



**Energy@schools PROJECT**  
**Project No. 2024-2-PL01-KA210-VET-000290095**

## **Course – “The use of innovative solutions and low-emission technologies in school buildings”**

**BIALYSTOK, 20-24.04.2026**

### **Sunday, 19<sup>th</sup> April 2026**

8:00 Departure Kozani, Greece (6 teachers from Regional Directorate of Primary and Secondary Education of Western Macedonia (RDPSEWM),

12:00 Departure Klaipėda, Lithuania (6 teachers from Klaipėdos Ernesto Galvanausko Profesinio Mokymo Centras (KEGPMC)

16:00 -19:00 Arrive to Białystok (hotel Ibis), Poland

### **Monday, 20<sup>th</sup> April 2026**

**7:00 – 8:30 Breakfast in hotel Ibis**

**9:00 -13:00 Module 1. Energy efficiency in sustainable construction (knowledge systematizing participants' knowledge) - Białystok University of Technology**

1. Introduction to energy efficiency in buildings
2. Energy Consumption in Buildings and Energy Efficiency,
3. Renewable Energy Sources in Buildings – Study Tours, Best Practices:
4. Low-Emission Buildings – Demonstrations and Exercises,
5. Energy-Saving Technologies and Solutions in Public Buildings.

### **Lunch in Białystok University of Technology**

**13:00 – 16:00 Module 1. Energy efficiency in sustainable construction (knowledge systematizing participants' knowledge) - workshops**

6. Introduction to renewable energy sources. Solar energy.
7. Selecting solar collectors for domestic hot water heating  
(In small groups, a solar collector selection will be performed on a computer in Excel, single-family home, with a description/explanation of the procedure and formulas),
8. Determining the efficiency of a flat-plate solar collector.  
(This exercise will be performed by a group of six people, then they will switch with a second group.)
9. Determining PV panel parameters. Series and parallel PV connections. Determining PV parameters depending on solar radiation. – Workshops.

**18:30 Dinner**

**Tuesday, 21<sup>st</sup> April 2026**

**7:00 – 8:30 Breakfast in hotel Ibis**

**9:00 -13:00 Module 1. Energy efficiency in sustainable construction (knowledge systematizing participants' knowledge) - Białystok University of Technology**

1. Introduction to wind energy.
2. Estimating the energy produced by a selected residential wind turbine.
3. Wind Energy Consumption and Energy Efficiency,

**Lunch in Białystok University of Technology**

**13:00 – 16:00 Module 1. Energy efficiency in sustainable construction (knowledge systematizing participants' knowledge) - workshops**

4. The selection of a residential wind turbine ( it will be performed on a computer in Excel, based on annual wind speed measurements).
5. Determining the characteristics of a wind turbine model. Determining the characteristics of the wind turbine model's generator.  
(The exercises will be performed by a group of six people, then they will switch with the other group).
6. Examining the power generated by the wind turbine model depending on the blade angle of attack. Examining the power generated by the wind turbine model depending on the number of wind turbine blades. (The exercises will be performed by a group of six people, then they will switch with the other group). - workshops

**18:30 Dinner**

**Wednesday, 22<sup>nd</sup> April 2026**

**7:00 – 8:30 Breakfast in hotel Ibis**

**9:00 -13:00 Module 2. Energy Management in My School (practical knowledge demonstrating specific solutions and tools in schools). Study visit in Siemiatycze**

1. Smart Buildings and School Practice,
2. Energy Saving and Management Culture in School Buildings,
3. Energy Management in School Buildings.

**Lunch in Siemiatycze**

**13:00 – 16:00 Module 2. Energy Management in My School (practical knowledge demonstrating specific solutions and tools in schools)- workshops**

4. Smart Buildings and School Practice,
5. Energy Saving and Management Culture in School Buildings ( schools in Siemiatycze)– Examples.
6. Instructions for reducing energy consumption in buildings - Case studies,
7. Technological solutions and tools related to energy savings (smart meters, sensors, applications, and other tools for monitoring energy consumption)- Workshops

**18:30 Dinner**

**Thursday, 23<sup>rd</sup> April 2026**

**7:00 – 8:30 Breakfast in hotel Ibis**

**9:00 -13:00 Module 2. Energy Management in My School (practical knowledge demonstrating specific solutions and tools in schools). Study visit schools in Białystok**

1. Smart Buildings schools in practice,
2. Energy Saving and Management in School Buildings ( schools in Białystok)– Examples,
3. Technological solutions and tools related to energy savings in schools at Białystok (smart meters, sensors, applications, and other tools for monitoring energy consumption)- Workshops

**Lunch in University in Białystok**

**13:00 – 16:00 Module 2. Energy Management in My School (practical knowledge demonstrating specific solutions and tools in schools) University in Białystok- workshops**

4. Reducing energy consumption in buildings (University in Bialystok) - Case studies,
5. Smart Buildings Solutions in Educational buildings – workshops.

18:30 Dinner

**Friday, 24<sup>th</sup> April 2026**

**7:00 – 8:30 Breakfast in hotel Ibis**

**9:00 - 17:00 Module 2. Energy Management in My School (practical knowledge demonstrating specific solutions and tools in schools). Workshops.**

1. Developing and implementing a school energy savings plan

The plan includes: setting energy reduction goals, scheduling activities, monitoring progress, reporting results.

2. Practical energy-saving measures

Regularly turning off lights and appliances, replacing lighting with LEDs, setting thermostats, monitoring ventilation and heating, reducing energy consumption in computers and IT equipment.

Lunch

3. Collaborating with local communities and organizations

Schools can collaborate with energy suppliers, renewable energy organizations, and educational institutions to: conduct workshops, joint projects, obtain data for analysis.

4. Using Technology for Energy Management

Using simulations, measurement applications, energy meters, and online monitoring platforms, Incorporating technology into teaching and practical activities (e.g., classroom measurements, energy loss simulators).