



12TH "BEST PRACTICE IN CITIZENS' PARTICIPATION" Award AWARD APPLICATION FORM

1ST PART: BASIC DATA

Title of the experience: The Sustainable Schools Project		
Name of the city/region: Águeda		
Country: Portugal		
Institution presenting the candidacy: Municipality of Águeda		
Start date of the experience: 2015		
End date of the experience: 2016		
Type of candidacy	<i>New experience</i>	✓
Type of experience	<i>Citizen initiative and community engagement</i>	✓
Objective of the experience	<i>To achieve higher levels of equality in terms of participation and to incorporate diversity as a criteria for inclusion</i>	✓
	<i>Community empowerment</i>	✓
	<i>To empower non-organised citizens</i>	✓
	<i>To connect different tools of participation within a participatory democracy "ecosystem"</i>	✓
	<i>To improve the effectiveness and efficiency of the mechanisms of participatory democracy</i>	✓
	<i>To improve the evaluation and accountability of the mechanisms of participatory democracy</i>	✓
Territorial area	<i>All the territory</i>	✓
Thematic area	<i>Governance</i>	✓
	<i>Education</i>	✓
	<i>Environment and/or urban agriculture</i>	✓
	<i>Local development</i>	✓
	<i>Training/learning</i>	✓
	<i>Others : Climate change</i>	✓

2ND PART: DESCRIPTION OF THE EXPERIENCE Objectives

Main objective of the innovative experience:

Choose one of the objectives mentioned in part 1, the one that you think is the most important.

This project aims, among other objectives, to actively involve school communities, namely students, as main drivers of change, reinforcing the role



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of the school community in society. A challenge addressed for schools to act and voluntarily reduce their ecological/carbon footprint, as well as to implement sustainability measures that go beyond the classroom, reaching and involving the community and partners promoting social and environmental responsibility of all, and also engaging different partners from the society. Students promote energy audits and weekly monitoring, implement actions and creative initiatives to improve local sustainability and reduce school carbon footprint, and evaluate results. By applying the principles and elements of Gamification, the communities were awarded by the results obtained.

How have you achieved this objective?

The project sought to affirm the importance of the individual and collective role, environmentally conscious citizens that contribute to its protection and in an ICT approach that involves also local companies and the active participation of all, communicating the actions and results to all. Students were the main "actors" of the project, the driven force of work, ideas and, at some point, the ones who were already challenging professors and the municipal team to implement other actions in order to educate and raise awareness among the all community, has they discover new approaches to science and technology exploring themes like Green Economy, Waste reduction, Climate Change, Mobility...

Participants interacted with the platform (<http://escolasustentavel.regiaosustentavel.pt>), where the information is available (presented in graphic and interactive components), developed to facilitate interaction and communication in a democratic and transparent way. Points and badges were given with the development of activities and the reductions achieved. The score obtained contribute to the classification of the best performance schools.

With the reinforce of the role of each student in the school community and in society, it was possible to Implement and disseminate good sustainability practices that resulted also on the reduction of energy and water consumption, CO2 emissions, energy and water costs (other objectives of the project).

To what extent has this objective been achieved?

This goal has been achieved to the extent that:

The involvement of schools and communities was a success, and exceeded expectations! About 55 schools and 3000 students involved, almost a thousand actions of sustainability developed in the community, engagement of several local entities, reduction of energy consumptions, and the achievement of environmental, economic and social gains! The reductions achieved, converted into a money award that the municipality delivers to the school for the development of more educational programs and activities in this area.



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Dimensions of the experience

Which is the most innovative aspect of the experience?

The gamification component was a quite innovative approach to this kind of projects. The initiative intends to apply principles and elements typical of a game (punctuation, performance, rules of game, among others), in the challenge to be implemented by the set of schools of the Intermunicipal Community of Aveiro. Each school was encouraged to reduce consumption and implement sustainability activities, with points and badges being assigned for the implementation of the activities and reductions obtained. The points obtained contribute to the classification in the defence by the best performance with the other schools. Participants interact with a computer platform (<http://escolasustentavel.regiaosustentavel.pt>), which has a graphic and interactive component, developed to facilitate interaction with participants, as well as serve to receive and provide the information necessary to the development of the initiative. All the energy consumptions were measured (and shown on the platform) has smart meters were installed on the school buildings. Other approach that we believe it is innovative is the way that from the first moment there was an active involvement of all the parties: schools, municipalities, several entities, assigning responsible and interlocutors who would actively work as a team in the project. This factor we consider determinant and also, despite all the preparatory meetings, visits to the field, the program and planning first done and discussed, it was adapted (over time) from school to school and on the basis of the concerns and expectations of school communities, inputs from the organizations and even from the challenges that the students themselves made to the team and the initiatives they wanted to implement in the school or surrounding areas, with the development of the project.

To what extent is the procedure transferable?

The project is fully replicable in other schools, territories and even organizations (as evidenced by its implementation in 55 different schools, having already been developed in schools other than those initially involved). It is considered that all the elements are replicable successfully and easily adapted to the dynamics of each entity. As determinants of success: the involvement from the first moment of all the main stakeholders, and extend the group to new members as the project gains maturity, adapt some of the initiatives also to some important and particular interest of the school community (or company workers).

The installation of intelligent sensors in buildings is also important so that the actual consumption is known and the savings achieved with the measures implemented by the users of the institutions can be evaluated.

It is important to communicate these results in the organization and to promote the involvement of all, quickly you will verify that some of the measures are beginning to be implemented at home and elsewhere.



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Why do you consider that the experience is feasible?

From the first moment there was an active involvement of all the parties: schools, municipalities, several entities, assigning responsible and interlocutors who would actively work as a team in the project. This factor we consider determinant and also, despite all the preparatory meetings, visits to the field, the program and planning first done and discussed, it was adapted (over time) from school to school and on the basis of the concerns and expectations of school communities, inputs from the organizations and even from the challenges that the students themselves made to the team and the initiatives they wanted to implement in the school or surrounding areas, with the development of the project. Given the gamification component, a regulation was also drawn up. In parallel the infrastructure was prepared, namely installed smart sensors in schools, prepared the platform of communication, prepared the image, an even a "small hero" a mascot named by the students- SustentiX. Nevertheless, the investment was supported by the municipalities, cofinanced, they commit to reward the schools that achieved more savings. Others actions were also taken, but we believe this project went very well has we had a great support from the all community and all the private and public organizations involved. The entire school community showed interest in participating in this ranking, demonstrating that it is a healthy competition, with the achievement of tangible results promoting sustainable good practices.

The innovative platform allowed the upload of the consumptions and SD initiatives which allowed visualizing the direct impact in the reduction of the consumptions resulting from the actions that were develop in the school, promoting a "positive feedback" to all involved. For example, the direct impact on energy savings (both on environmental and financial), about 1.800 m3 of water where saved in a year.

How has the experience been coordinated between the different actors and procedures?

The project was successfully coordinated by the Municipality of Águeda, involving Community Intermunicipal of the Region of Aveiro (CIRA) and the other municipalities that make up this region. Águeda promoted the activation and dynamisation of the project among the school groups, carrying out various awareness actions, initially with the managers and school leaders, then with the schools themselves and teachers, later on in the community.

In this process, the various partners of the project were involved, which from the outset also became the face of what was to be developed, integrating into the actions and dynamics the concerns, wishes and expectations that the teachers presented, as well as the students. The project was also adapted and shaped to other projects and educational and municipal plans that were already outlined / in progress. The ABAE eco-schools project (national project) is a good



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example, where the actions required for this project also counted as actions for the Sustainable Schools.

The evaluation of this coordination was very positive, evidenced by the results obtained, the active involvement of all schools and partners, and it was also expressed the desire that the Municipality of Águeda continue to coordinate this project in future years. The reports produced were also submitted to the Centro Regional Coordination and Development Commission (CCDR-C), and there was also a good evaluation.

Which has been the level of co-responsibility?

Among other premises, the project is based on the co-responsibility of several sectors, entities, communities and citizens! There are several levels of co-responsibility: at the level of local actors and citizens (school community) and at the level of the municipalities involved and the intermunicipal community. Regarding the latter, the sustainable schools project was initially promoted by the Municipality of Águeda, but integrated in the Intermunicipal Community in which it operates the Region of Aveiro, assisting the 11 municipalities to contribute to national and international objectives in the field of sustainable development, providing the region with a set of innovative practices, promoting it as a Region of Excellence, dynamic and competitive, with differentiated practices and methodologies. Each municipality monitored the dynamics promoted in their communities, supporting, as necessary, human resources, technical support, materials (installation of smart meters, etc.), and committed to financially reward schools that achieved the best results: energy savings and initiatives developed. Another aspect concerns the school itself: the school was responsible for introducing information crucial to the development of the project characterization and diagnosis at an early stage, as well as the development of actions (with the support of the municipality and a dynamization team). With the development of actions, which often involved the whole school community (different classes and even the surrounding community at school) each coordinating teacher had a level of platform access and editing permissions, becoming responsible, such as the student designated by the school, by introducing the necessary information, evidence and descriptive information. Every other community had access to the results, evidence and reports produced.

Which evaluation and accountability mechanisms were used?

Platform Utilities:

The platform allowed access to several user profiles: teacher editors, teacher readers and project interlocutors. In the personal area users had access to



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information from their school (depending on the user profile). In the monitoring of consumption, it can be observed the consumption of water, gas, electricity and CO2 emissions and compare with the same months of the previous year, based on the invoice data of the merchants.

In Information Activities - teachers with the profile of "teacher editor" read the activity and indicated that it did, Surveys and forms - contained an appropriate form for recording the necessary information.

Free activities - allowed a free registration of activities usually carried out by schools / teachers.

Besides the registration of activities and obtaining information on the data of the various vectors, the platform also provides an information panel with visual access to the badges obtained and alerts for the activities made available at any time or to be performed.

In the state of my school is presented a summary of the available activities versus those realized. All submitted responses are also available.

Sustainable Schools Project, which integrates two parallel initiatives: the Education and awareness-raising sessions for sustainability and Gamification. These and other initiatives, such as protocols, environmental surveys, factsheets, characterization and energy profile of the schools involved, among other elements that support the development of more sustainable schools, communities and citizens, are supported by an ICT Platform - Sustainable Schools.

This project aims to raise awareness of all the initiatives promoted to educate and raise awareness among young people on the issues involved (Policies for Green Economy, Energy Efficiency, Water Efficiency, Waste Utilization, Sustainable Construction, Adaptation to Climate Change, Mobility and Ecotourism). The project seeks to feel more about the Planet and intends to affirm our role, as environmentally conscious citizens, through our contribution in its protection, awakening to issues related to current problems, such as climate change, production and packaging of waste and priority themes such as preservation of essential resources such as water. In this sense, and as the project is directed to a school target audience, to support the transmission of concepts and for an effective awareness came the development of a mascot of the program.

The mascot is a hero who has attitude and energy, is cool and friendly, adventurous and boosts the values of environmental protection. The colors used in your suit and hair are the colors of planet Earth, which give the mascot an ecological, healthy and conscious character.

The mascot is a fan of technological gadgets and innovative, environmentally friendly. This is the case with your flying skateboard and its special suit that refers us to renewable energy. The mascot loves to travel on



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his skateboard and visit places in the world that need your help.

Education sessions and awareness raising for sustainability

The education and awareness sessions are being implemented in 55 schools (5 per municipality) belonging to the 11 municipalities of the Inter-municipal Community of Aveiro (Albergaria-a-Velha, Águeda, Anadia, Aveiro, Estarreja, Ílhavo, Murtosa, Oliveira do Bairro, Ovar, Sever do Vouga and Vagos), underpinning the themes of Energy and Water Efficiency, Waste and Climate Change and will include two sessions in each school:

- First session | "Treasure Hunt + Sustainable City Model"
- Second session | "Game of Ground"

These sessions were carried out and monitored by technically prepared monitors in the area and the topics addressed.

Gamification

It was a challenge for schools to voluntarily reduce their energy and water consumption, as well as implement sustainability measures. The initiative intends to apply principles and elements typical of a game (punctuation, performance, rules of game, among others), in the challenge to be implemented by the set of schools of the Intermunicipal Community of Aveiro.

Each school is encouraged to reduce consumption and implement sustainability activities, with points and badges being awarded for the implementation of the activities and reductions achieved. The points obtained will contribute to the classification in the defence by the best performance with the other schools.

Participants will interact with a computer platform (<http://escolasustentavel.regiaosustentavel.pt>), which will have a graphic and interactive component, developed to facilitate interaction with participants, as well as serve to receive and provide the information necessary to the development of the initiative.

The Sustainable Schools is a project where 55 Schools of the Region of Aveiro participate. To date, there have been 921

- Information activities: 491;
- Sustainability actions activities: 253;
- Inquiries and Forms: 177;
- Students involved: 3000

Other Results

• Reduction of 1029m³ and 3501.74 € of water in the schools involved in the project for the period of consumption analysis in Gamification and for which we received the data for analysis;

• Reduction of 106 784 kWh and 9847.54 € of natural gas with the consequent reduction of 21 570 kgCO₂; • Reduction of CO₂ emissions by 8349 kg in all buildings and vectors of natural gas and electricity.



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The results obtained also contributed to other projects in which the schools are involved such as EcoSchools from ABAE (european blue flag association).
This innovative initiative became a landmark and a project that was already been presented in some national seminars, and also others schools want to implement it.