

TEMPLATE

Output factsheet: Trainings

Version 1

Project index number and acronym	CE744 ENERGY@SCHOOL
Lead partner	UNIONE DEI COMUNI DELLA BASSA ROMAGNA
Output number and title	O.T3.1 Training programmes developed and delivered for capacity raising of senior energy guardians towards EE management - CEGE Continuous Energy Guardian Education
Responsible partner (PP name and number)	PP4 KSSENA
Project website	https://www.interreg-central.eu/Content.Node/ENERGYATSCHOOL.html
Delivery date	01.2019

Summary description of the implemented training measure(s), explaining the specific goal(s) and target groups

The energy training program is addressed to CEGE to provide up-to-date and constantly updated didactic support both regarding the technical aspects (energy theme, smart meters, etc.) and the aspects most closely linked to communication and the involvement of students, teachers, etc.

It was developed with the aim of increasing students' and teachers' awareness of the positive and negative impacts that our behaviors and habits entail both in terms of energy consumption and in terms of environmental and climate impacts.

The training program was based on the school's energy consumption to address the issue of sustainable development, as well as that of renewable sources. The involvement of teachers and young people has been fundamental because childrens represent opportunities for future environmental and climate sustainability.

Trainings started from the energy audits on of representative selected schools, a developed system for targeted monitoring of energy consumption carried out within 8 pilot actions and software applications (app and game) as part of the developed energy monitoring systems.

The focus of the trainings was on fostering a marketable and relevant skill set from the pre-investment phases of energy renovation activities, to advanced monitoring solutions and behavioral impact on building users (students and teachers).

The main target groups of the training activities for Senior energy guardians - SEG, was local authorities (municipal representatives), personnel in charge of operation and maintenance in schools.

The most appropriate target group were teachers, school staff responsible for maintenance work, energy experts and representors from municipalities.

Throughout the project we have successfully educated 211 teachers, school staff, energy experts and representors from municipalities.

The real surprise of the training activities was revealed through the students who, in addition to learning, were able to provide their contribution both in terms of ideas and contributions and in terms of involving other students, friends' families.

NUTS region(s) where training(s) have been conducted (relevant NUTS level)

NUTS 0	NUTS 2	NUTS 3
IT	ITH5, Emilia-Romagna	ITH57, Ravenna
IT	ITH5, Emilia-Romagna	ITH55, Bologna

Expected impact and benefits of the trainings for the concerned territories and target groups

The major contribution linked to the training activity was a greater awareness of energy uses and behaviors at school. At the beginning of the program the energy represented an abstract entity (physical and economic) while with the development of the project the energy became a concrete and measurable entity (the smart meters has been very useful, together with the game) both in terms physical (kWh) and in economic terms (the school bill). With new gained knowledge and skills, participants are now able to monitor energy consumption and recognize the possibilities to implement measures with the aim of lowering energy consumption and consequently lowering the energy costs. With lower energy consumption the goal to reduce public buildings CO₂ emission and their impact on climate change was reached.

After participation in training program SEG are able to:

- > Save thermal energy through appropriate measures like correct ventilation of classrooms,
- > Save electrical energy with recognition of saving potential and implementation of measures,
- > Encourage others to be more energy efficient,
- > Have a good communication and collaboration as teams of SEG,
- > Guide and direct teams of JEG to be aware of their contribution to everyday energy consumption and to encourage them to be a good example in energy efficient behaviour to other schoolmates and
- > Have an increased awareness of the impact of human activities on the environment.

Sustainability of the training(s) and developed training material(s) and their transferability to other territories and stakeholders

To assure the sustainability we have developed trainings that are not intended to only educate the participants but to prepare them to use the new gained knowledge and skills in everyday routine, not only in schools but also in their homes. The developed content is based on Energy management system which enables them to work independently on school's management system even after the project end. Training materials were prepared in the way that can be easily customized and adjusted to the users' needs regardless the participants previous knowledge or building location. We were also successful in creating a real community of SEG and JEG teams that works constantly towards energy, environmental and climate sustainability.

The developed training materials and trainings were prepared to be easily transferable to other territories, stakeholders and public buildings that are interested in implementing or improving their Energy management system.

The principle developed by the project which can be the key to the success of transferability is represented by the concept of Smart Energy School. The principle is simple, shareable and effective even if each school and each territory must find practical and effective measures to achieve the goal.

Lessons learned from the development and implementation of training measures and added value of transnational cooperation

The actions set by the Plan have demonstrated how small interventions and actions that can be considered of "good sense" can result in significantly energy saving. Besides this, more technological interventions and measures should be foreseen and implemented in schools, together with a constant monitoring activity, in order to progressively achieve higher energy efficiency.

GIVE SPECIFIC EXAMPLES OF YOUR LESSON LEARNT on:

- 1) Development/implementation of your EGSMP: Strategies and methodology of the EGSMP must be common, but the plans must be "taylor made". The common methodology allows to compare the results to be achieved and the results achieved in a comparable manner.
- 2) TRANSNATIONAL COOPERATION within the project: Each participating country and each municipality involved in the project has relevant aspects that constitute the added value of the project. The communication and comparison between the partners and the study visits during the project meeting are extremely important because they allow exchanging concrete and successful experiences. There are no "teacher countries" and "student countries" because the experiences of all the partners are common heritage and the added value of the project

References to relevant deliverables and web-links If applicable, pictures or images to be provided as annex

Here is the list of relevant deliverables:

- D.T3.2.1 Training materials to deliver VEGTP training program to Senior energy guardians
- D.T3.2.2 Training materials to deliver CEGE training program to Senior energy guardians
- D.T3.2.3 Reports on VEGTP and CEGE trainings supplied to build EE management capacities to senior energy guardians
- Joint inventory of energy-saving and RES technologies with best cost-effective bundle of measures for schools
- D.T1.5.2 Upgraded decision-support toolbox for school energy guardians
- D.T1.6.1 Energy guardians smart-school management plans

All developed deliverables are uploaded on the project website:

<https://www.interreg-central.eu/Content.Node/ENERGYATSCHOOL.html>