Application of GOTARRENDURA, CRADLE OF INNOVATION.

A. Profile of the Initiative

<table>
<thead>
<tr>
<th>Geographic Region</th>
<th>Western Europe and Others</th>
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</thead>
<tbody>
<tr>
<td>Country/Region</td>
<td>Spain</td>
</tr>
<tr>
<td>Name of City/Local Authority</td>
<td>GOTARRENDURA</td>
</tr>
<tr>
<td>Organization</td>
<td>AYUNTAMIENTO DE GOTARRENDURA</td>
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</tbody>
</table>

Basic City Data

- Population size: 161
- Population Growth Rate(%): 0.00
- Surface Area (sq.km): 10.000
- Population Density (people/sq.km): 15.000
- GDP Per Capita (U.S.$): 19.011
- GINI Index: 0.034

<table>
<thead>
<tr>
<th>URL/Webpage of Your City:</th>
<th>URL/Webpage of Your Initiative:</th>
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</table>

Main source of prosperity (e.g. industry, trade, tourism, creative industry, etc.): energy efficiency

B. Title and Abstract

For a large integrated initiative, please consider submitting up to three initiatives under the same title. For example, you may wish to submit under “Low-Carbon Urban Development for My City” an initiative on public transport, an initiative on energy efficiency in buildings, and an initiative on use of renewable energy.

<table>
<thead>
<tr>
<th>Title or Tagline of the Initiative</th>
<th>GOTARRENDURA, CRADLE OF INNOVATION.</th>
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</thead>
<tbody>
<tr>
<td>Sub-title</td>
<td></td>
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<tr>
<td>Start date of the initiative</td>
<td>2017-11-05</td>
</tr>
<tr>
<td>Tentative End Date of the Initiative (if not yet completed)</td>
<td>2019-06-30</td>
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</table>

Thematic Areas

- Environmental
- Technology

Abstract/Short description of the innovative initiative being submitted for Award.(150 words max)

GOTARRENDURA, CUNA DE LA INNOVACIÓN.

Gotarrendura es una ciudad situada en la provincia de Ávila, España, con una población total de 161 habitantes. En 2004 comenzó a hacer grandes esfuerzos para hacer que el desarrollo tecnológico sea más innovador, sostenible y social. Con ese propósito, participó...
en diferentes estudios de investigación centrados en la innovación, a nivel local y también a nivel europeo. Con este plan en mente, fomentó la mejora de la calidad de vida, respaldada por conceptos de eficiencia energética y ahorro de la economía. Así es como la forma de vida comenzó a cambiar en la ciudad.

Se ejecutaron diferentes proyectos para mejorar el Ayuntamiento, con el objetivo de hacer de la ciudad un referente en eficiencia. Una vez que se identificaron los problemas, se definió un conjunto de objetivos, así como las líneas de acción para lograrlos.

Acciones tomadas:
· Adaptations in the electricity supply contracts.
· Refurbishment of municipal primacies, using adobe techniques.
· Installed low consumption streetlights.
· Installed a more efficient water supply network.
· Replaced electric heating systems with biomass heating systems.
· Improved water pumping, using solar and wind power.
· Installed a power self-sufficient water pressure regulator.
· Supported other innovation projects

Besides, there is another project currently in progress, run by a researcher, to develop a new kind of vertical wind turbine. This turbine is intended to provide power to water extraction plants. If the project success, this system could be easily installed in other cities, with a great balance between installation cost and overall energy savings.

C. Background Information

Describe the legislative or policy framework under which the initiative is taking place, for example, a public policy document at the central or local government level, a policy statement, a covenant, a compact or internationally recognized agreement including, for example, the Sustainable Development Goals, and/or the New Urban Agenda

Nos estamos gobernados por el acuerdo alcanzado en el 27 de junio de 2018, que establece el objetivo de para 2030 El 32% de la energía de la UE proviene de fuentes renovables. Aunque no estamos trabajando en ello y participando en sesiones de eficiencia energética desde 2006.

D. Summary of the Origins of the Initiative

Describe how the initiative came about and what challenges or issues of sustainable development it is meant to address using the following lead questions as your guide. (350 words max)

1. Describe briefly the reason(s) for undertaking the initiative including social, economic, political or cultural challenge(s) or issues confronting the city/region/community. Include where relevant number of people, enterprises or institutions affected.
Gotarrendura is a town small of 161 inhabitants, of whom 62 are women who belong to the Group of disabled people and the rest 70% are over 65. These data reflect a population aged and limitations for the development of the town. In addition to these data, the consistory, in 2010, had a percentage of expenses caused by the power consumption of a 60% compared to revenues of statutory headings. Being unfeasible to support these expenses without neighbors were harmed either by a municipal tax increase, by stopping the development of its activities or diminishing the quality of the services.

The City Council began to have an intention of change, based on a blend of knowledge of new technologies, awareness of environmental care and an aggravating factor of the expenses caused by the excessive use of electric energy in the different municipal offices. It is necessary to also illuminate, heat the school and Town Hall, and provide potable water supply service to the municipality.

Energy efficiency and renewable energies are becoming a priority for Gotarrendura, feeling the need to transform the old system to one of clean energy. Seeing that it could also be a source of employment for the municipality development. It begins to find an energy so that a change in clean energy, savings and efficiency.

2. Describe the goals of the initiative in terms of desired change or outcome and timeframe for achieving the change or outcome (for example, change in policy, strategy, business model, technology, means of implementation, financing arrangements, human development and empowerment, measuring and evaluating progress and impact, etc.).

Actions taken:
- Adaptations in the electricity supply contracts.
- Refurbishment of municipal primacies, using adobe techniques.
- Installed low consumption streetlights.
- Installed a more efficient water supply network.
- Replaced electric heating systems with biomass heating systems.
- Improved water pumping, using solar and wind power.
- Installed a power self-sufficient water pressure regulator.
- Supported other innovation projects

3. Describe whether the innovation involves any partnership (public-public, public-private, public-community, etc.) and if yes, who is or was the leading partner(s), the role they each played and whether other parties have benefited or are benefiting from your innovation and how?

The City Council with the collaboration of private companies of new researchers has created projects. Giving them the opportunity to install its technology in the village and promote his idea as well.
4. Describe the resources used for implementing the initiative, including funding/financing strategy or arrangements and any significant contributions that are not in cash, for example, in human, technical or managerial resources.

The economic resources of this town are scarce, so that all projects have been made thanks to government subsidies. Supporting innovators also made that the costs of the projects were lower thanks to carry them out for the first time was a boost to its initiative. Positive support from residents of the village has also been very significant so that they could perform

E. Summary of the Innovative Aspect(s) of the Initiative
Describe the innovation for the initiative using the following lead questions as a guide. (350 words max)

1. Describe whether the initiative should be considered evolutionary or revolutionary. Evolutionary would imply that innovation evolved over time based on lessons learned from experience and that the changes or outcomes are cumulative. Revolutionary would imply something quite new or something that has been borrowed from elsewhere but never been tried before in the sector or context in question and therefore bears a certain degree of risk. If it's borrowed from elsewhere, describe what the linkage with the other preceding experiences is.

2. Describe where the innovation is being applied, for example, in policy or strategy; planning, design and implementation; business model or financing arrangement; tools and technology; governance and administration; etc

The innovative project will be installed in the village, to supply water to people with the power of air, financial model income and with the help of the Government country. The creative company device look for funding supportable continue creating these elements.

3. Describe whether there was or are any obstacles or resistance to the innovation and if so, how were/are they being overcome.

So far strong moment resistances not found support for the new project is still acceptable.

F. Summary of the Desired Change or Outcome and how it is being Measured
Describe how the initiative, and in particular the innovation, is or will be making a qualitative and/or quantitative change and how that change or outcome is being measured. (350 words max)

1. What change(s) or outcome(s) have you already achieved or hope to achieve? Please describe the nature of the change(s) or outcome(s) in, for example, improved quality of life; new levels of social, economic or environmental sustainability, including new attitudes and behavior; improved efficiency, effectiveness, accountability or transparency, etc. Please describe the scale of the change, for example, primarily local, regional, national or global and where possible, please quantify the change(s) or outcome(s) being achieved.


2. What indicators or metrics are you using to assess the change? Describe who is doing the measuring, and who is using the measurements and how.

Each project is accompanied by an economic study of the money that is spent on non-renewable energy, cost and amortization period, obtaining very reliable results, which we are guided to know if profitable or not. This is carried out in the Innovation Technician Village, with actual data provided by the City Council. Once still getting balance reflects positive change obtained after each project.

3. Describe any specific tools or methods that were developed or applied to improve the chances to attain the desired outcome or change, for example, new working methods, new data and information, new incentives or disincentives, new means of communication and knowledge, new technology, etc.

The first measures were audit various municipal power supply points. Found the payment of invoice to company Distributor, verifying increase with comparative data from 2010 to 2012. It was launched an analysis each point and see improvements that could be made. Taking into account hired powers, use intended for type heating building time, engagement appropriate need electrical offered best price.Commitment energy efficiency leads rehabilitate several buildings, using traditional sustainable construction technique. Street lighting caused major consumption in expenditures, by some older installations. Lighting provided it bulbs mercury vapor, which replaced sodium along organization distribution lines, flow reducers, making more efficient. Changes water pipeline based on were systems changed biomass, pressure groups supply less drinking people is self-sufficient thanks solar energy. Booster work now want wind power.

4. How does the initiative and its intended changes or outcomes contribute to a new image or reputation for your city or community?

Thanks to the projectsthat have been madein Gotarrendurawas named 2011 "City of science and innovation", is still ongoing maintaining this recognition. As a result, we are known throughout the country Europe.

G. Describe what you think other cities can learn from our initiative and what your city/community is prepared to do to further that learning.

Choose any of the above headings or a particular aspect of the initiative that you wish to highlight and that you think best describes the reasons why the innovative aspect(s) of the initiative could be of benefit to improving social, economic and environmental sustainability in cities and regions and, in so doing, to advance the prosperity and quality of life of their citizens. (400 words max)

H. Relevance of the Initiative to the 2030 Agenda for Sustainable Development, Commonly Referred to as the “Sustainable Development Goals” and to the New Urban Agenda.

Please tick the most appropriate boxes and provide a brief description of the relevance of your initiative in relation to the relevant goal(s). Please also refer to the complete text of the Sustainable Development Goals at:

| Goal 3: Ensure healthy lives and promote well-being for all ages |
| Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all |
| Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation |
| Goal 10: Reduce inequality within and among countries |
| Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable |
| Target 6: Improve air quality and manage municipal and other wastes |
| Target 8: Support positive economic, social and environmental links between urban, peri-urban and rural areas |
| Target 9: Improving resource efficiency, mitigation and adaptation to climate change, resilience to disasters and implement holistic disaster risk management |
| Goal 13: Take urgent action to combat climate change and its impacts |

I. Descriptive Materials in Annex to the Document

These are materials destined to allow members of the Technical Committee and the Jury to have a better understanding of the context of your initiative which is a very important consideration. Please do not exceed the specifications below; anything that exceeds these specifications may not be availed to the Technical Committee or the Jury. Please provide, where possible and relevant, the following:

◆ Up to 5 press clippings or copies of covers and tables of content of reports published on the initiative.

◆ Up to 5 photos (with titles) that best illustrate the initiative (.jpeg at 300 dpi, 2000 x 2000 px max).

◆ Up to 5 graphics that best illustrate the initiative (300 dpi). These graphics could illustrate for example, trends, ratios or percentages; tools or technologies; etc.

◆ 1 map that best illustrates the physical context of the initiative (300 dpi)

◆ 1 chart that best illustrates the initiative (300 dpi)

◆ 1 technical drawing (300 dpi)

J. Additional material

Any additional material such as videos should be submitted on a DVD/CD or by email to the Secretariat at info@guangzhouaward.org.

Note: Any additional material should be submitted to the Secretariat via email or mailing.

The Guangzhou Award Secretariat
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