

DELIVERABLE D.T3.1.2

Upstreaming ENERGY@SCHOOL smart-school	Version 1
management plan	09/2021

D.T3.1.2: Upstreaming ENERGY@SCHOOL smart-school management plan

Activity A.T3.1 Adjustment of strategies, roadmaps and action plans

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1. Introduction

The deliverable D.T3.1.2 belongs to the activity related to the adjustment of strategies, roadmaps and action plans (A.T3.1), with the aim to capitalize non-technical EE solutions, provided by the selected transnational projects.

The ENERGY@SCHOOL solution(s) (the Energy guardians smart-school management plan, from now on EGSSMP) are being adjusted and tailored in a way that they can be easily used and better deployed in the new PAs, on national, regional or local levels. The obtained results will be available through the BOOSTEE-CE OnePlace platform.





2. ENERGY@SCHOOL – Description

ENERGY@SCHOOL is a project related to the improvement of energy efficiency in school buildings. It starts from the consideration that a school is a complex ecosystem where students, teachers, parents, school staff have their own role in energy consumption. Following the project idea, a more energy-efficient school may be achieved in a double way: on the one hand, by investing in the structural equipment of the building; on the other hand, by raising awareness on the issue of energy waste through training activities for students and teachers. To do so, the project relies on a strategic tool – the Energy Guardians Smart-School Management Plan (EGSSMP).

The EGSSMP outlines key energy-saving opportunities that can be adopted by schools, following a customization on each peculiar situation. The paper demonstrates how simple actions undertaken by teachers, students and school staff can result in significant cost savings.

Such actions also provide an excellent opportunity for practical, on-the-ground learning for students. The EGSSMP highlights activities that can be realized by students to bring sustainable energy action plans directly into the classroom.

From a wider perspective, all the people gathering the school – not only students – may be encouraged by the EGSSMP to do their part in achieving a green school, both in technical and in cultural terms. In this sense, the guidelines provide practical suggestions to be tailored on every school environment.

2.1 EGSSMP – Adaptation to new pilot areas

Every school is a distinct reality, with its own social and territorial peculiarities. However, the EGSSMP elaborated by the ENERGY@SCHOOL experience refers to the school intended in a basic sense and is consequently easy to scale up to other national and transnational contexts.

To replicate the management plan on large scale, and so to upstream it on the TARGET-CE project, an adjustment was made in the last part of the document, "TAKING ACTION". This section has been turned into a decalogue to be followed by schools willing to improve efficiency both in a technical and in a cultural way. Each school may complete its EGSSMP with reference to its specific reality.

Currently, the PAs engaged in implementing the project are 8 schools, involving students from 11 to 14 years, in the territory of the Union of Bassa Romagna Municipalities. More in detail:

Municipality of ALFONSINE	Scuola secondaria di I grado "Oriani"
Municipality of BAGNACAVALLO	Scuola secondaria di I grado "Graziani"
Municipality of BAGNARA DI ROMAGNA	Scuola secondaria di I grado "S. Francesco d'Assisi"
Municipality of CONSELICE	Scuola secondaria di I grado "Stoppani"
Municipality of COTIGNOLA	Scuola secondaria di I grado "Varoli"
Municipality of LUGO	Scuola secondaria di I grado

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	"Gherardi"
Municipality of MASSA	Scuola secondaria di I grado
LOMBARDA	"D'Acquisto"
Municipality of SANT'AGATA SUL	Scuola secondaria di I grado
SANTERNO	"Pascoli"

2.2 EGSSMP – Problems occurred in capitalization

The main difficulties faced in upstreaming the activities above were related to budget and time constraints. In order to make the ENERGY@SCHOOL management plan replicable in more realities, the dimension of the project itself had to be reshaped. The scope of the project, in fact, does not involve the entire school building anymore, but it starts from a little part to leverage commitment and it provides a list of actions to be followed for a successful capitalization of the past project.

An extraordinary problem to be addressed was the difficult relationship with schools during the pandemic period. Accessing schools was not always easy or even permitted in school year 2020/2021. In addition, consequent to COVID-19 and national incentive policies for the private construction sector, a serious lack of raw materials on the market emerged and made it difficult to find the technological equipment for schools.

3. Results and examples of tailored tool in new PAs

The new PAs engaged in the capitalization are now planning or implementing a series of actions on the basis of the upstreamed guidelines.

A very first result achieved by the upstreaming is the diffusion of the awareness about energy issues, in turn stimulating the sharing of good practices from the original pilot towards the new PAs.

In concrete, such result is being achieved through a number of crossed actions:

- the collaboration with school principals and teachers, mainly to schedule the project activities during the school year and to give the whole project an educational coordination;

- the set-up of energy labs inside schools, provided with all the technical equipment for practice and learning activities for students;

- the adjustment of training programmes for both students and teachers;

- the complementary use of the updated smartphone app.

4. Conclusions

The EGSSMP may now be adopted in a number of different school realities, representing an easily-usable tool to gain efficiency in school buildings. The positive experience of the original project, ENERGY@SCHOOL, may be successfully capitalized by supporting other school districts in adopting a smart energy management plan. By translating the EGSSMP into common guidelines for schools, the actions necessary to improve under an energy efficiency point of view may be quite easily undertaken in different school realities.