

OPTION 1

Bordeaux Metropole, France | Key figures

BUILDING STOCK

387,833 housing units

42% individual houses **58%** condominiums

80% privately-owned **20%** social housing

44% owner-occupied housing units **56%** rented

Average cost of energy renovation: EUR 438/m²

TERRITORY

28 municipalities
Area of 570 km²

28%

Carbon footprint of the city housing stock

PEOPLE

Population of 749,595



Some **90%** households are eligible for a bank loan

- 10% of households have low or very low incomes (taxable income less than EUR 10,984) and are not eligible for commercial bank loans

The objective of the Bordeaux Metropole Climate Plan is to renovate **2,000 private and 1,000 social housing units per year**. The Metropole encourages the completion of extensive energy renovation work in order to meet low energy building standards (maximum consumption of primary energy is set at 50 kWh/m² per year).

The issue

Lack of attractive financing for homeowners with low to medium incomes

In France, homeowners who wish to renovate their homes have access to the following financial sources:

- **Commercial banks** offer two types of loans to finance energy efficiency renovation in the housing sector:
 - **A consumer loan** usually has a maturity of 7 - 10 years and

relatively high interest rates (compared to a mortgage). Average consumer loan interest rate was 3.83% in September 2016.

- **A mortgage** can include energy renovation costs when purchasing the property. The interest rate is lower and maturity longer which is more attractive for homeowners. The average mortgage interest rate was 1.68% in September 2016.
 - **The national government offers a 0% Eco-loan (Eco-PTZ)**, however, its uptake is quite low due to two major barriers. First, banks are expected to validate the technical feasibility of the renovation projects which is not their 'core business' and the whole administrative procedure linked to issuing loans is very complex. Consequently, banks are not encouraged to actively promote this product to their clients. Second, construction companies

and craftsmen are required to issue detailed invoices (e.g. type of materials used, expected energy savings) to be eligible under the financing scheme which is not in line with their standard procedures. At the national level, two other financial and fiscal incentives are also available – the so-called '**Energy Efficiency Certificates**' and **tax credits**.

However, existing subsidies, incentives and loans reach their limits when households decide to carry out ambitious energy renovation work which significantly increases the costs.

Bordeaux Metropole carried out a market study which revealed that **44% of housing units (154,000) are owner-occupied**. Out of the 154,000 households, nearly 90% would be eligible for a commercial bank loan



according to the existing standard bank rules if they aimed to achieve 25% energy savings. However, only 68% of homeowners would be eligible for a bank loan if they wanted to carry out extensive energy renovation. Low income households in particular would be excluded.

Homeowners with low to medium incomes lack attractive low cost financing for their projects.

Fuel poverty and lack of upfront financing for very low income households

Out of the 154,000 targeted housing units, approximately 1,000 are very low income households who could in fact finance extensive energy renovation work through the subsidies for which they are eligible (there is a wide range of subsidies in France for low and very low income households which are not cited here). In spite of this significant financial support, they cannot have the work done because they are unable to pay the contractors in advance. Indeed, subsidies are only reimbursed once the work is finalised and approved.

Upfront financing is the main problem for this target group.

Solution

In order to create a critical mass of renovation projects that can be showcased as good practice, Bordeaux Metropole decided to focus first on the **owner-occupied residential buildings**. It was assumed that this target group would be easier to convince about the benefits of carrying out energy-efficiency renovation work. One of the key decisions was also to take a **holistic approach** to renovation work and provide financial and technical support to homeowners while involving and coordinating all key stakeholders. Finally, Bordeaux Metropole realised that **one product will not fit all** households which led to the development of tailor-made products for low to medium income households and for very low income households. Bordeaux Metropole:

- **Has built partnerships with commercial banks in order to stimulate the uptake of the national 0% Eco-loan and to develop and promote low interest 'energy renovation loans':**

Bordeaux Metropole has taken a holistic approach to renovation. Awareness raising, technical support and financial incentives targeting homeowners are all provided via a **Local Energy Renovation Platform**. The

Platform provides technical and financial support to homeowners and stimulates the market by connecting banks and contractors with homeowners.

The Platform stimulates the **uptake of the 0% Eco-loan**: independent energy advisors help homeowners develop technically feasible projects eligible for the Eco-loan that do not need to be checked by the banks. The Platform also provides a list of craftsmen certified within the framework of a national quality certification scheme 'RGE' or a quality charter developed by the Metropole.

Finally, Bordeaux Metropole has established partnerships with a limited number of banks who have become official partners of the Platform. They agree to provide specific '**energy renovation loans**' with lower interest rates to homeowners. All partner banks promote their products on the Platform which boosts **competition**.

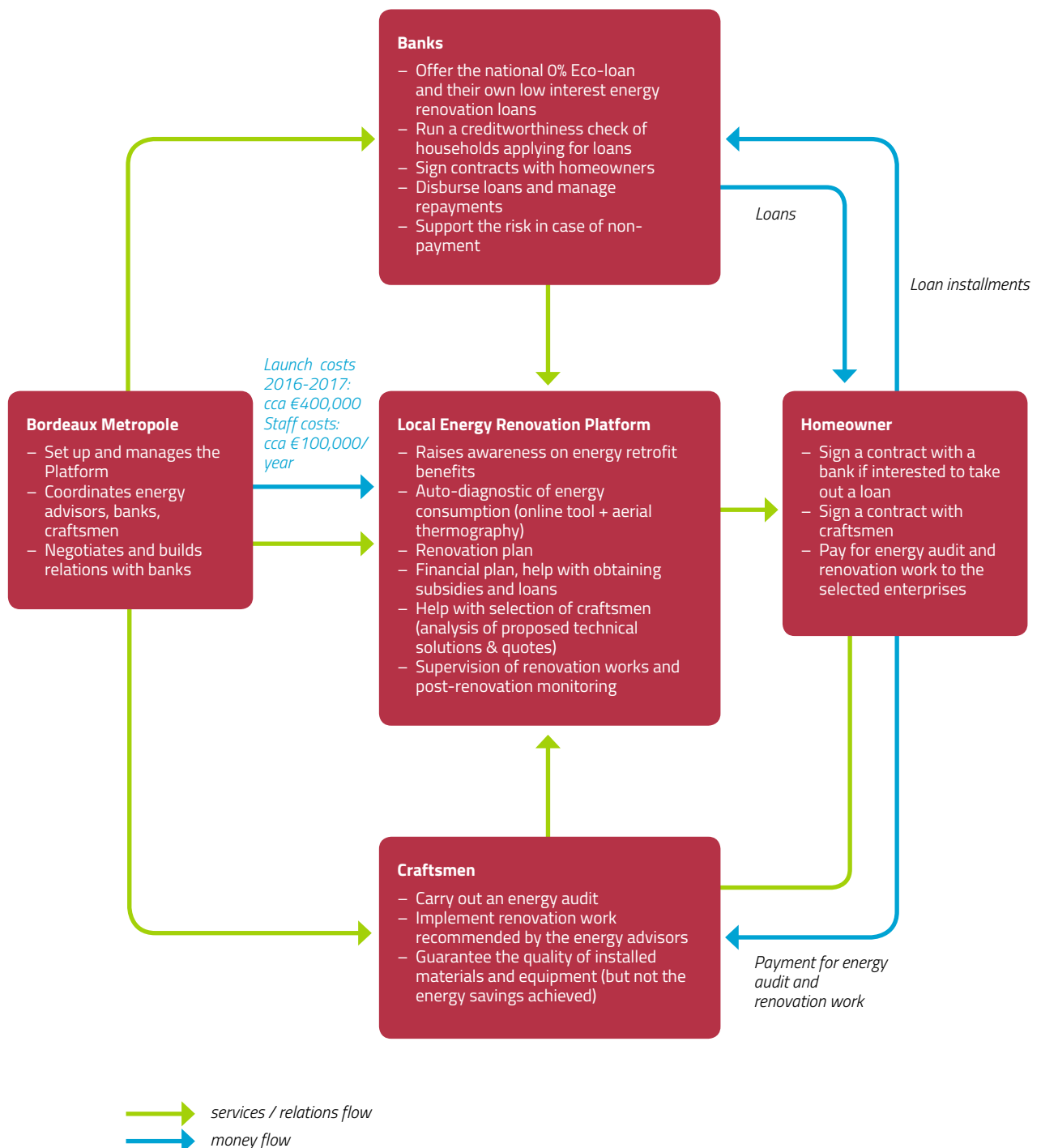
- **Has set up a 'Subsidy advance payment fund'** which will advance money to contractors who carry out energy retrofit work in order to help out low and very low income households.

Business Model

Low interest energy renovation loans: Bordeaux Metropole does not subsidise low interest loans offered by local banks and does not pay any administration fees

for their management. These are managed in full by the partner banks which determine homeowners' eligibility criteria based on their creditworthiness. The Metropole has

not set up any guarantee fund to cover any non-payments by homeowners. The entire risk is born by the partner banks.





Subsidy Advance Payment Fund

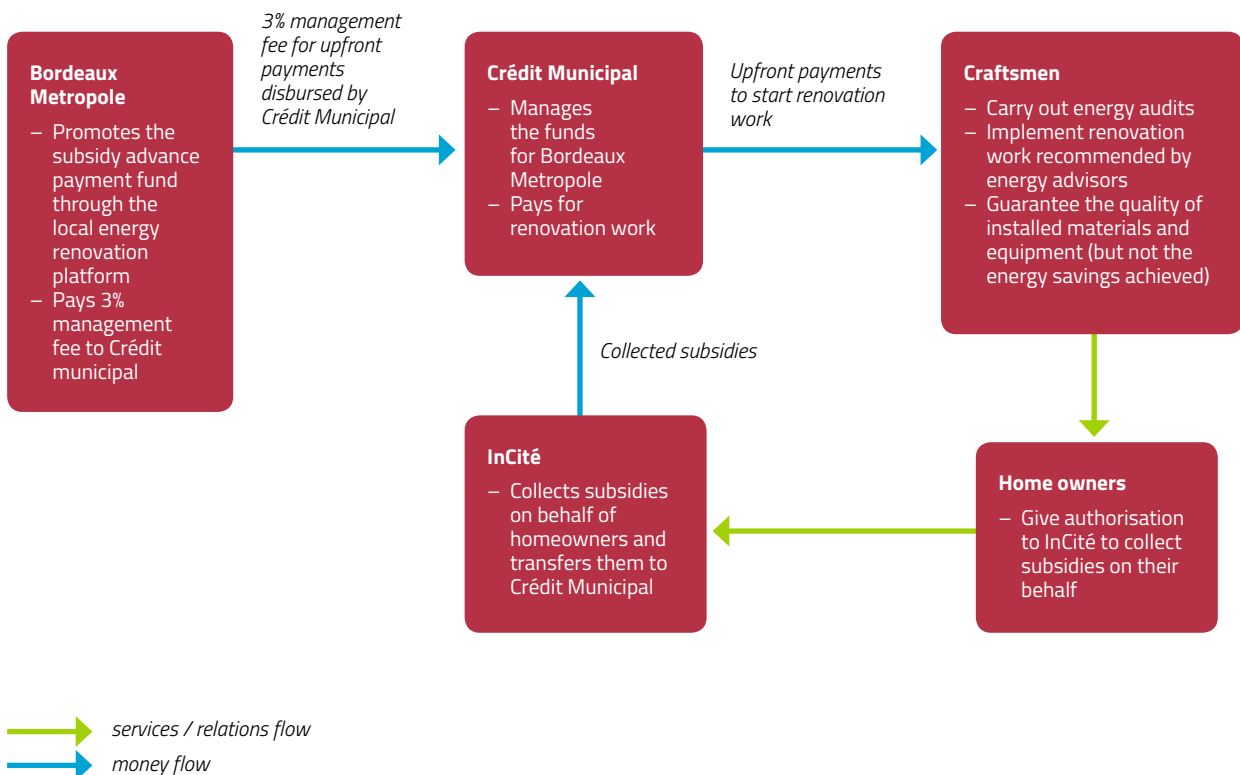
Bordeaux Metropole signed an agreement with two partners - Crédit Municipal (local public bank) and InCité (local public-private company) to jointly set up a '**Subsidy advance payment fund**'.

The agreement states that:

- **Crédit Municipal** pays in advance for renovation work directly to craftsmen/companies.
- Homeowners authorise **InCité** to collect subsidies on their behalf (no grants are channelled through

the owners) which are then paid to Crédit Municipal.

- **Bordeaux Metropole** pays a fixed management fee of 3% for advanced payments paid by Crédit Municipal.



Low interest energy renovation loans step-by-step

Step	Action
Set up a team	<ul style="list-style-type: none"> - 1.5 Full Time Equivalent (FTEs): project manager and technical experts, two experts on financial, legal and admin. issues intervened on an ad-hoc basis.
Carry out a market study	<ul style="list-style-type: none"> - A market study was carried out by an external consultant who was selected through a tendering procedure (indicative cost: €60,000 to €80,000) - Key findings: 44% of buildings are owner-occupied, 68% of low to medium income households could have access to a bank loan, 10% of low to very low income households unable to secure upfront financing although eligible for subsidies. - Key recommendations: focus on homeowners occupying the buildings, global approach to energy renovation work through the Local Energy Renovation Platform, specific tailor-made financial support for each target group. - The market study was an important phase of the project. It provided the elected officials with a snapshot and specificities of the local area as well as clear recommendations on what measures to take. This facilitated decision making for launching a plan for massive energy renovation.
Develop a business model	<ul style="list-style-type: none"> - Bordeaux Metropole did not have sufficient budget to set up a fund that would disburse low interest loans to homeowners. - There was no interest in managing the fund as it requires complex administrative procedures and at least 1 full time staff member to manage it (based on a previous experience with a similar financing scheme). - Trigger action: motivate a limited number of partner banks to offer attractive energy renovation loans and boost competition through the Platform. This solution is 'lighter' in the eyes of the politicians because it does not require any investment. When it is proved to work, a second step can be envisaged such as a third party investment or a guarantee fund to motivate households who cannot access a bank loan or propose a specific solution for condominiums in the form of a collective loan (see 'Next steps' below).
Set up strategic partnerships	<p>Establishing the Local Energy Renovation Platform</p> <ul style="list-style-type: none"> - Launch costs for 2016-2017: €400,000 (incl. operational and communication costs) - Staff costs: €100,000 / year for 2 FTEs coordinating the Platform.
Set up strategic partnerships	<p>Partnership with banks</p> <ul style="list-style-type: none"> - Bordeaux Metropole contacted local banks and proposed they become official partners of the Platform. The partnership has been concluded with a limited number of 5 to 6 banks only so as not to disperse the volume of loans, give a certain exclusivity to the Platform partners and speed up its launch. The Metropole expects that the Platform will foster competition and the volume of loans will gradually rise which will encourage banks to further reduce the costs of the loans. Banks are encouraged to position themselves quickly as the number of partner banks is limited. - The choice of banks: was done through a competitive dialogue. The Metropole gave priority to banks with whom it already had good cooperation in the past on similar projects. It also gave priority to banks with numerous branch offices in the geographical area to ensure the best possible proximity for the households. - Partnership agreements stipulate that the partner banks will actively promote the Platform and the 0% Eco-loan as a priority. They will also provide their own energy renovation loans. These will offer more advantageous conditions to Bordeaux Metropole citizens compared to average conditions at the national level. This specific offer has to be a real added value for the territory. The Metropole could not oblige the banks to include detailed conditions of the soft loans in the agreement though. Banks also commit to monitoring the number of loans disbursed and to sending regular reports to the Metropole. - Banks were interested in the partnership. The Platform offers them a unique marketing opportunity. It allows them to keep their existing clients and gain new ones while increasing their loan portfolio. - Difficulties: each bank network has different internal policies, rules and decision-making processes. Their commercial strategies also differ. Therefore, the Metropole could not apply a single cooperation framework and all partnership agreements are different (tailor-made).



Set up strategic partnerships	<p>Partnership with other key actors</p> <ul style="list-style-type: none"> - The Metropole also developed strategic partnerships with local businesses and craftsmen. It set up an inventory of businesses that signed up to a 'Bordeaux Metropole Quality Charter' or that are certified under a national quality certification scheme, 'RGE'. This inventory is promoted on the Platform. - Other partners who participate in developing and operating the Platform include public authorities such as the French environment and energy management agency (ADEME), the Local Energy and Climate Agency (ALEC), Energy Information Centres (EIE), professional building sector associations such as the French Building Federation (FFB), the Confederation of Crafts and Small Building Enterprises (CAPEB), and the Chamber of Commerce and Industry (CCI).
Launch the scheme & communicate	<ul style="list-style-type: none"> - The Platform was officially launched at one of the biggest national events on the energy transition (Les Assises européennes de la transition énergétique) that took place in Bordeaux in January 2017. A large communication and media campaign included radio advertising spots, articles in newspaper and magazines, billboards and other urban advertising, social networks and flyers. - A webmaster makes sure that the Platform website is displayed at the top of a list of research results on Google and other search engines when Bordeaux Metropole citizens search for information on energy renovation work. - Partner banks promote the Platform to their clients.
Monitoring and improvement	<ul style="list-style-type: none"> - Homeowners need to register to be able to access all information on the Platform and to open their personal 'energy renovation account' where they can exchange information with an energy advisor (invoices, energy audit results, etc.). - Bordeaux Metropole will thus be able to monitor the number of connections, accounts and appointments taken with energy advisors. It will also monitor the number of loans disbursed. - Other statistics can be compiled to better understand the households' profile and to adapt the strategy in case of unsatisfactory results. - Depending on the data the households are willing to communicate, it may be possible to set up a database of the actual energy savings and satisfaction of homeowners with their energy renovation. This could help Metropole to set specific objectives in terms of % of energy savings for certain types of housing.

Homeowners' advantages

Technical assistance through the Local Energy Renovation Platform

1. The homeowner visits the **Local Energy Renovation Platform** (online) and **creates a personal account** which is validated by an energy advisor.
2. The homeowner runs an on-line **self-energy audit** of the house / apartment or has an energy audit carried out by a **certified professional**. The result is analysed by an energy advisor.
3. The energy advisor develops an **energy renovation plan** including expected energy savings and estimated **renovation costs**. The homeowner validates the measures he wants to take and publishes them in his personal account to receive the **service offers and quotes from craftsmen**.
4. The energy advisor and homeowner analyse the craftsmen's service offers and quotes, select and **validate the most appropriate ones**.
5. The energy advisor helps the homeowner to identify all **subsidies** he is eligible for and **relevant bank offers**.
6. The homeowner applies for a **0% Eco-loan** and receives additional **loan offers** from partner banks to cover his funding needs if unable or unwilling to pay from his own savings. He signs a contract with a partner bank and **gets a loan**.
7. The homeowner signs a contract with certified technical consultants / architects / construction companies / craftsmen who have signed the quality charter with Bordeaux Metropole and gets the works done.
8. Once the renovation work is finalised, the energy advisor helps the homeowner to prepare the **application forms to obtain subsidies**.

Low interest energy renovation loans

Eligibility criteria

Type of housing	Type of households	Measures
<p>-All types of housing (single-family, apartments, condominiums) built before 1st January 1990</p> <p>-The owner-occupied housing units are the main target, however, rented properties are also eligible</p>	<p>-Households meeting the eligibility criteria of the national 0% Eco-loan</p> <p>-No specific conditions regarding the households' income</p>	<p>In the framework of the national 0% Eco-loan, at least two measures out of the list below must be implemented:</p> <ul style="list-style-type: none"> - Thermal insulation of roofs, walls, doors and windows; - Installation, regulation or replacement of heating systems connected or not to energy efficient ventilation systems or hot water production; and - Installation of hot water production equipment using renewable energy sources. <p>All work has to be performed by certified professionals holding quality accreditation. Eligible costs also include energy audits, project management (e.g. architect fees), insurance, etc.</p> <p>In the context of the soft loans offered by partner banks: homeowners can only have one energy renovation measure carried out (e.g. window replacement).</p>

Loan conditions

National 0% Eco-loan



Partner banks



If the beneficiary implements 2 eligible measures:

Loan amount: max. €20,000 per housing unit
Maturity: max. 10 years
Interest rate: 0%

If the beneficiary implements 3 eligible measures:

Loan amount: max. €30,000 per housing unit
Maturity: max. 15 years
Interest rate: 0%

The conditions below indicate the existing standard market conditions offered by partner banks to households as of November 2016. The interest rates range from 1.50% to 3.20% with maturity of up to 15 years. The banks undertake to offer loans with more advantageous conditions to Bordeaux Metropole citizens. All partner banks are encouraged to propose further advantages to homeowners such as reduced or zero loan administration fees, a grace period, longer maturity, etc.

Partner bank 1

Loan amount: max. €25,000
Maturity: max. 10 years
Interest rate: 1.50% - 1.85%

Partner bank 2

Loan amount: N/A
Maturity: 5-15 years
Interest rate: 1.85% - 3.05%

Partner bank 3:

Loan amount: max. €75,000
Maturity: 10 years
Interest rate: 1.55% - 1.80%

Guarantee:

No specific guarantee required by the banks

Beneficiary's own contribution:

No minimum contribution from the homeowner is requested by the bank. The 0% Eco-loan can be combined with other existing subsidies.

Other partner banks: to be confirmed



Financing scheme highlights

Next steps

In the near future, Bordeaux Metropole wants to facilitate access to attractive financing to households that are not eligible for the **0% Eco-loan and soft loans** (some 10,000 low income households) offered by commercial banks as well as condominiums. Three options are being explored:

- **Set up a third party investment operator:** either a public company financed in full by the Metropole or a public-private company (Société d'économie mixte) that would provide financing to homeowners. This operator would take into account the cash flow generated through energy savings and offer long-term financing which would further increase the number of solvent households.
- **Set up or contribute to a guarantee fund:** this would cover all the risks of default payments currently borne by the partner banks which would allow them to soften their loan eligibility criteria.
- **Develop specific financial support for condominiums:** grants for energy efficiency renovation work of buildings' communal areas for very low income households and grants to pay a project manager who assists the condominiums in the preparation and implementation phases of the renovation. About €250,000/year should be allocated for this action.

Bordeaux Metropole has signed an agreement with the national promotional bank **Caisse des Dépôts** to maximise financial support for condominiums that want to carry out ambitious energy renovation. The bank will provide: an investment subsidy for low energy renovation (€4 m); a subsidy for a global audit (€96,000); and aid for financial engineering (€76,000).

Need more details about this case study?

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