

# **infinitesolutions**

FINANCING ENERGY TRANSITION IN CITIES

## Local study and action plan

October 2014 - January 2015



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## Foreword

The INFINITE Solutions (Innovative FINancing for Local SusTainable Energy Solutions) is a project launched in February 2014 under the Intelligent Energy Europe (IEE) programme from the European Commission.

Local authorities involved in the INFINITE Solutions project aim to implement a soft loan scheme or a contracting scheme (intracting) to finance energy efficiency and renewable energy projects in their city.

This will require strong technical, financial and legal skills and expertise which are currently lacking and therefore hindering policy implementation. Thanks to the Infinite Solutions project, participative local authorities can share their experiences and train each other. The target is to achieve an efficient running scheme by January 2017.

Bordeaux Métropole is a 'learning city' and member of the Infinite Solutions programme, in search of innovative financing for an energy-performance renovation programme

The 'Infinite Solutions' call for projects is an opportunity for Bordeaux to explore new, innovative financing solutions for energy-performance renovation – solutions already put in place in other learning cities.

This study presents the legal and financial framework, the local context and the action plan decided by Bordeaux Metropole.

# 1. Local study

## 1.1. Legal framework in France

- **The Energy Renovation Plan for Housing (PREH)** was one of 20 measures announced by the French President on 21 March 2013 at the launch of the housing investment plan.

The PREH is intended to encourage French people to commit to energy renovation work and help them in their endeavours. It is based on a one-stop-shop for energy renovation and Renovation Service Information Points (PRIS). It is also based on remodelling aid for work, with a better coordination of the existing systems: tax credits, interest-free eco-loans (Eco-PTZ) and social housing eco-loans (Eco-PLS).

- The **draft law on energy transition for green growth** was passed by the National Assembly and will be examined by the Senate starting from February 2015. The government held a banking and finance conference in order to move forward, especially in terms of the funding of renovation work on private housing. The following measures were announced :
  - Simplified and enhanced tax breaks;
  - Stimulus for of interest-free eco-loans, which currently cover only 33,000 operations per year;
  - Creation of a guarantee fund for energy renovation;
  - Finalisation of third party financing

## 1.2. Financial framework

In France, numerous programmes for energy refurbishments are offered. In addition to grants, the banks promote loans for private buildings.

### 1.2.1. Grants

- Subsidies from the ANAH

For individual houses: a financial aid system for low and very low-income owners and for lessors renting out their property.

Advantages: Major renovation work guaranteeing performance gains of at least 25% + Aid covering about 80% of the total amount of the work.

Drawbacks: Low income ceilings + Leaves substantial amounts to be paid by low-income owners + a lot of administrative formalities.

- The Ecological Solidarity Assistance (ASE): for energy renovation work, the State grants a means-tested aid of €2,000 to owners occupying their accommodation and a premium of € 1,600 to lessors who renovate their high energy consumption accommodation and commit to capping the rent.

### **1.2.2. Aid for work**

➤ The Energy Transition Tax Credit (CITE) is a tax system that allows households to reduce their income tax for a part of the equipment expenditure arising from any energy improvement work carried out in their main residence. However, the effects of tax credits on their "decision to act" are limited because they only encourage the realisation of works in cases where households can ensure the pre-financing.

➤ Financial assistance from Bordeaux Métropole for energy renovation in individual houses

Since January 2015, Bordeaux Métropole has been awarding grants (means-tested) of between €300 and €1,800 to owners occupying an individual house built before 1990 for roof insulation work or to install an efficient heating system (condensing boilers, firewood or other biomass, CESI) or for a work package.

### **1.2.3. Energy Saving Certificates**

The **Energy Saving Certificates** programme (law of 13/07/2005) imposes energy saving quota measures on energy suppliers.

To meet their quotas, energy suppliers can either carry out energy efficiency operations in order to directly obtain ESCs or buy ESCs. The ESC sellers include local authorities or groups of regional authorities and their public institutions, but in actual fact, the authorities and social housing lessors, who are at the origin of a large number of energy saving measures, do not contribute much to this market.

The system of ESCs does not currently encourage ambitious renovations: the certificates directly "reward" the installation of insulation or efficient heating equipment.

### **1.2.4. Bank offers**

➤ Eco-PTZ

The Eco PTZ is an interest free loan which is available for carrying out a work package or for work resulting in an improvement in the building's overall energy performance.

The fact that it is interest-free is a significant financial benefit. The loan interest is funded by the State through tax credits granted to the credit institution.

Yet banks are wary because the system is too complex to examine each case and they are put off by the eligibility checks that they have to perform.

However, changes to the Eco-PTZ, which is now the the most advantageous form of funding accessible to individuals for financing energy efficiency work, should be closely monitored. The government has also decided to bring it sharply back to the forefront, most notably by relieving the banks of the eligibility checks for work done using Eco-PTZs.

➤ Work loans

Banks usually offer **work loans** initially. These loans are considered as consumer lending and therefore have terms of less than 15 years (most often 7 to 10 years) and have relatively high rates (compared to mortgages for example).

The value of work corresponding to an overall renovation varies. In most cases it is a budget of around €25,000 to €45,000 for individual houses and €15,000 to €30,000 for apartments.

The main obstacle to the energy renovation of buildings is therefore financing the "amount to be borne", that is say the amount the household must pay using its savings or loans, after the grants and other financial aid received by the household have been deducted from the total amount of work including tax.

### **1.2.5. Third party financing**

Third party financing is based on direct intervention with the household from an operator to grant financing. This is with a view to leveraging the banking industry and ensuring that the financing is distributed widely enough. Third party financing allows energy savings to be included in the calculation of the repayment capacity for households.

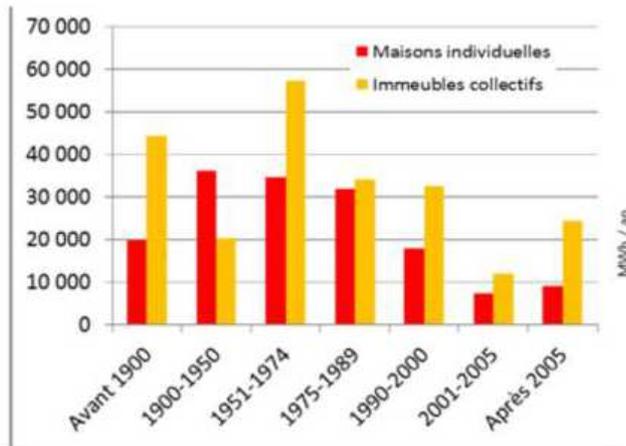
The financing component is then provided to individuals directly by the third-party financing operator, who also deploys the other functions of energy renovation platforms according to the highly integrated one-stop-shop plan. The operator uses banks for the overall financing, making it possible to refinance the portfolio of receivables that it holds on households under third party financing.

## 2. Local context

### 2.1. Current situation on the Territory of Bordeaux Metropole

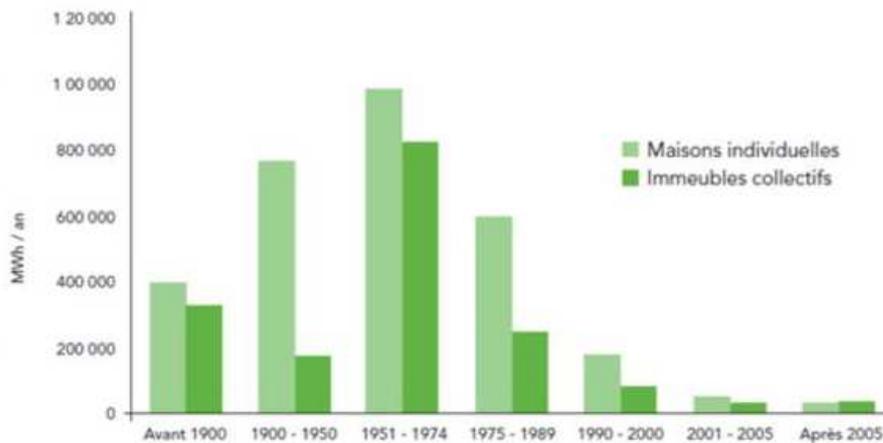
#### ➤ Characteristics of private housing stocks

- Nb of housing units (01/01/2012):  
382 600 units, of which 40 % individual houses and 60 % condominiums



Source : DGFIP 2012

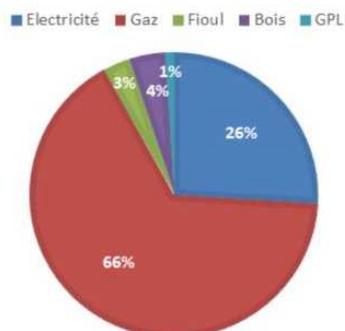
- Energy consumption per construction period:



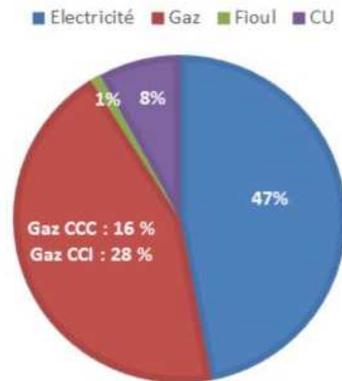
Source : A'Urba

- Heating systems in housing stocks

- Individual houses:
- 66% of gas heating



- Condominiums: 47% electric-powered heating system and 44% gas heating



The average cost of renovation work for all types of accommodation (individual houses and condominiums) reaches €438/m².

➤ **Goals of housing rehabilitation**

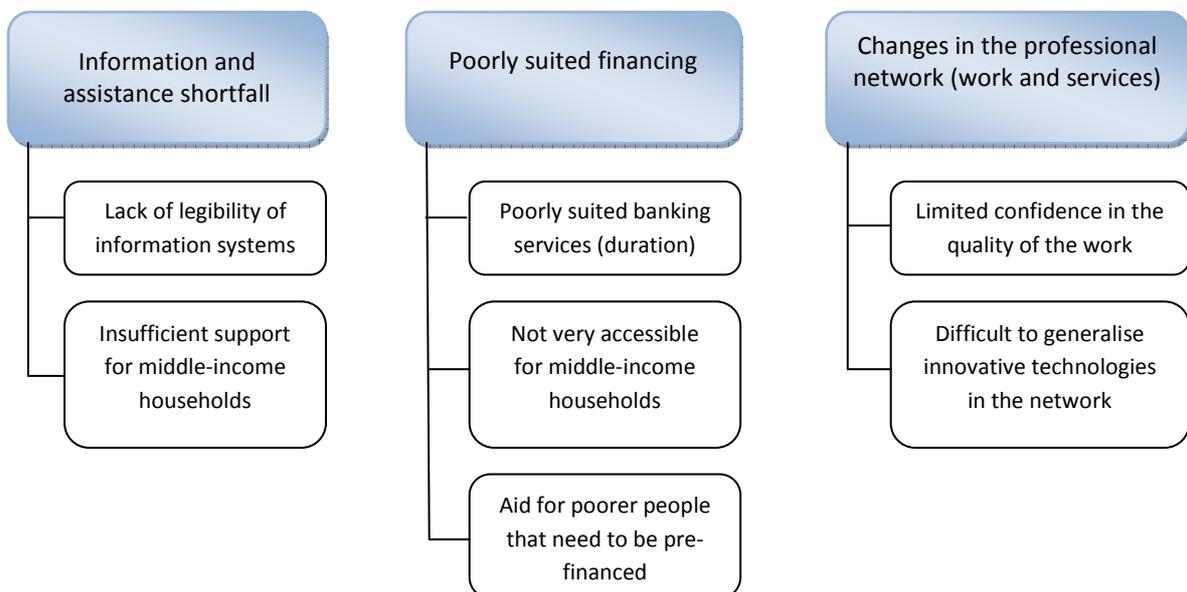
- The Bordeaux Metropole Climate plan
  - Accompany the rehabilitation of close to 3,000 homes per year over 40 years
  - Reduce energy consumption in the residential sector by 60%
- Global costs for energy rehabilitation works per year:

Nb rehabilitated housing X costs of works X average area of housing:

$$3000 \quad \times \quad 438 \quad \times \quad 78$$

**= €100,000,000 / year**

**2.2. Obstacles: barriers to the development of the energy renovation market**



### 2.3. The Local Platform for Energy Renovation

Following the deliberations of July 2014, Bordeaux Métropole answered the call for expressions of interest launched by the Aquitaine Regional Directorate of Ademe and forms part of the deployment of Habitat Aquitain's (PREH Aquitain) Energy Renovation Plan.

The objective is to initiate and support comprehensive support initiatives for individuals driven by regional authorities and to mobilize construction industry, real estate and banking professionals in order to facilitate the implementation of energy renovation projects for individuals.

This platform will be launched in 2015 and will include the innovative financing system deployed as part of the European project (see below pattern page 11)

### 2.4. The system implemented by the Aquitaine Region: the Rénov'Aqt programme

Set the decision in motion with the owner	Finance the renovation	Develop the professional networks
Information for all: EIE	Accommodation Eco-cheque	Develop the skills of professionals: training
Craftsmen trained to give quality advice	Expand financing solutions: <ul style="list-style-type: none"> <li>- Advance fund</li> <li>- Third party operator for communal accommodation</li> <li>- PIG and OPAH support</li> <li>- Banking agreement – Purchase/Renovation pack</li> <li>- Third party instructor</li> </ul>	Develop innovation in the network: <ul style="list-style-type: none"> <li>- Develop a network of “Building Demonstrators”</li> <li>- INEF 4 Research Centre “Institute for energy transition”</li> <li>- Eco-materials experimentation sites</li> </ul>
Partnership with banks	Mobilise the FEDER	Finance energy audits through Eco-cheques
Mayors: representatives		

Need for complementarity with Bordeaux Métropole's system

### 3. Benchmark

#### ➤ **Picardie Pass Rénovation (Public Energy Efficiency Service)**

Distinctive points:

- Operational structure of the support to households that own individual houses: consulting, support and financing missions in thermal renovation projects for individuals, with a voluntary reduction target of 50 to 75% of final energy consumptions
- Picardy Region Public Company
- Structuring third party financing
- Dialogue with the EIB
- Technical assistance from Elena
- Implementation stage for the first cases

#### ➤ **Energies POSIT'IF (MEC)**

Distinctive points:

- Operational structure of the offer to carry out work for condominiums: support at different stages of the renovation project: the project's organizational, technical, legal and financial arrangements
- added value: validate the quality of the execution of the work
- Structuring of third party financing adapted to condominiums
- Dialogue with the EIB
- Technical assistance from the EASME
- Implementation stage for the first cases

#### ➤ **Nord-Pas de Calais Financial Engineering**

The Nord Pas-de Calais Region is in the process of creating a third party investment operator as part of the regional plan for the energy rehabilitation of old housing stock. The chosen legal structure is that of a mixed economy company (MEC) in order to bring together shareholders from public bodies (accounting for more than 50% of the capital as well as private stakeholders, such as financial institutions, energy sector stakeholders, etc.) representing at least 15% of the capital.

➤ **Effilogis Franche Comté**

Distinctive points:

- Is intended for individuals, social housing lessors and local authorities and supports Scheduled Operations for Housing Improvements (OPAH).
- contributes to raising the level of demand for energy efficiency of work programmes by financing energy audits, studies and air tightness testing
- Facilitation: Ajena Energie & Environnement, with the participation of the Espaces Info Energie network and the Franche-Comté Energy Cluster, in partnership with the ADEME.
- technical and financial support for project owners
- Structuring work benchmarks (=> BBC)
- Partnership with the Caisse d'Epargne as part of the KFW BPCE line

➤ **Tinergie (Brest) and Vir'Volt (Saint Briec):**

Distinctive points:

- Objective: reducing the territory's electricity demand (houses with electric heating) for private owners, occupants or lessors
- Functions: support, creating a network of companies, bank financing, monitoring consumption following the work
- Web platform entrusted to an external service provider in charge of referencing companies
- Pivotal role played by ALEC
- Partnership with the Caisse d'Epargne as part of the KFW BPCE line

➤ **Mur/Mur (Grenoble)**

Distinctive points:

- incentive scheme for the support and accompaniment of thermal renovation for private condominiums: Advice and support, financing through grants, technical and administrative support
- Technical references for renovating condominiums (for a target of fairly standard buildings: condominium buildings built between 1945 and 1975)
- Support courses ensured by ALEC and PACT financed by the agglomeration
- Ongoing thinking towards a sustainable mechanism, by greater use of loan financing and incorporating consumption monitoring.

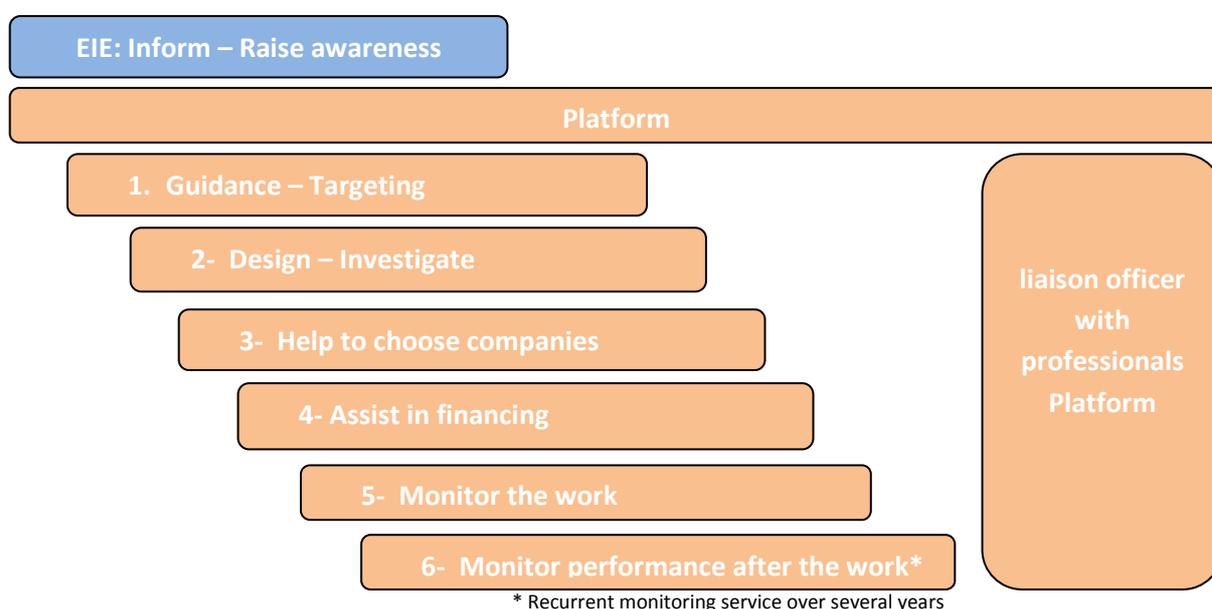
## 4 Actions Plan: Designing an overall plan

It is important for Bordeaux Métropole to provide responses to all the public and adapt to the specificities of each household: Owners of individual houses, Households that are eligible for aid from Anah, Households that are not eligible for such aid, Co-owners and owner lessors.

The approach to these categories requires a track which includes 4 services:

- project ownership assistance
- financing
- integration of offers from renovation professionals,
- organisation, coordination of the system and dedicated communications.

### 4.1. The function of project ownership assistance



This function presents the role of the Local Platform for Energy Renovation.

### 4.2. Funding

The action plan intends to build a system that meets 2 objectives:

1. Facilitate access to existing systems for households
2. Extend the financing offer to take energy savings into account

The objective is to make the most of procedures and projects that are already underway.

#### 4.2.1. Facilitating access to existing systems for households

- Advances on grants to help to combine all of the financing plan at the first instalment to initiate the work

Actions for households eligible for aid from ANAH:

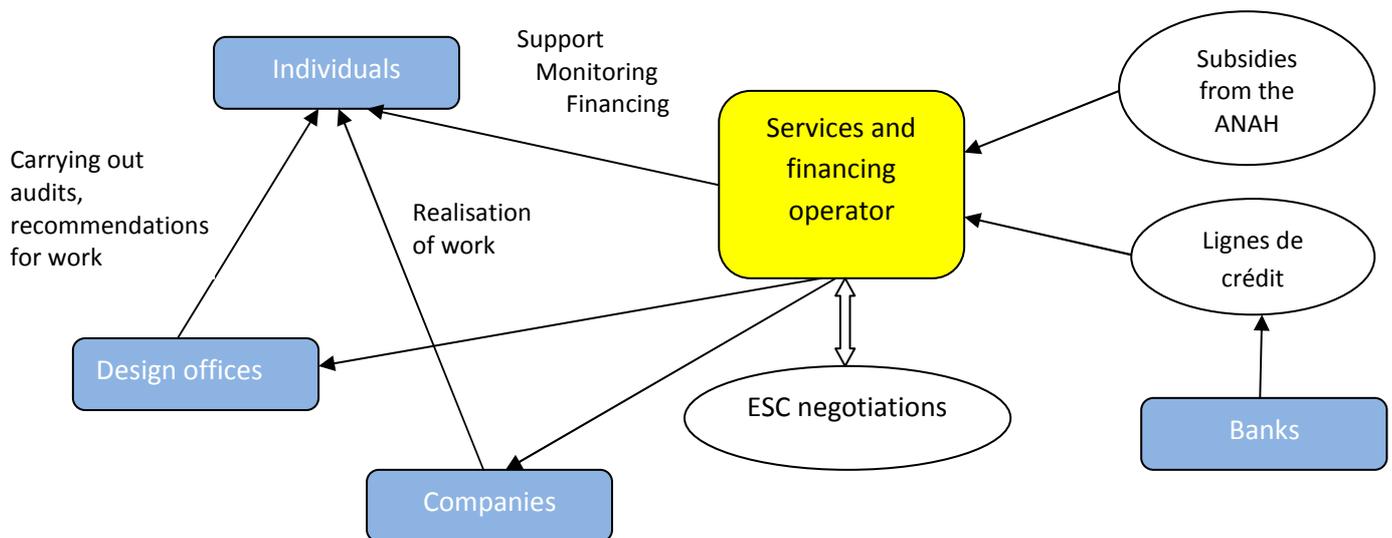
- Protocol with Crédit Municipal suggested by the Prompted MEC
- Participation in the advance funds that the Regional Council sets up

- Incentive for banks to improve their terms
- Leverage property acquisitions to plan financing for the work
- Promote the distribution of Eco-PTZs (and by extension examine Tax Credit records and ESCs)

Actions:

- Banking partnership launched from a call for expressions of interest
- Platform for pre-processing cases

#### 4.2.2. *Extending the financing offer to take energy savings into account: experimenting with third party financing*



The structure dedicated to the implementation of third party funding is to be considered. The implementation of the funding mechanism as part of the Infinite Solutions Project will not allow Bordeaux Métropole to consider third party funding within the timeframe of the project (2017).

#### 4.3. Integrating offers from renovation professionals

This is a key function played by a trusted third party that Bordeaux Métropole could put in place. Mobilising the offer is an essential corollary to stimulating demand.

This function is part of the tasks of the future Local Platform for Energy Renovation:

- coordinate all of the stakeholders and existing systems in Bordeaux Métropole linked to the energy renovation of the housing stock
- facilitate access to information for project leaders
- mobilise professionals around strong partnerships
- set up an observatory on renovation sites across the city

#### 4.4. Organisation, coordination and communication

To be developed

## Conclusion : potential solutions

Bordeaux Métropole has opted for a two-stage approach.

**Proposal 1: Facilitating access to existing systems for households** via the Platform, by introducing:

- An Advance fund for grants, as a complement to that of the Aquitaine Region
- A partnership with banks using a call for expressions of interest

This solution will help to achieve results by 2017.

### **Proposal 2: Extending the existing offer to energy savings**

This is a question of looking more closely at the suitability of third party financing (proposal 2) for the needs of households or condominiums that could not bring together a financing plan with proposal 1. This proposal 2 corresponds to a longer implementation time horizon, and therefore does not fall under the implementation schedule defined by the Infinite Solutions project.

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### Sources :





Co-funded by the Intelligent Energy Europe  
Programme of the European Union

Février 2015