Project: Energy@schools

01.03.2025 - 28.02.2027



Numer projektu: 2024-2-PL01-KA210-VET-000290095

Partnership created within the project:

- Perfect Project Leader, Poland
- www.perfect-project.eu

Partners:

- KLAIPEDOS ERNESTO GALVANAUSKO PROFESINIO MOKYMO CENTRAS - Lithuania
- www.gpmc.lt
- Regional Directorate of Primary and Secondary Education of Western Macedonia -Greece
- www.dmaked.pde.sch.gr

Energy@schools information



The Energy@schools project is implemented by the Perfect Project Sp. z o. o. as part of the Erasmus+ Action 2 Strategic Partnerships for Vocational Education and Training program.



The Energy@schools project will be implemented with financial support from the European Commission.



The main objective of the project is to provide access to practical solutions that increase energy efficiency using school buildings as an example.

Specific objectives:







learning about the requirements and low-emission solutions in school buildings,

exchange of experiences in the use of renewable energy in sustainable construction,

introduction of energy management plans in schools that limit energy consumption and reduce their expenses



1. A report that is a collection of three analyses (PL, GR, LT) containing research, diagnosis and comparative analysis in the field of energy efficiency in sustainable construction resulting from climate change,

Project results:



2. A pilot training program in the use of innovative solutions and low-emission technologies in school buildings,



3. A school energy management plan using the solutions learned to increase energy efficiency.

Action 1. A report that is a collection of three analyses (PL, GR, LT) containing research, diagnosis and comparative analysis in the field of energy efficiency in sustainable construction resulting from climate change.

Before preparing the report, each of the project partners will conduct research among schools, municipalities and governing bodies) and enterprises to clarify the following elements of the report.

We would like to diagnose the level of energy consumption in school buildings and the current solutions implemented by schools.

Our report will be the essence of knowledge from Poland, Greece and Lithuania, which each teacher will be able to use later for their subject in the field of construction or energy and influence the development of specific didactic competences of teachers.

Action 1. A report that is a collection of three analyses (PL, GR, LT) containing research, diagnosis and comparative analysis in the field of energy efficiency in sustainable construction resulting from climate change.



In partnership, we would like to prepare a report containing the following elements:



energy efficiency - optimization of solutions thanks to artificial intelligence AI,



renewable energy sources in school buildings: e.g. solar collectors; small (micro) wind turbines,



low-emission solutions in intelligent buildings,



energy-saving technologies and solutions in buildings



culture of saving and managing energy in school buildings - examples.

Action 1. A report that is a collection of three analyses (PL, GR, LT) containing research, diagnosis and comparative analysis in the field of energy efficiency in sustainable construction resulting from climate change.

The report will be prepared on a minimum of 30 A4 pages and will be prepared in English and the partner's country. The report with the diagnosis will be prepared in consultation with schools and companies cooperating with the construction industry.

The Lithuanian partner is responsible for the preparation with the participation of all partners.

Duration: 7 months (research, establishing the structure of the report, preparing and collecting data, substantive description, translation into English by partners, preparation of the document's editorial). Action 1. A report that is a collection of three analyses (PL, GR, LT) containing research, diagnosis and comparative analysis in the field of energy efficiency in sustainable construction resulting from climate change.



The tasks for the prepared document will be divided among the participants. 6 experts will be selected from the project partners who will prepare the report:



- from the Lithuanian partner (2 teachers of vocational education in construction and energy),



- from the Greek partner (2 teachers of construction vocational subjects),



- from the Polish partner (2 experts in construction and renewable energy sources).



These experts will have experience in preparing such analyses and diagnoses

Action 1. A report that is a collection of three analyses (PL, GR, LT) containing research, diagnosis and comparative analysis in the field of energy efficiency in sustainable construction resulting from climate change.



The INNOVATIVE side of our report is the fact that we would like to examine the current use of renewable energy solutions in school buildings and what is the energy efficiency of these buildings.



This will allow us to indicate and specify areas of gaps in theoretical and practical knowledge, which we will develop during the next task, which will be training in the use of innovative solutions and lowemission technologies.

Action 2. A pilot training program in the use of innovative solutions and low-emission technologies in school buildings.



Training title: "Use of innovative solutions and low-emission technologies in school buildings"



Training type: practical workshops, practical exercises



Leaders: experts and trainers in the field of sustainable construction, renewable energy sources from Perfect



Project - Project Leader.

Action 2. A pilot training program in the use of innovative solutions and low-emission technologies in school buildings

Content: course content clarified after the report and diagnosis, the main points of the course are as follows:

Module 1. Energy efficiency in sustainable construction (knowledge systematizing the knowledge of participants)

- · Energy consumption in construction and energy efficiency,
- Renewable energy sources in construction study visits, good practices:
- · Low-emission buildings demonstrations and exercises,
- Energy-saving technologies and solutions in public buildings.

Module 2. Energy management in my school (practical knowledge showing specific solutions and tools at school).

- · intelligent buildings and school practice,
- culture of saving and managing energy in school buildings examples.
- energy management in school buildings workshops

Action 2. A pilot training program in the use of innovative solutions and low-emission technologies in school buildings

Number of training hours:

35 hours (5 days of 7 hours) + 2 days for travel

- Module 1 14 hours (introduction to the topic of energy efficiency in construction)
- Module 2 21 hours (workshops, study visits, practical classes)
- Work method: visual, competence tests, case studies, study visits.
- Method of evaluation of learning outcomes: questionnaire assessing satisfaction and the level of meeting expectations.



Action 2. A pilot training program in the use of innovative solutions and lowemission technologies in school buildings

Expected number of participants: 15 participants (15 teachers/entrepreneurs)

- Regional Directorate for Primary and Secondary Education in Western Macedonia in Greece 6 teachers,
- Ernestas Galvanauskas Vocational Training Centre in Klaipeda (Lithuania) – 6 teachers,
- Perfect Project in Białystok (Poland) 3 experts/entrepreneurs.

Action 2. A pilot training program in the use of innovative solutions and low-emission technologies in school buildings







The pilot training will be prepared with the participation of companies from the construction and energy sectors cooperating with schools.

Responsible: Perfect Project - Project Leader with the participation of all partners.

Duration: 9 months

Action 3. A school energy management plan using the solutions learned to increase energy efficiency.

Preparation of a school energy management plan, including results from the implementation of the training, results of testing the effects of the training, solutions and tools to increase energy efficiency in construction using school buildings as an example, recommendations for school principals and teachers and practitioners.



In preparing and implementing the plans, partners will be supported by their governing bodies, which are very interested in introducing energy management plans in schools, which can bring about a real reduction in energy consumption and cost reduction.

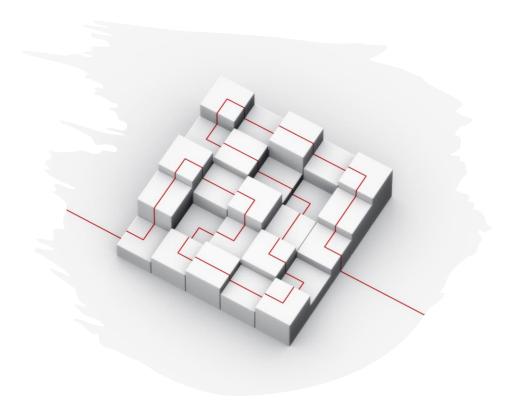


After introducing the model energy management plan in partner schools and its possible corrections, it can be used for other schools (not only vocational schools) as a good practice.

Action 3. A school energy management plan using the solutions learned to increase energy efficiency.

This plan is a model, so that it can be used and presented as a good practice for other vocational and general schools. The school energy management plan will include training materials in the form of:

- description and application of low-emission solutions and technologies in school buildings,
- · sample practical exercises,
- demonstration and instructional videos,
- · multimedia presentations,
- technical instructions,
- sample lesson plans,
- campaign promoting energy saving and management in school buildings - e.g. we will introduce "energy" stickers and special signs all to remind students and teachers to pay attention to energy losses in empty classrooms (for example, due to leaving windows open or monitors on),
- photos.





Action 3. A school energy management plan using the solutions learned to increase energy efficiency.



THE REGIONAL DIRECTORATE FOR PRIMARY AND SECONDARY EDUCATION IN WESTERN MACEDONIA IN GREECE, WITH THE PARTICIPATION OF OTHER PARTNERS, WILL BE RESPONSIBLE FOR THE IMPLEMENTATION OF THE TASK.



DURATION 8 MONTHS



Action 3. A school energy management plan using the solutions learned to increase energy efficiency

They will be directly involved in the preparation of energy management plans at school - 9 experts:

the Lithuanian partner (2 teachers of vocational subjects in the field of construction and energy + 1 personvfrom the school management staff),

the Greek partner (2 teachers of vocational subjects in construction + 1 person from the school management staff),

The Polish partner (2 experts in construction and renewable energy sources + 1 person from the school management staff).

Action 3. A school energy management plan using the solutions learned to increase energy efficiency

Preparation of a school energy management plan containing solutions learned to increase energy efficiency in construction using school buildings as an example.

It will be prepared in English and in the partners' country.

The school energy management plan will include conclusions and recommendations from:

- 1. A report that is a collection of three analyses (PL, GR, LT) containing research, diagnosis and comparative analysis in the field of
- · energy efficiency in sustainable construction.
- 2. Training in the use of innovative solutions and low-emission technologies in school buildings in the
- · construction and energy industry.
- description and application of low-emission solutions and technologies in school buildings,
- · sample practical exercises,
- · demonstration and instructional videos,
- multimedia presentations,
- · technical instructions,
- · sample lesson plans.

Action 4. International Partner Meetings

International project meetings - organized as follows (we plan to hold six meetings in total, approximately once a quarter):

- the Polish partner participates in a total of six meetings (two at the Lithuanian partner's, two at the Greek partner's, and two where it is the host) in 2025-2026,
- the Lithuanian partner participates in a total of six meetings (two at the Polish partner's, two at the Greek partner's, and two where it is the host) in 2025-2026,
- the Greek partner participates in a total of six meetings (two at the Polish partner's, two at the Lithuanian partner's, and two where it is the host in 2025-2026.

Action 5. Management:

- 1. Recruitment and formation of project teams in each organization participating in the project.
- 2. Preparation of a tripartite, English-language partnership agreement taking into account the project's objectives and tasks, the rights and obligations of the partners and the project budget, which we will sign with the partners at the first International meeting.
- 3. Promotional and information activities about the project, its objectives and results:
- preparation of a logo and poster as well as information for the website and local information portals. The activity will be carried out in each institution participating in the project.
- 4. Project evaluation preparation of tools, strategy and its implementation in accordance with the assumptions.
- 5. Monitoring financial issues, making payments to project partners in accordance with the project budget.
- 6. Preparation and conducting organizational and preparatory meetings with project participants.
- 7. Dissemination activities regarding the project results.
- 8. Implementation of the project results.

Action 5.
Management:
Managment
report

