

Constructing energy efficient schools for the future

February 12 2016



The EU SCHOOL OF THE FUTURE project has devised innovative solutions and designs that will allow for the creation of a new generation of highly energy efficient school buildings.

The [project](#) aimed to create, demonstrate and publicise the opportunities of constructing high energy performance schools. With four demonstration retrofitted schools throughout Europe located in different climates (in Denmark, Germany, Italy and Norway), the project highlights how schools can be exceptionally energy efficient and provide a high quality indoor environment, whilst being economically feasible.

Enhancing efficiency and cutting energy use

By renovating existing [school](#) buildings and their systems, integrating [renewable energy solutions](#) and creating advanced management systems, the project aimed to demonstrate that total energy use can be cut by a factor of 3.

Moreover, a 75 % cut in the energy used for heating can be achieved with an investment of less than €100 per square metre, according to the project.

They also create greater awareness on energy efficient school concepts which will boost the uptake of innovative retrofitting measures and improve the school experience for future generations of children.

SCHOOL OF THE FUTURE also demonstrates how retrofitting can enhance the quality of the indoor environment by improving air, daylight, acoustics and thermal comfort for pupils and staff.

The successful introduction of zero emission buildings is the goal of many energy efficiency policy roadmaps up to 2020 across Europe. This project contributes to this ambition by demonstrating cost-efficient measures and showcasing how these can be replicated.

Moreover, the project expects the large-scale deployment of energy efficient school concepts before 2020 inspired by the four demonstration sites and the available guidelines and online resources.

Disseminating the project results

The project also aims to create a multiplier effect via school pupils who will disseminate the energy efficient features of their school buildings to their families.

Additionally, it aims to improve perceptions on innovative energy saving retrofit concepts amongst personnel working for public building

administrations.

It has also published four retrofit guidelines on indoor environmental quality in schools, and solutions for existing zero emission or energy surplus schools.

The project has created an online building diary for the sites in Germany, Denmark, Italy and Norway, a simple energy performance calculation tool for use in school lectures and three sets of training material for pupils, teachers and technical service personnel.

SCHOOL OF THE FUTURE is also a major contributor to EU BUILD UP portal, the European information portal for [energy](#) efficiency in buildings.

More information: For more information please see the SCHOOL OF THE FUTURE project website: www.school-of-the-future.eu/

Provided by CORDIS

Citation: Constructing energy efficient schools for the future (2016, February 12) retrieved 28 April 2024 from <https://phys.org/news/2016-02-energy-efficient-schools-future.html>

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