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Application form “AEBR-Cross Border Award” 2014
Deadline: 31.07.2014

Please, fill in the grey gaps and return this form by e-mail!

INNOVATION AND RESEARCH – CROSS-BORDER REGIONAL DEVELOPMENT
THROUGH PUBLIC-PRIVATE PARTNERSHIP

1. General information

1.1 Applicant border / cross-border region:

EGTC Duero-Douro. The European Grouping of Territorial Cooperation Duero-Douro is a public entity with the aim of the social and territorial cohesion between Spain and Portugal, concretely in NUT III Beira Interior Norte, Douro and Tras-òs-Montes (Portugal) and Zamora and Salamanca (Spain).

Title of the cross-border measure* [project(s), programme(s) / strategy(ies)]:

Energetic Efficiency in Public Lighting of the Border: Duero-Douro Energy Consumer Center

1.3 Period:

Recruitment phase in Spain: 14th march 2012 – 25th september 2013

Contract implementation in Spain: 01 november de 2013 – 31 october 2028

Recruitment phase in Portugal: 05 july 2014 – march 2015

1.4 Lead Partner:

EGTC Duero-Douro

Contact:

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1.5 Partners:

Members of EGTC Duero-Douro (councils / local administration)

Contact:

1.6. Financing of the cross-border measure (e.g. INTERREG):

Remark: It should be explicated how the financing of the strategy(ies) / concept(s) / project idea(s) has been or is realised.

Funding for this project is based, primarily, on the savings achieved through the replacement of public lighting installations and the joint management contract of all participating municipalities. Thus, through the public private partnership contract with an Energy Service Company (hereinafter ESC), the company is the one conducting and paying the investment and in the duration of the contract, the investment is amortized by the savings. By doing this, it is possible that every municipality, however small they may be, they can carry out energy efficiency measures without advancing the money, grouping, and in our case, paying the same that was paid before the effective measures for the whole the life of the contract.

In addition, the contract takes into account the possibility of obtaining grants for this purpose that would shorten the duration of the contract. In fact, the project already has a grant that comes from the Ministry of Energy and Mines of the Junta de Castilla y León (Autonomous Regional Government) totaling € 498,000 granted to the Consumer Energy Center Duero-Douro that reduces the time of the contract in almost 9 months.

1.7 Links to other projects, measures and/or programmes (only if applicable):

The first phase of the project on Energy Efficiency in Public Lighting of the Energy Consumer Center Duero-Douro is within the Plan of Saving and Energy Efficiency Activation 2008-2011 (Plan de Activación del Ahorro y la Eficiencia Energética 2008-2011) of the Ministry of Industry, Tourism and Trade (Spain's Central Administration). In the following link, there is an article published by the Ministry on this project, which can be consulted:

<http://www.idae.es/index.php/id.644/relcategoria.3832/mod.pags/mem.detalle>

In fact, the Head of the Agriculture and Services Department of the Institute for Diversification and Saving of Energy (IDEA) of the Ministry participated as a full member in the special table for the Competitive Dialogue procurement of the ESC, together with the Chairman of the Spanish Lighting Comité and a technician of the Saving and Efficiency Department of the Regional Energy Agency (EREN) of the Junta de Castilla y León and other representatives of the Duero-Douro EGTC.

All the documents of the recruitment process can be found in the client profile in the website of this organization:

http://www.duero-douro.com/contratante/index.php?pagina=lista_contratante2&cod=47&lang=es

<http://www.duero-douro.com/index2.php?pagina=articulo&cod=53&lang=es&tema=proy&tit=%20Duero-Douro.com%20%20INSCRIPC%20D3N>

2. Contents

2.1 Objectives of the cross-border measure:

General Objective

.- Ensure economic, social and territorial cohesion as well as joint and integrated management, in energy, throughout the territory object of action. The project's general objective is to enhance the energy efficiency of Exterior Public Lighting of the municipalities participating in the EGTC Duero-Douro. Being energy efficiency the reduction of energy consumption while maintaining the same energy services, without compromising our comfort and quality of life, protecting the environment, ensuring supply and fostering sustainable behavior in its use as proposed by the European Directive on Energy Efficiency. With all this, the project achieved average savings of about 82% compared to traditional lighting systems.

Specific Objectives:

- .- To consolidate the Public Entity Duero-Douro EGTC, as an efficient tool and a guarantor of territorial cooperation, through its conversion into a single energy consumer centers, representing the Spanish and Portuguese municipalities (In this project, 54 spanish municipalities participate with 155 villages while 7 portuguese municipalities participate with around 140 villages).
- .- Establish the necessary protocols of shared and common use of infrastructures and services in the energy field.
- .- Increase efficiency and effectiveness of services at the border.
- .- Having the best lighting technology ,the most modern and efficient available in the market. LED technology.
- .- Implement in all public outdoor lighting installations accessories and technologies that provide maximum effectiveness and efficiency.
- .- Control, regulate and maintain street lighting facilities in all municipalities members of the EGTC Duero-Douro, in optimal conditions.
- .- Produce environmental benefits by reducing pollutant emissions, as will mean a lower emission of greenhouse gases (commitments to the Kyoto Protocol), mainly carbon dioxide (CO₂) and methane (CH₄). Concretely, in the Spanish area, this project is experimenting around **1.853.919,21 kg CO₂/year** of savings, that means more than 5 millions of kWh/year of energy savings.
- .- Disseminate among the citizens the new technologies and the change of energy consumption habits.
- .- Improve the balance of payments, by reducing energy bills.

Therefore, through this initiative will contribute to the objectives of the 2020 strategy as follows:

Duero-Douro Energy Consumer Center	Expected outcomes by 2020
1. Changed the " <u>unilateral energy management model</u> " for a Joint Participated Model with a PUBLIC-PRIVATE PARTNERSHIP	<ul style="list-style-type: none"> ▪ Influence on local and regional energy policies of the territory of the Duero-Douro EGTC.
2. <u>Decreased at least 80% of the demand and energy expenditure of the Duero-Douro Consumer Center</u>	<ul style="list-style-type: none"> ▪ Reducing emissions of greenhouse gases over 3.600.000 kg annually.
3. Eliminated more than 295 " <u>Critical Issues</u> " from the standpoint of energy efficiency	<ul style="list-style-type: none"> ▪ Transform misbehaviors on energy issues of both the population and public facilities in the territory subject to activity
4. <u>10.000 toe/year Primary energy savings compared to projections (toe/year)</u>	<ul style="list-style-type: none"> ▪ Primary energy savings compared to projections (toe/year)
5. Value the energetic territorial iden-	<ul style="list-style-type: none"> ▪ Convert the territory of the Duero-Douro EGTC in an area

tity as an Enclave of Energy Excellence

remarkable for its low energy consumption, at European level, being known as a rural area of exceptional energy efficiency and high environmental protection, as they protect the land as a reservoir for more than 5.000,000 trees

2.2 Organisational structure and activities to implement the objectives (e.g. joint secretariat, contract, etc.):

In this first phase of the project, temporary planning carried out has been:

- April 2011: Contracting services for conducting energy studies (stocktaking).
Inventory and energy study of the outdoor lighting facilities participating in the project, provide important preliminary information for the energy service companies to analyze the type of savings, existing technologies and make a forecast investment. Therefore, to offer an overview of the territory is essential for the recruitment process to be effective. In fact, the most recommended is that the company performing the preliminary study is different from the one winning the tender, thus, avoiding potential controversies that may arise.
- October 2011. **Field Work** of the Public Lighting Energy Studies (**stocktaking**).
- February 2012. Presentation of results to the members of the Energy Consumer Center Duero-Douro and **setting deadlines for bidding on the ESE**.
The Duero-Douro, due to being a non-profit public institution, must have the approval of all or most of the members to implement a project. That is why the members of the Groupment get together periodically in briefings, to be themselves the ones deciding on the priorities and needs of their territory. Thus, the project was previously approved at the Ordinary General Assembly and then each participating municipality had to pass in its the plenary body the adherence to the project, a preliminary agreement during the period of Contracting and finally a Contract, After the tender.
- March 2012: Approval by the Coordinating Council of the entity, to make the contract of the Energy Service Company for the first phase (Spanish Municipalities) through a procedure of Public-Private Partnership by Competitive Dialogue Award.
The Coordinating Council is the contracting authority of the Duero-Douro EGTC, being responsible for the tendering procedures. That is why this body adopted the type of procedure, the award procedure, the contract that would govern the competition: Description Document and Functional Program and the Establishment of the Special Bureau of Competitive Dialogue.
- May 2012: Publication of Tender in the Official Journal of the European Union, and in the Official State Bulletin of Spain Boletín (Boletín Oficial del Estado de España) (**DOUE – BOE**).
Since it was a cross-border project, it was decided to make the publication in the OJEU and later, in the BOE as it was the territory where the project would be implemented.
- June 2012: Analysis of Bidders: technical and financial solvency eligibility. This was the first step of the Competitive Dialogue. It was decided to invite the 8 companies who obtained the highest score on these criteria, among which stand out ENDESA, GAS NATURAL, FERROVIAL,...
- July 2012: Candidate selection and invitation to the highest rated ESCOs to participate in the Competitive Dialogue.
- October 2012: Submission of Proposals and Analysis by the Special Committee of Competitive Dialogue.
- October 2012 to July 2013: Discussion with the candidates.
- Were held 6 sessions with the finalist Energy Service Companies. In each of them the final proposal was progressively worked and outlined, because this procedure allows choosing the best of each proposal and then presenting the characteristics of the final bid. Thus, the procedure was very enriching, offering the best features, the most innovative technologies of the market in rural areas.
- August 2013: Final Award. Based on the Final Act containing the features that the offer would have to meet, the best valued company was ELEC NOR S.A.
- 25th September 2013: **Signature of the contract**. The contract is signed by the Delegation of the Government of Junta de Castilla y León in Zamora.
- 1st November 2013: **Start Date** of the contract.
At this day was signed the Act of Start. It gives the company a month for requesting changes in holdings of the contracts with the suppliers of energy. Thus, from day 1 November 2013, the ESCO should provide all 4 benefits included in the contract:
 - P1: Energy supply
 - P2: Maintenance
 - P3: Total Warranty
 - P4: Renovation and improvement of street lighting installations.
- November 2013 to July 2014: **Execution time of renewal** of public lighting installations.
In the photographic Annex is possible to see the situation before and after the project's intervention in many municipalities that are already completed. There is a qualified field Technician monitoring all the facilities, in order to assure that, at the end of the project the work done is the best.
- November 2013 to October 2028: Contract time to recoup the investment during which the ESCO will continue its **other services**: electrical supply, maintenance and total guarantee facilities.

The second phase in Portugal will follow a very similar scheme, although it is expected to shorten the procurement time, given the acquired experience, besides that the consumption analyzed at the participating towns and villages from Portugal is much higher than in Spain (for instance: the 28 localities that make up the City Hall of Mogadouro are larger than the entire participating population from Spain) so it is assumed that the Tender will be more attractive, competitive and efficient and that the savings will be much greater, causing that the consumption time return may also be much lower.

2.3 How far has the measure been implemented?

We are now at the stage of completion of the renovation of the facilities of the municipalities of Spain. At the same time, we are starting the recruitment process, through public-private collaboration in the Portuguese municipalities, based on experience acquired on the other side of the border. As in the first phase, the Special Bureau of Competitive Dialogue will always be composed of Spanish and Portuguese members to ensure cross-border cooperation and transfer of good practices and results and also by representatives of the central government from each country to ensure compliance with current legislation and adapting ourselves and the project to national and European strategies on energy efficiency.

The implementation had to be performed separately in both countries because of being a complex contract in which the provision of power supply is included, and considering that suppliers are NOT the same in both countries, it could not be done with a single bidder. That is why we decided to start it in Spain since the energy market was liberalized and more ESCO's are registered, serving as a model and pilot experience for its later deployment in Portugal. It is expected that the procurement procedure time is shorter in Portugal, but no less rewarding than the Spanish, in view of experience gained.

When it comes to analyze the results of the Spanish phase, the feedback is very positive, given the satisfaction of the population, local government, local installers and therefore the contractor and contracting. The light quality has improved very quantitatively, taking into account that, on the Spanish side, more than 65% of facilities had mercury vapor technology lamps, approximately 25% of high-pressure sodium vapor and the other were fluorescent lamps. We must also assess the aesthetic improvement experienced in the streets of the participating villages and the elimination of potentially dangerous electrical hazards to citizens (increased security in the area), environmental improvement obtained by removing tons of carbon dioxide emissions to the atmosphere through reducing energy consumption and the satisfaction of having implemented an innovative technology in rural areas due to the union of 155 villages.

2.4 Special framework conditions (a. geographical, political, etc. / b. only rural area (no regional metropolis))

Indeed, the implementation framework of the project is very specific. All municipalities belonging to the Duero-Douro EGTC and therefore making up the Energy Consumer Center Duero-Douro are predominantly rural, border, away from the big cities. That is why in these areas are not usually implemented innovation and development projects such as this one that we are developing, in addition, these local governments have great difficulties concerning to economic availability to invest because they have very limited resources, as well as a lack of qualified technical personnel.

On the Spanish side, the largest town may be around 800 inhabitants, while in Portugal there are 7 large towns (where the City Hall is located) with about 3,000 inhabitants, while the remainder are also small, with an average about 300 - 400 residents.

3. Contribution of the measure (added value) to the development of the border/cross-border region:

(not more than half a page)

- Added Value on the Territory and the Society. Improved Street Lighting, thus decreasing the risk for older facilities, improved lighting conditions of small towns and increased quality of life and public services. Moreover, in neighboring towns, whether different countries, promotes equal to avoid differences between Spain and Portugal.

In Portugal, local governments had always been more unwilling to this project given due to the energy state in which the country found itself. Once implanted the first phase in Spain, seeing the good results, that it is really possible to do it, and in fact, it goes in line with European priorities, is when they have shown more confidence in being able to perform the project in Portugal.

The aesthetic appearance of the villages is improving considerably, because many of them had broken lights, no glass protection, twisted and rusty lights,... plus downed wires or open electrical panels, with the consequent danger to the population of the territory. With this contract, those conditions will not ever be a concern for this local administration.

- Added Value on the Economy of the area. Territorial Management Model in cooperation, obtaining: a 82% energy and economic savings as well as job creation in the territory, to avoid people having to migrate in search of employment. Thus, fix population in rural areas. Thus, the maintenance crews lighting installations will come cross-border in the Consumer Energy Center Duero-Douro.

Many border residents work indifferently in the neighboring country, coming and going every day, so job creation is another way to break psychological, social and economic barriers between countries in border areas. In addition, if the economy of an area goes better, it will always affect the business of a whole territory and its area of influence.

The ESCOs that have participated in the Spanish phase are already mobilizing and seeking support in Portugal to be able to present to this second phase. This shows the interest of these companies to expand their business and the interest to work together because of the experience gained in previous phase. Thus also contributes to break the barriers of the European market.

Furthermore, from the EGTC Duero-Douro, we are reducing transaction costs, which is achieved by sharing costs and optimizing resources without compromising the autonomy of the parties (295 villages), we also are improvement of economies of scale, undertaking joint projects that require resources that go beyond the capabilities of the parts taken

