



ACTION PLAN



Action Plan ENERSELVES - Extremadura Energy Agency

ENERSELVES, Policy instruments for energy self-consumption in buildings, aims to:

- Promote new policies or improve existing policies to support the integration of renewable energy into buildings for self-consumption, financed by Structural Funds and other EC instruments.
- Design policies to promote only those renewable energies for self-consumption technologies with greater benefits in each region.
- Support the integration of RES in buildings

Each region that composes the consortium will develop their **action plan** and will implement it during the project's second phase. This document will provide details on **how** the lessons learnt from the cooperation will be exploited to improve the policy instrument tackled within our region. It specifies the nature of the actions to be implemented, their timeframe, the players involved, the costs and funding sources.

It is the key document elaborated throughout the project, and it will integrate conclusions from our regional study of the situation regarding self-consumption technologies, the lessons learnt from the stakeholders' participation and the knowledge exchanged through the project's activities and events. All this will develop in long-lasting results and impacts in our region.

Among the conclusions drawn from our regional self-assessment, solar energy is one of the most profitable alternatives for own energy production. There are two different technologies to benefit from solar energy. Solar thermal collectors that are mandatory by law in new buildings since 2006 and they are more extended in the region's rooftops. And photovoltaic panels for electricity production, which have been under a complicated legislation at national level and therefore, not promoted at all, in any case the opposite. The high potential in Extremadura for this technology, and the recent change in the regulation concerning self-consumption are key elements to boost electric self-consumption in the following years in residential and public buildings.

General information

Project: Enerselves

Partner organisation: Extremadura Energy Agency

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Part III – Details of the actions envisaged

ACTION 1. DEFINITION OF THE SUSTAINABLE DEVELOPMENT STRATEGY “FRAMEWORK EXTREMADURA 2030 FOR GREEN AND CIRCULAR ECONOMY”

BACKGROUND

The background related to this action is based on the visits and exchange of experience with the project's partner countries: Sweden, Poland, Malta, Italy and Romania. Many lessons have been learnt regarding the use of different technologies for self-consumption in these different countries, but there is a common and more important lesson that is to include energy in each regional development plan. This will allow the regions to develop and grow in a more sustainable way. In the case of Extremadura, this project has contributed to create not a plan, but a regional Framework.

The objective of the “Framework Extremadura 2030 for Green and Circular Economy” is to boost the green and circular economy in the region as the best way to achieve a sustainable development. The time frame has been established from 2017 to 2030, and the main actions (the document uses the term “strategic lines”) have been fully defined in 2018. This means that most of the defined actions will be carried out and implemented from 2018 to 2020, and the same line will be followed and reviewed until 2030.

A draft version of this Framework was made public in an ENERSELVES local seminar to receive input from key regional stakeholders in energy matters. This took place at the end of 2017 in Badajoz, where the strategic lines in this field were defined and lessons learnt in this project were provided.

In this way, AGENEX understood that not only it was important to include renewable large-scale projects, which are already taken into consideration in our region as beneficial, but also to focus on the specific situation of renewable self-consumption and the importance and multiple benefits it has for consumers.

ACTIONS TO BE IMPLEMENTED

Following our goal to include the integration of self-consumption in buildings as a strategic line of action under the Framework Extremadura 2030, AGENEX has carried out several activities during phase I, and will ensure the implementation of the energy related actions during phase II. AGENEX has participated, through ENERSELVES project by assuring that renewable energy is a key priority, in one of the most important regional strategies that defines the steps that should be followed to achieve a carbon reduction in Extremadura .

This strategy compiles actions in the field of energy, especially through the definition of a regional sustainable energy model, the management of natural resources, the objectives for climate change, sustainable mobility, the role of citizens and municipalities and the job creation. Each specific area will have its own actions that will jointly allow Extremadura to reach its final goals. Given that energy plays a key role in this Framework Extremadura 2030, AGENEX will work closely with the regional government to make sure that these actions are indeed implemented. For this, AGENEX will develop the following subactions:

- 1.1. **Meeting with the public body** responsible for the Framework, that belongs to the Regional Government, were held during phase I to help define this strategy, and are planned until 2020 to monitor a correct implementation of the activities defined. These meetings will be held periodically, every six months.
- 1.2. **Giving support at local level** by organizing local stakeholders' meetings to assure a proper engagement of the public administration in the development of the actions at local level, and developing a working document to achieve a low-carbon economy at municipality level.
- 1.3. **Developing policies to fight energy poverty.** AGENEX will contribute to improve current policies to fight energy poverty through energy efficiency improvements in low-income and social houses. The synergies between ENERSELVES and SOCIAL GREEN projects, will allow that all improvements achieved through this project will be transferred to the other. Low-income and social housing will be encompassed in this regional strategy; and the benefits and improvements achieved in public buildings through the second strategy (action 2) will also be applied to social housing, which in most cases, also belongs to the regional government.

PLAYERS INVOLVED

The most important players that will be involved in developing these actions will be the Regional Ministry for Environment and Rural Affairs and the Regional Ministry for Economy and Infrastructures because both of them together agglutinate the competences of energy, environment and sustainable development. So, they have the legal competences necessary to promote and manage the previous activities.

AGENEX will have a key role to assess and contribute to the development of the Plan in all the issues related to energy. In this case, focusing on the best way of integrating RES in buildings and determining those technologies that are more cost-effective to support.

Moreover, the Framework considers that the participation of citizens is a priority and that awareness on energy consumption matters should be created. This is why several meetings and workshops will be organized involving all these different branches in society, in order to get feedback from experts, social and economic agents, political organizations and citizens.

TIMEFRAME

The first action of the Action Plan for Extremadura on THE INTEGRATION OF RES IN BUILDINGS has the following activities and deadlines:



COSTS (if relevant)

All the support given by AGENEX to better define this green and circular regional strategy has been covered during the first phase with the project's resources for staff. So, there is not a specific budget for this action, the costs for its implementation will be related to personnel, both from AGENEX and from the Regional Government.

FUNDING SOURCES (if relevant):

The players involved in the action will support the activities described with their own resources.

ACTION 2. DEFINITION OF THE STRATEGY "ENERGY EFFICIENCY AND RENEWABLES IN PUBLIC BUILDINGS OF EXTREMADURA'S REGIONAL ADMINISTRATION 2018 - 2030"

BACKGROUND

The background related to this action is again based on the contribution received by all the project's partners. The lessons learnt by AGENEX's staff when attending the interregional events are the following:

- **From Sweden**, the possibility to combine more than one renewable technology for self-consumption in order to increase the efficiency.
- **From Poland**, the importance of the stakeholders involved and their dedication when planning and developing public strategies.
- **From Romania**, the relation between public support and research in universities to develop new projects and alternative solutions.
- **From Malta**, the huge difference when comparing the situation of electric self-consumption to the one in Spain. The widespread expansion of photovoltaic systems, not only in public buildings but in the private sector too, is the result of a good supporting scheme. It is also worth highlighting the perspectives they have for the coming years of energy independence in the island.
- **From Italy**, the commitment of the Autonomous Region of Sardinia with renewable energy, especially in public buildings: we visited two with different uses, an office building and a hospital.

In the region of Extremadura, more than 100% of the electric demand is produced by renewable energy sources. Additionally, Extremadura is one of the regions in Europe that exports more electric energy produced by CO₂ emission-free sources. Nevertheless, this situation is not as "green" when speaking about electric self-consumption, due to long and complicated procedures and regulations.

Thanks to the lessons learnt in other EU countries, AGENEX has informed the Regional Government on new and improved possibilities to increase the support given to these renewable technologies for self-consumption. Both entities agreed that the best way to promote the integration of RES in buildings and improve the EE, at the same time as creating awareness on this matter, is to implement the measures in public buildings. To determine the best way to do so, a study will be carried out depending on the buildings' purposes and characteristics.

ACTIONS TO BE IMPLEMENTED

Following our goal to include the integration of self-consumption in buildings as a strategic line of action inside the Strategy that addresses energy efficiency improvements and integration of renewables in public buildings of Extremadura's regional administration 2018-2030, AGENEX has carried out and will continue on pursuing the following sub-actions:

- ▣ **Several meetings with the responsible bodies in charge of defining the Strategy under consideration.** These meetings started at the beginning of 2018 and are still ongoing until the Strategy is made public; the expected date for it to be published is December 12, 2018. These meetings were necessary to set the guidelines for AGENEX to work on the document, including all those actions that are a priority for the Region. This support and input is given by AGENEX through ENERSELVES project.
- ▣ **Technical and Financial Development of the Strategy.** With the support of DG Architecture and DG Energy, AGENEX has been responsible for developing the core of the document. For this purpose, it has been necessary to study the public building stock, promoting efficient and intelligent technical solutions to reduce the final consumption of energy, taking into account the use of these buildings and the potential for reducing their consumption.
- ▣ **Validation of the Strategy by Extremadura's Regional Government.** Although the work developed by AGENEX has been agreed upon by the DGs involved in the Strategy, before the document's final validation and its implementation, it should be approved by the Regional Government Board. Not only from a technical point of view, but also to assure the economic allocations for the specific actions.
- ▣ **Recommendations for the first Action Plan 2018 - 2020.** The methodology of this Strategy defines the fundamental steps for the design of the action plan to develop it. The first stage, 2018 – 2020, is slightly different to the following, 2020 – 2030. Due to the shortage of updated energy data, a series of recommendations are included to design the scope in this first stage:
 - Energetic characterization of the existing administrative buildings, including their certification as is established in the Royal Decree 235/2013.
 - Design and implementation of a common platform for buildings energy management.
 - Recommendations for the elaboration of the Technical Specifications Documents to include the parameters that must be taken into account for new buildings and for complete rehabilitations.
 - Further monitoring of energy consumption and analysis of this consumption.
 - Identification of types/uses of buildings with greater energy consumption, and definition of a proposal of priority energetic action axes on each identified group.
- ▣ **Implementation.** Once the previous recommendations have been defined, and depending on the results of the different studies that will take place, the implementation of the Action Plan will be developed. Preliminary analysis point out sanitary buildings as those more likely to be tackled first.

PLAYERS INVOLVED

The main players that will be involved in developing these actions will be the Regional Ministry for Social Affairs and Health, as it holds DG Architecture and the Regional Ministry for Economy and Infrastructures that holds DG Industry, Energy and Mines. The joint work of these two DGs is what will allow the Strategy to address the public buildings' energy needs. Managing from Architecture the measures that will be taken for energy efficiency improvements and from Energy the possibility to integrate renewables in the buildings to reduce consumption through self-generation.

AGENEX has had a very important role in defining this Strategy for public buildings in the Region, which's final objective is to identify and put in value those actions that will be implemented in the buildings of the regional administration to promote the transition towards a green and circular economy, based on the use of autochthonous resources, promoting the generation of quality employment within the framework of a new and sustainable productive model, and by developing an exemplary role in energy and building quality matters.

Moreover, the Strategy also aims to achieve some specific objectives: to inform and create awareness to all citizens as they are they final consumers of this energy system; to contribute to an economic revival in the region through a new model of circular economy; boost a decentralized transition in which consumers gain a higher importance and opt for a technological development and research in the region's competitive sectors.

TIMEFRAME

The first action of the Action Plan for Extremadura on THE INTEGRATION OF RES IN BUILDINGS has the following activities and deadlines:



COSTS (if relevant)

All the support given and the work put in by AGENEX to define this strategy for public buildings in the region has been covered during the first phase with the project's resources for staff. The cost of the architects and engineers from both DGs that have collaborated with the document are covered with their own resources.

This situation will be given in the same way during the project's second phase: 4PM/year (30.000€/PM) from AGENEX and 2PM/year (40.000€/PM) from the Government.

Currently, it is not possible to calculate the exact amount of costs for the implementation of the Strategy during its first action plan. However, estimations have been extrapolated to the first period and a total amount of 5M € will be allocated until 2020 to the activities developed between the Regional Ministry for Economy and Infrastructures and the Regional Ministry for Social Affairs and Health.

FUNDING SOURCES (if relevant):

The main funding source will be ERDF contributed by the Regional Government, and own resources of the entities involved. As well as ESCO models to support the investments.

ACTION 3. SPECIFIC REGIONAL ERDF GRANTS TO FINANCE REGIONAL PROJECTS

BACKGROUND

The learning process is enriched by other regions not only by the need of increasing the energy self-consumed and by highlighting the importance of these consumers, but also by the support schemes that are available in some of these regions. For instance:

- From our Swedish partner we learned that public subsidies were given for the integration of technologies for electric self-consumption, as photovoltaic systems, and once these investments were more reasonable, recent subsidies also include electric storage. In a way, part of the cost reduction reached by this technology is due to the growth it has experience thanks to the support received by local, regional and national administrations. Increasing the number of installation companies, products available, etc. The lesson learned is that some public support is necessary to develop new technologies that still aren't fully implemented, due to many different reasons, and once it is accepted by consumers, this help can be focused on other technologies or storage systems.
- One of our Italian partners, the Autonomous Region of Sardinia, is as Extremadura, highly committed with renewable energy. As mentioned in the second action, it is important that this commitment is led by the example and therefore, measures are implemented in public buildings. But it is also important that help is provided to individuals, neighborhood communities and enterprises.

The final objective of this third action is to establish measures that serve to better channel energy production through clean energy and ensure the reduction of CO2 emissions, as well as to promote the use of renewable energy in favor of a sustainable development model and reduce greenhouse gas emissions. This will be achieved by a better use of the energy and by the promotion of renewables. In this way, public subsidies are established for the acquisition, installation, improvement, and expansion or adaptation of equipment, systems and installations of renewable energies.

ACTIONS TO BE IMPLEMENTED

A regional call was launched before the end of phase 1, in July 2018, by the Regional Government to finance renewable projects in Extremadura: Decree 110/2018, of July 17, which establishes the regulatory bases for the regime of granting subsidies for actions in renewable energies in Extremadura. This decree distinguishes three lines of action:

- ▶ **The first line is for individuals and neighbourhood communities.** It is therefore addressed to private owners of detached dwellings but also to communities that live in a block of flats and want to develop projects of common interest. The maximum amounts vary depending on the projects' characteristics.
- ▶ **The second line is for municipalities and minor local entities.** This line is addressed to public projects, but in small municipalities and entities.
- ▶ **The third line is for private companies, individual or self-employed entrepreneurs and energy services' suppliers.** AGENEX has supported the Regional Government with the technical specifications and requirements for this call. The type and quantity of the grants will also range depending on the technologies used: thermal energy from biomass, low temperature solar thermal, photovoltaic systems for electric energy (with or without storage), biogas installations for electric and thermal energy production, geothermal installations and aerothermal/hydrothermal installations when using high efficiency heat pumps.

For this action to be fully and properly implemented, the following sub-actions have been identified:

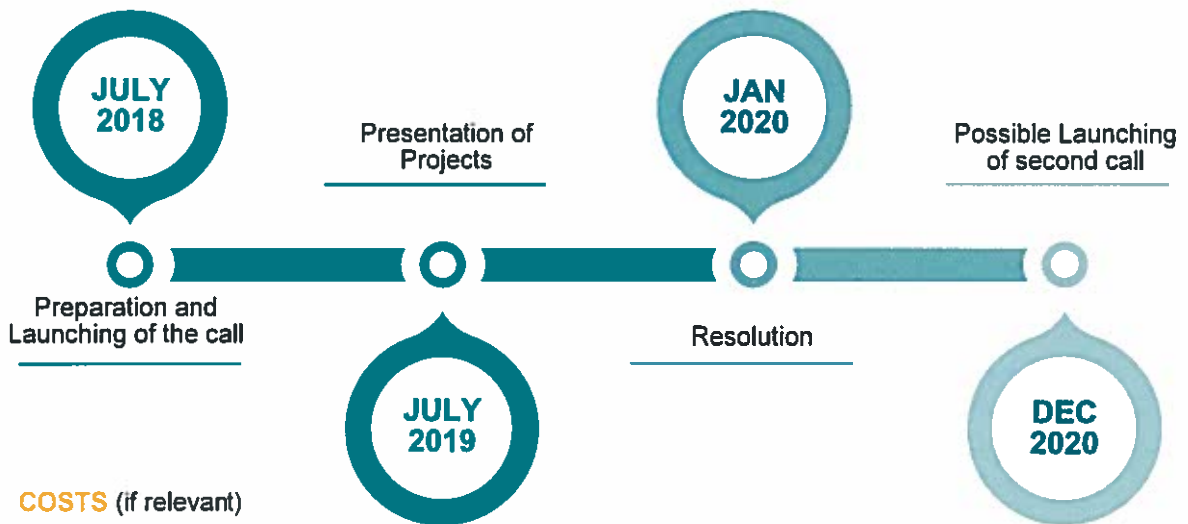
1. **Preparation and Launching of the call.**
2. **Presentation of projects to be granted.** The time to submit projects and documents required will be 12 months since the call is made public. Nevertheless, if the budget runs out before this time is complete, this period will be declared ended and published so, the following projects presented from this moment on, won't be considered.
3. **Resolution of the call.** Projects will be resolved 6 months after been presented. Considering this could happen 12 months after the call is launched, 6 months will be added to this date. But, most likely, it will happen sooner.
4. **There will be a possible second call** depending on the results of the first call. This is, if the entire budget is spent and more projects are waiting for grants to be implemented, the stakeholders involved will evaluate the need to launch a second call before the end of the project.

PLAYERS INVOLVED

The main players involved in preparing and launching this action are the Regional Ministry for Economy and Infrastructures through its DG for Industry, Energy and Mines, and its Regional Energy Agency, AGENEX.

TIMEFRAME

The third action of the Action Plan for Extremadura on THE INTEGRATION OF RES IN BUILDINGS has the following activities and deadlines:




COSTS (if relevant)

The costs of this call, as well as the staff costs involved that have been covered with own resources, are the amount of budget allocated for the grants. This amount is specified depending on the lines of action previously defined:

- Line 1: 1.535.155,00 €
- Line 2: 722.479,00 €
- Line 3: 4.324.012,00 €

FUNDING SOURCES (if relevant):

All of these amounts are funded by the General Budget of Extremadura Region, co-financed 80% by ERDF.

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| <p>The partner responsible for drafting the ENERSELVES regional action plan for Extremadura Region</p> <p>08874086L COSME PEDRO SEGADOR (R: G06358105)</p> <p>Firmado digitalmente por 08874086L COSME PEDRO SEGADOR (R: G06358105) Fecha: 2019.07.24 09:10:31 +02'00'</p> <p>Signature: Mr. Cosme Segador, Director</p> <p>Director of AGENEX – Extremadura Energy Agency</p> <p>Date:</p> | <p>Managing Authority of the Regional Operational Program of Extremadura 2014 – 2020 acknowledging and validating the current action plan</p>  <p>Signature: Mr. Samuel Ruiz Fernández, Director</p> <p>Directorate General for Industry, Energy and Mines - Regional Government of Extremadura</p> <p>Date:</p> |
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