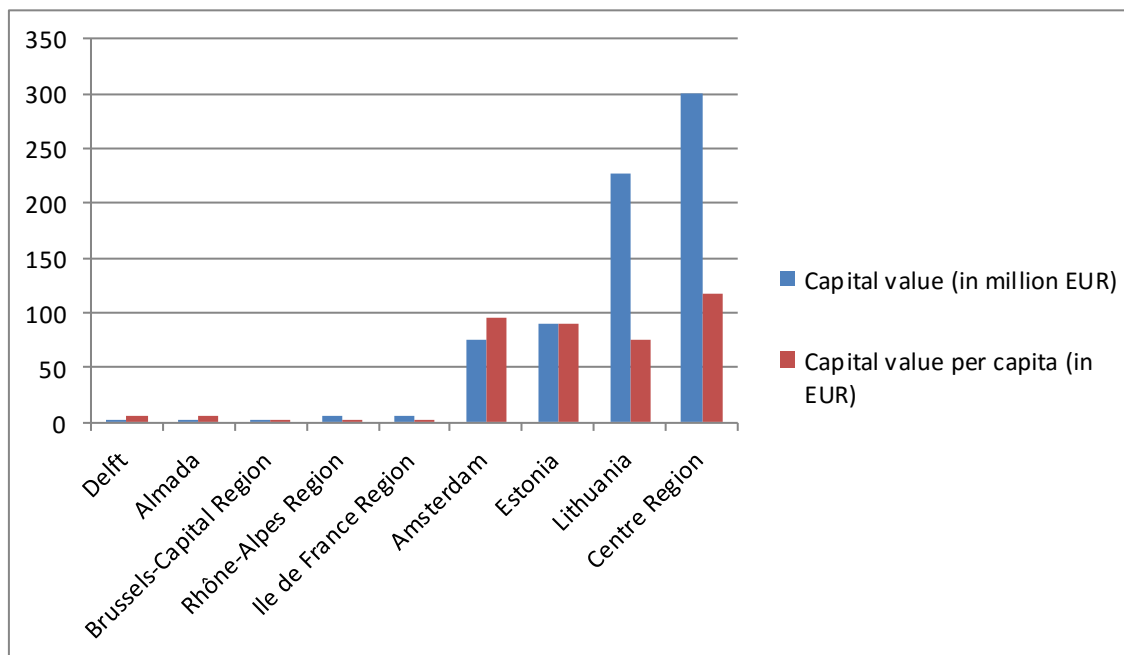
<http://spl-oser.fr/>

# ANNEX: Comparison of the financing schemes

## 1. Date of the financing schemes creation



## 2. Amount of the funds allocated to the financing schemes



Fund size / Capital value (in million EUR)		Fund size / Capital value per capita (in EUR)
Centre Region (FR) Regional Investment and Guarantee Fund & Regional Schemes Targeting Private Housing	<b>300</b>	Centre Region (FR): Regional Investment and Guarantee Fund & Regional Schemes Targeting Private Housing
Lithuania (LT) JESSICA Holding Fund	<b>227</b>	Amsterdam (NL) The Amsterdam Investment Fund
Estonia (EE) Kredex Revolving Fund (incl. grants from other sources)	<b>116</b>	Estonia (EE) Kredex Revolving Fund
Amsterdam (NL) The Amsterdam Investment Fund	<b>75</b>	Lithuania (LT) JESSICA Holding Fund
Ile de France Region (FR) Semi-Public Company SEM Energies Posit'IF	<b>5</b>	Almada (PT) The Less Carbon Climate Fund
Rhône-Alpes Region (FR) Local Public Company – SPL OSER	<b>5</b>	Delft (NL) Energy Saving Fund and Soft Loans Scheme
Brussels-Capital Region (BE) The Brussels Green Loan Scheme	<b>1</b>	Rhône-Alpes Region (FR) Local Public Company – SPL OSER
Almada (PT) The Less Carbon Climate Fund	<b>0,89</b>	Brussels-Capital Region (BE) The Brussels Green Loan Scheme
Delft (NL) Energy Saving Fund and Soft Loans Scheme	<b>0,5</b>	Ile de France Region (FR) Semi-Public Company SEM Energies Posit'IF





### 3. Financial contributors

<b>Almada</b> (PT): The Less Carbon Climate Fund	Municipality
<b>Amsterdam</b> (NL): The Amsterdam Investment Fund	Municipality
<b>Brussels-Capital Region</b> (BE): The Brussels Green Loan Scheme	Region Gas/electricity suppliers
<b>Centre Region</b> (FR): Regional Investment and Guarantee Fund & Regional Schemes Targeting Private Housing	Region Banks (via loan)
<b>Delft</b> (NL): Energy Saving Fund and Soft Loans Scheme	Municipality
<b>Estonia</b> (EE): Kredex Revolving Fund	National government Banks (via loan) EU Structural Funds
<b>Ile de France Region</b> (FR): Semi-Public Company SEM Energies Posit'IF	Region Municipalities Banks (via equity)
<b>Lithuania</b> (LT): JESSICA Holding Fund	National government Banks (via loan) EU Structural Funds
<b>Rhône-Alpes Region</b> (FR): Local Public Company – SPL OSER	Region Municipalities

## 4. Operational costs of the financing schemes

	Allocated funds (in million EUR)	Operational costs (in EUR)	As % of the allocated funds	Staff involved (full-time persons per year)
Almada (PT)	0,89	<i>unknown</i>	<i>unknown</i>	<i>unknown</i>
Amsterdam (NL)	75	>50,000 (communication, legal, other costs) > 150,000 (Fund manager - Euroepan tender procedure)	>0,06 (per year) >0,2 (European tender procedure)	>2 (City administration) > Fund Manager
Brussels-Capital Region (BE)	1	>100,000	>10	1
Centre Region (FR)	300	<i>unknown</i>	<i>unknown</i>	<i>unknown</i>
Delft (NL)	0,5	<i>unknown (part of the operational budget of the Delft Local Energy Action Plan)</i>	<i>unknown</i>	0,5
Estonia (EE)	116 (with grants)	> 200,000 for two years: KredEx staff costs related to the setting up of the scheme (preparation, negotiations, etc.) > 50,000 / year (1 full-time person equivalent): KredEx operational costs related to the running of the scheme (lawyers, accounting, marketing, etc.) > 150,000 / year: promotion of the scheme	> 0,17 (setting up of 1 scheme) > 0,043 (per year)	
Ile de France Region (FR)	5	<i>unknown</i>	<i>unknown</i>	3
Lithuania (LT)	227	<i>confidential</i>	<i>confidential</i>	<i>confidential</i>
Rhône-Alpes Region (FR)	5	500000	>10	4

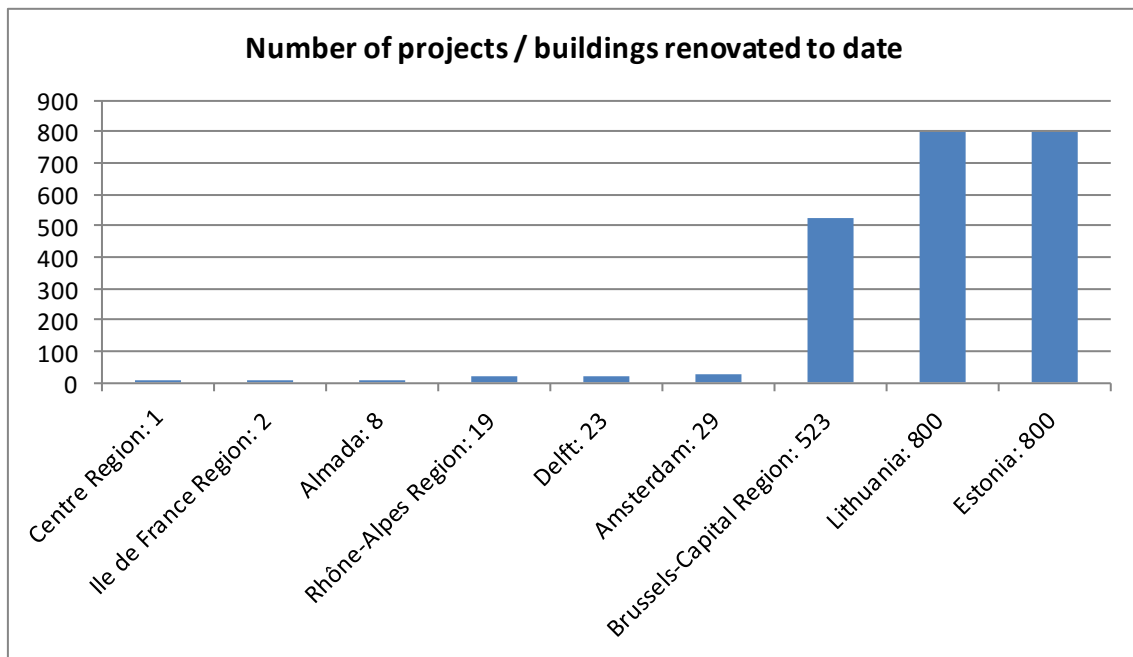
## 5. Beneficiaries and type of support provided

Fund	Beneficiaries	Type of support	Specifications
<b>Almada (PT)</b> The Less Carbon Climate Fund	municipalities and/or municipal companies	municipal investments	N/A
<b>Amsterdam (NL)</b> The Amsterdam Investment Fund	private housing owners, SMEs & businesses community organisations / associations / NGOs	loans seed funding	Soft loans: Social initiatives Amount lent: up to € 500.000 per project (for unique projects a higher maximum is possible) Interest rate: 1.99% Soft loans: House owners Interest rate: up to 2% Loans: Businesses Amount lent: min. € 0.5 – max. € 5 million Interest rate: 7-12% per year, plus risk margin (depends on project, includes fee for fund manager = 1.5%) Maturity: max. 15 years
<b>Brussels-Capital Region (BE)</b> The Brussels Green Loan Scheme	private housing owners	grants loans guarantees	Zero-interest loans: Max. amount lent: € 20,000 – a consumption credit Interest rate: 0% Maturity: determined by Belgian law Guarantees: Regional warranty in case of no repayment Maximum duration: 84 months (7 years) Maximum monthly instalment: €238.01/month Guarantees: Covering the loss (loan) + administrative costs. Granted after validation of the (subsidy) committee. Grants: The green loan is linked to the regional energy grants for insulation and heating system. The amount of grant depends on the beneficiary's income (lower income = higher support) and is not related to the energy performance achieved.

Fund	Beneficiaries	Type of support	Specifications
<b>Centre Region (FR)</b> Regional Investment and Guarantee Fund & Regional Schemes Targeting Private Housing	municipalities and/or municipal companies SMEs & businesses community organisations /associations / NGOs, private housing owners	grants loans guarantees	<b>Soft loans:</b> Loans at preferential rates are offered to beneficiaries. The interest rate is lower than the actual market rates at the date. The interest rates vary depending on the duration of the loan and type of project. The Regional Guarantee Fund significantly improves the financial conditions for the VSE and SME.
<b>Delft (NL)</b> Energy Saving Fund and Soft Loans Scheme	private housing owners community organisations / associations / NGOs	loans	<b>Soft loans:</b> Amount lent: <ul style="list-style-type: none"> <li>• Private house owners: € 1,500 - € 10,000</li> <li>• Non-profit organizations : € 1,500 - € 50,000</li> </ul> Interest rate: 4% below the market rate, with a minimum of 1.5% (this has also been an average for several years) Maturity: 10 years Guarantees: no guarantees (if there's no repayment the Fund value decreases and less projects can be supported) Insurance: not applicable Grace period: not applicable Self-financing: not applicable Maximum monthly instalment: depends on the size of the loan (min. € 14.38/month up to € 480/month (interest + instalment))
<b>Ile de France Region (FR)</b> Semi-Public Company SEM Energies Posit'IF	private housing owners	loans	<b>Soft loans:</b> Amount lent: between 20,000 – 30,000 per apartment Interest rate: 3.5-4.5% Maturity: 15-20-25 years Guarantees: legal guarantee imposed by law Insurance: no insurance screening of individual owners Self-financing: 100% of investment can be covered by the loan (financial contribution from beneficiaries is not compulsory) Maximum monthly instalment: variable, depending on each project
<b>Lithuania (LT)</b> JESSICA Holding Fund	private housing owners	grants loans	<b>Soft loans: Multi-apartment buildings renovation</b> Amount lent: no limits defined Interest rate: fixed for entire loan period at 3% p.a. Maturity: up to 20 years Guarantees: no third party guarantee requirements Insurance: no loan insurance requirements Grace period: 2 years, during construction Self-financing: financial intermediary may require a down payment (not more than 5%) Maximum monthly instalment: determined for each multi-apartment building <b>Grants: Multi-apartment buildings renovation</b> >100% grant to prepare renovation documentation (from national funds) >Exceptional 100% subsidy on all expenses for low-income persons >15% JESSICA loan rebate for where minimum energy efficiency level is met (class "D" level, heat energy consumption is reduced at

			<p>least by 20% ) + 25% grant from Climate Change Programme, i.e. sale of assigned amount units (AAUs) (in case energy efficiency class D is achieved and heat energy consumption is reduced at least by 40%)</p> <p><b>Soft loans: Student dormitories renovation</b>  Amount lent: no limits defined  Interest rate: fixed for entire loan period at 3% p.a.  Maturity: up to 20 years  Guarantees: no third party guarantee requirements  Insurance: no loan insurance requirements  Self-financing: financial intermediary may require collateral depending on the risk level of final recipient  Maximum monthly instalment: 15% of total investment into energy efficiency measures</p>
<b>Estonia (EE)</b> Kredex Revolving Fund	private housing owners	grants (paid from an extra budget) loans	<p><b>Grants for reconstruction</b> (&lt;35% – do more get more!)  &gt;15% (fulfil the terms for renovation loan, energy saving 20 or 30% according to the size of the building, Energy label E, energy consumption &lt; 250 kWh/m<sup>2</sup> )  &gt;25% (roof, facade, windows (U 1,1) heating system, energy saving at least 40%, Energy label D, energy consumption &lt; 200 kWh/m<sup>2</sup>)  &gt;35% (roof, facade, windows (U 1,1) heating system, heat-recovery ventilation system, energy saving at least 50%, Energy label C, energy consumption &lt; 150 kWh/m<sup>2</sup>)</p> <p><b>Soft loans for reconstruction</b> (&lt;85%)  Max. amount lent: 1.35 M per building (banks' requirements)  Interest rate: 3,5% (2013), before up to 4,5% fixed for 10 years, average 4%; fixed interest rate  Maturity: up to 20 years, annuity loan (average maturity = 17 years)  Guarantees: No collateral is needed, credit against cash flow  Insurance: building should be insured during the loan period  Grace period: 1 year  Self-financing: 15% (grant or own funds or loan)  Maximum monthly instalment: no limit (banks' decision)</p>

## 6. Number of projects financed via the scheme







[www.energy-cities.eu/INFINITE-Solutions](http://www.energy-cities.eu/INFINITE-Solutions)

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