

## TEESCHOOLS project: Results and vision over the future of energy savings in the MED area

European Union EU has an important challenge in trying to reach the energy efficiency objectives established for 2030 which plan to reduce greenhouse gas emissions, to significant increase energy production from renewables and to improve energy efficiency. The European Commission (EC) urges the Member States to intensify their current efforts to ensure the collective achievement of these objectives, focusing in particular on buildings sector that has a significant potential for energy saving. At present, about 35% of the EU's buildings are over 50 years old and almost 75% of the building stock is energy inefficient. Renovation of existing buildings can contribute to significant energy savings and play a key role in the clean energy transition, while getting economic, social and environmental benefits and contributing to improve citizen's health.



Forum of Mayors and Deans in Valencia, November 2019

**TEESCHOOLS** – Transferring Energy Efficiency in Mediterranean Schools\* - is a European project implemented under the Interreg MED Programme in 7 Mediterranean countries: Italy, Bosnia & Herzegovina, Croatia, Cyprus, France, Greece, Spain. It lasted three years and aimed to develop an integrated strategy for Mediterranean countries to simplify the energy renovation of public buildings by providing tools and trainings for Local Authorities (LA) to overcome technical and financial barriers. The construction of nZEB (Nearly Zero Energy Building) school buildings, in which the energy consumed is balanced by the energy produced from renewable resources is moreover promoted. TEESCHOOLS succeeded in the establishment of a common vision among technical and institutional project partners and the whole “**Efficient Buildings**” Mediterranean Community\*\*.

\*<https://teeschools.interreg-med.eu/>

\*\*<https://efficient-buildings.interreg-med.eu/>

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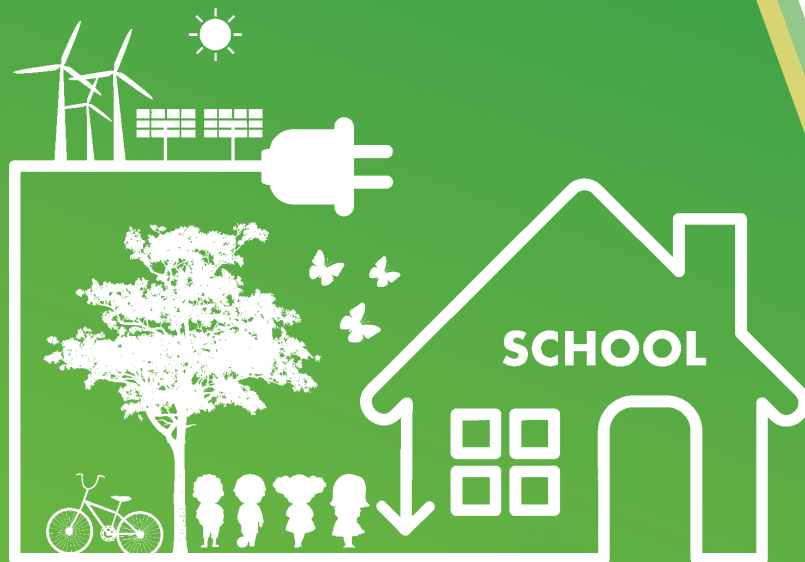


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## Results

Main outputs of TEESCHOOLS project were:

- A user-friendly web tool\* for stakeholders, LA technical staff, energy managers, which can also be used by non-experts, to perform simplified energy diagnosis of school buildings based on a minimum set of data on the building characteristics. The tool allows to perform a simplified evaluation of the building's energy performance and to choose the improvement actions with the best cost / benefit ratio. The tool is adapted to Mediterranean climate zones and allow to calculate the improvement of carbon footprint of the building after its energy renovation
- An innovative database of BAT (Best Available Technics)\*\* for renovation of school buildings
- A 52 hours, freely accessible e-learning course\*\*\* on the efficient management of energy in buildings and on TEESCHOOLS methodology
- A Policy recommendation document, which synthetizes the main problems, barriers and some best practices for the full exploitation of energy efficiency potential of public building in each partner country

These results were achieved thanks to several activities developed in the project

- Pilot activities in 7 countries which allowed to carry out energy audits and renovation plans of 48 school buildings in the partnership's territory validated by a transnational working team of technical experts. The pilots provided the technical basis to validate the simplified tool
- Internal and External trainings & world cafe in 7 countries involving relevant stakeholders

\* <http://www.improveyourschool.enea.it/>

\*\* <https://bit.ly/2uQZKga>

\*\*\* <https://mqa.edf.global/>



Energy audit at a project pilot school in Valencia, Spain, September 2017

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- More than 30 open lessons in 7 MED countries, involving approximately 2800 pupils, on the effect of behavioral change on the energy saving in the school buildings. The open lessons took place in pilot and other schools for each of the 7 participated countries and included short presentations, energy games, video projection on energy issues. The participants were introduced to the most important issues related to energy, emissions, energy efficiency and NZEB with theoretical and practical sessions, such as testing of measurement tools with the involvement of pupils



- Signing of 33 MoU with municipalities of 7 different partner countries for the further use of TEESCHOOLS results and knowledge base
- 14 Regional Conferences for the dissemination of results among public administrators, regional energy agencies and energy managers
- 7 "Declaration of intent" with National Coordinators or other relevant national organization of Covenant of Mayors for the exploitation of TEESCHOOLS base of knowledge in national context and for preparation of Sustainable Energy Action Plans

## Dissemination achievements

The project activities and results reached more than 4000 people from general public through social media, official website, blog and newsletters.

Around 70 press releases and articles were published in 7 countries media and partners participated in more than 40 external events\*

A short video with project partners' interviews\* was produced.

A technical publication was prepared in all project countries, including the results of the pilot activities and the suggestions on how to improve the energy efficiency tools

\*\*\* <https://bit.ly/2TnU9az>



Open lessons in partnership countries.

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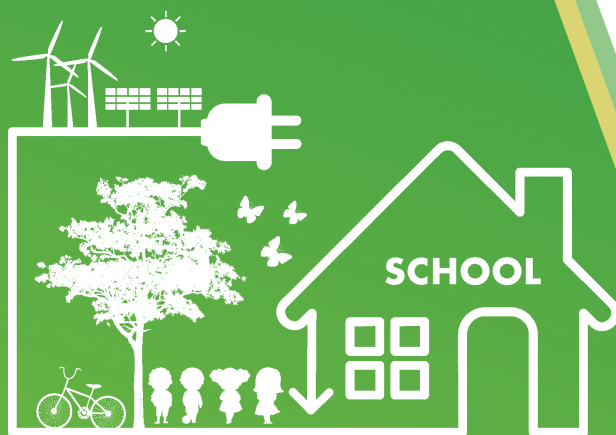


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## Vision

In this quickly changing context LA, by deep energy renovation of public buildings, are called to exercise an “exemplary role” towards citizen and private owners and to overcome the several barriers that are hindering the full potential of this role. TEESCHOOLS project focuses its attention on energy efficiency of school buildings, the ideal building to reach and train at the same time students, families and private users and to trigger effective behavioral changes. The project evidenced that besides the need to increase public incentives, is essential to:

- Overcome the lack of technical advice and internal skills for LA, establishing working teams at municipal or more aggregated administrative level to monitor the energy efficiency of public buildings and to build up financial opportunities by using funds that comes very often from different sources
- Simplify and standardize the procedures and the existing Legal Framework favoring the application of EPC or other contractual models which favor the synergies with private capital
- Appoint Energy Managers to public buildings at municipal or regional level
- Organize and promote information and training events to raise energy efficiency awareness among citizens and private owners

### Some best practices emerged in the conduction of the project:

- a strong political commitment in the LA that owns the building will allow to overcome several weaknesses of LA (e.g. a general understaffing, lack of technical advice)
- increasing the knowledge of existing public building characteristics by creating regional or national registers to overcome the lack of data on buildings plans and structures, disseminate to interested parties the knowledge on the buildings and schedule with greater effectiveness maintenance operations
- create framework contracts in the field of energy services based on Energy Performance Contracting (EPC) model which can help in avoiding legal disputes

The capitalization of TEESCHOOLS results and main outputs through relevant networks and agreements is at the current state promising. It helps in getting closer to EC expectations and energy efficiency objectives.



*World café in Italy, October 2018*

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