



# INNOVATE project

## WP2, D.2.2

### Regional Development Plan

### AGENEX – Extremadura Energy Agency

## Introduction

To better understand the project's goal and the important role that AGENEX plays to achieve it, there are a few facts that must be introduced.

Firstly, one of the main objectives of AGENEX – Extremadura Energy Agency is to improve the energy efficiency (EE) in Extremadura Region. Furthermore, AGENEX is currently focusing its activities on triggering a leverage effect in specific sectors.

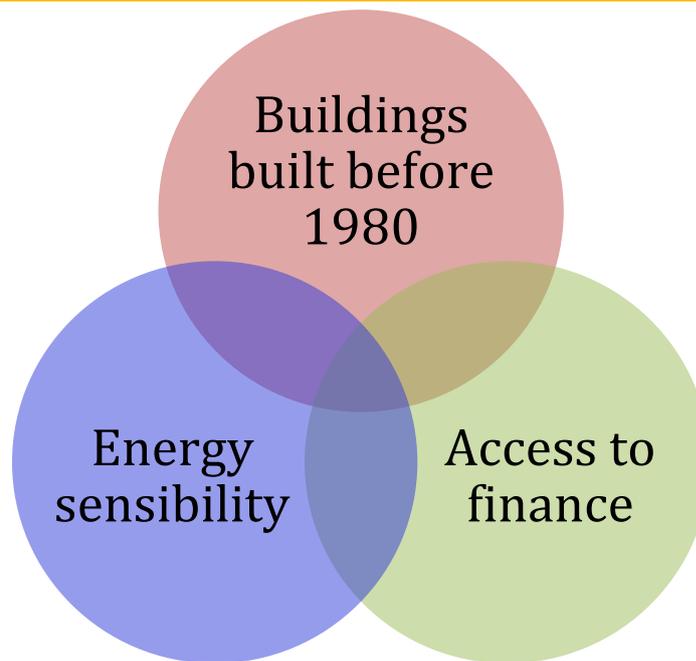
Secondly, the building sector has a high economic and energy impact on the region. This sector experienced a huge growth in the past, when energy efficiency was not a priority. This explains why the building sector consumes more than 30% of the Final Energy Consumption, but it also reflects the opportunities that exist to overcome this situation.

#### A. What is the starting point?

The starting point is a blending between AGENEX's recent experience in working on energy efficiency and building renovation, and the conclusions drawn from the Market Gap Analysis (MGA) document made by AGENEX. The three main conclusions achieved can be highlighted as follows:

1. There are a large number of buildings in the region with a high potential for energy retrofitting. These are all the buildings built before 1980 (Spanish Standard NBE-CT 79) which account for approximately 60% of the building stock, and which lack in isolation.
2. It was common that owners prioritized investing in aesthetic features rather than in energy retrofitting. This is due to owners' low energy sensibility. So, it is clearly necessary to create awareness and increase sensibility in sustainable energy matters.
3. Access to finance is one of the key issues that must be addressed in order to boost the energy retrofitting in the residential building sector.

The bottom line is that the market will be influenced by these three ideas. Therefore, the meeting point where they coincide will be the target market for the *One-Stop Shop for Extremadura (OSS-Ex)*.



In addition, AGENEX has a vast experience in energy efficiency applied to the buildings sector. This has allowed AGENEX to pre-identify several standard measures for improving the buildings' energy efficiency (EE). These measures are divided into 3 main groups:

- A. Window renovation.
- B. Improvement of the building envelope.
- C. Improvement of the HVAC system.

Furthermore, AGENEX suggested including a new group related to the integration of Renewable Energy. So, the fourth group will be:

- D. Integration of Renewable Energy Facilities in the building.

The OSS-Ex will offer several renovation settings per building that will include actions from at least 2 of the previous groups. The office's staff will also guide owners in how to select the best scope by reaching a balance between energetic and financial criteria.

## B. Where to?

The One-Stop Shop for Extremadura (OSS-Ex) should work on the main issues identified in the MGA, aiming to improve the energy situation of the building stock. Therefore, it is necessary to expand the prior "bubbles" in order to achieve a broader meeting point. This can be done by:

1. Expanding the number of targeted buildings to those built until September 2006 (Standard CTE). In this way, AGENEX has already identified and pre-studied more than 400 buildings (blocks of flats). This work has been done in collaboration with the Regional Government, which gave AGENEX access to the database on residential buildings.
2. Increasing the owners' energy and environmental sensibility. Creating awareness.
3. Facilitating access to different types of financing tools (including grants).

Consequently, the OSS-Ex should be a reference point for building owners regarding the following:

- Improving their building's energy efficiency (economic savings)
- Integrating renewable energy technologies in the buildings (mainly biomass boilers, solar thermal collectors, photovoltaic panels and aerothermal energy), making them more



environmentally friendly.

- Financing the investment with the savings generated

These three points summarize the main objectives of the OSS-Ex. These are qualitative objectives that will improve not only the comfort for owners and tenants, but also the sustainability of the residential building stock in Extremadura.

The previous qualitative objectives should be complemented with quantitative targets that would help to prove the success of the OSS-Ex. These targets are summarized as follows:

- Increasing the value of the Energy Performance Certificates in, at least, one level. And when it is possible, the renovated building will be between “A” and “D” categories. This criterion is standardized in order to access the grants offered by national and regional plans on building renovation.
- All the studies made by OSS-Ex will include the integration of renewable energies in the building.
- At least 3 important buildings (condominiums and/or single-family dwellings) will be renovated by the end of the project. This target could be increased by 2025, when an estimated investment of 35 M€ is expected for building renovation. The average cost for building renovation is set on 15.000 – 25.000 € per dwelling, according to recent studies carried out by AGENEX.

The OSS-Ex will focus on buildings (single-family houses and condominiums) built before September 2006. However, any users that need the OSS-Ex services will be able to receive them.

The OSS-Ex, created by AGENEX with the support of Extremadura’s Regional Government, will have a coordination role. This means that OSS-Ex will develop buildings’ energy studies and will guide the owner/s in the selection of the best energy solution. As mentioned earlier, the contractors’ offers will also be ranked. However, the owner/s will be responsible for taking the final decision in selecting the contractor.

For this reason, OSS-Ex will have two main offices in Extremadura’s provincial capitals, Cáceres and Badajoz. A specific website will be available and several services will be offered.

### C. How? What?

The OSS-Ex will gather three main activities: Capacity-Building, Financing, and Advising. Each of these fields will be explained in more detail:

- **Building capacities:** The objective of building capacities is to improve the quality of the work carried out by the supply chain (contractors, builders, engineers and architects), by the banks, and by the OSS-Ex’s staff. The technical training will focus on new materials and building techniques in order to improve the energy efficiency in buildings. Regarding the banks, the training will be related to learning different concepts and opportunities, and identifying the best financing schemes. AGENEX has already begun these trainings through another European project: the REHABILITE project. The first courses were addressed to builders and can already be accessed at: <http://rehabilitate.eu/en/online-training/available-courses>
- **Financing:** As it was shown in the MGA, one of the main barriers when investing in energy retrofitting is the lack of financing. AGENEX is working on the development of a new financial instrument, promoted through the HouseEInvest project, which will be applied to building renovations. The instrument will consist of a guarantee fund that will facilitate owners’ access to financing, including condominiums and single-family dwellings. The goal of this financial instrument is that the loan fees will be paid off through the yearly savings, making it a lot more attractive to householders.



- **Advising:** To be able to provide an advisory service, AGENEX will have permanent staff available to attend public consultations. They will be capable of giving good advice due to their deep knowledge on energy efficiency, renewable energy sources, and financing tools. Furthermore, AGENEX will coordinate other regional partners and stakeholders that are involved in other EU and non-EU projects with similar objectives, allowing the creation of synergies between entities and projects.

In this case, the tailor-made approach will be very important, as well as activating the demand. On this last issue, AGENEX has already been working on pre-identifying a number of buildings suitable for energy renovation.

A broad definition of the steps to follow (in chronological order) has been outlined:

- A. Building capacities in all the sectors involved (including building and banks).
- B. Identifying best practices through the results achieved in the project.
- C. Identifying financial instruments, including grants (public sector) and loans or similar types of funding (public and private sector)
- D. Bundling of actions, meaning to make “solution packages” in which technical-energy measures and financial schemes will be handcrafted for each building situation.
- E. Training future OSS-Ex’s staff.
- F. Creating or allocating offices for the OSS-Ex.
- G. Pre-identifying suitable buildings for energy renovation.
- H. Marketing activities.
- I. Activating the demand by encouraging the pre-identified buildings to use the OSS-Ex services.
- J. Guiding of the full process: elaborating studies, helping owners select the best option, facilitating access to finance, coordinating renovation activities and proving the benefits to owners
- K. Publishing and disseminating the main results of the successful renovations (no personal nor critical data will be published)
- L. Preparing a roadmap to transfer the OSS-Ex to the private sector. This transfer will probably be done by a certified process.

#### D. Who?

The project development will require the mobilization of both public and private entities.

So, from the public scope:

- Regional Government. Mainly the departments related to Economy, Energy and Architecture.
- Regional Energy Agency.
- Local and provincial governments.
- Public companies related to dwellings and houses.

On the other hand, from the private scope:

- Chamber of Commerce and Industry.
- Associations of builders (regional and national).
- Professional associations of engineers and architects.
- Banks and bank associations.
- Real estate and property administrators and their regional association.
- Owners and tenants.



#### **E. In what time?**

The operational stages and timing for the implementation of the project is all shown in the attached Excel File of the Action Plan.

#### **F. What will be the indicators of success?**

Each stage will have various and different targets, but the main goals that will be met throughout the project are listed below:

- Number of entities/companies that receive training
- Number of enquiries filed in the OSS-Ex
- Number of energy studies conducted
- Number of advisory services provided (considering one service per building)
- Total amount invested in energy improvements/renovations
- Energy and CO2 emissions savings
- Level of satisfaction (provided by users' feedback)

#### **G. Other comments**

The LDP should be a live document that will be updated and adapted to the project's progress.