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DIDACTECH



SUSTAINABILITY FOR EDUCATIONAL CENTERS



IKASIA TECHNOLOGIES · redREE making projects · smallcodes · nanoPAINT · ΕΠΑ.Λ Κ. ΑΧΑΪΑΣ · RÉPUBLIQUE FRANÇAISE · greta AUVERGNE · 1ο Επαγγελματικό Λύκειο Πάτρας

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INTRODUCTION



In recent years, the green transition and sustainable development have become fundamental pillars. The European Union is promoting measures and initiatives that contribute to the green transition and the implementation of sustainable practices. In this context, as explained in the Council Recommendation on learning for environmental sustainability: “As in other sectors, action must also be taken in the field of education and training to respond to the climate emergency and the planetary crisis—with regard to its own activities and, in particular, how these prepare students for the future.[i]”

In this context, within the framework of the Erasmus+ project “Didactech” [2024-1-ES01-KA220-SCH-000247893], we have developed a dossier that brings together a set of green measures and practices for secondary schools, designed for phased implementation without requiring significant time investment.

[i] European Commission. (2022). Proposal for a Council Recommendation on learning for environmental sustainability [COM(2022) 11 final]. Brussels: European Commission. Available from: https://eur-lex.europa.eu/legal-content/ES/TXT/?uri=CELEX%3A52022DC0011

EUROPEAN REGULATORY FRAMEWORK

The European Union has placed environmental sustainability at the heart of its growth and competitiveness strategy. Through the European Green Deal, the EU aims to achieve climate neutrality by 2050, promoting an economic model based on energy efficiency, the circular economy, and emissions reduction.



European Green Deal [ii]

Roadmap towards a climate neutral economy in 2050.

Energy Efficiency Directive (EU) 2023/1791 [iii]

Binding targets for reducing energy consumption.

Action Plan for the Circular Economy [iv]

Promotes reuse, recycling and waste reduction.

[ii] European Commission. (2019). Commission Communication: The European Green Deal (COM(2019) 640 final). Brussels.

[iii] European Parliament and Council of the European Union. (2023). Directive (EU) 2023/1791 on energy efficiency.

[iv] European Commission. (2020). A new Circular Economy Action Plan. For a cleaner and more competitive Europe (COM(2020) 98 final).

GREEN PRACTICES

7 concrete actions to transform your educational center





01 Energy Efficiency

Schools consume significant amounts of energy through lighting, heating, cooling, ICT equipment and specialised classrooms such as laboratories or workshops. Improving energy efficiency not only reduces operational costs but also provides valuable learning opportunities by encouraging students to adopt responsible energy-use habits.

Heating and cooling

- Maintain indoor temperatures between 19–21°C in winter and 26–27°C in summer.
- Ensure windows and doors remain closed while heating or air conditioning is operating.
- Schedule heating and cooling systems according to school hours.
- Carry out regular maintenance of HVAC systems.

Lighting

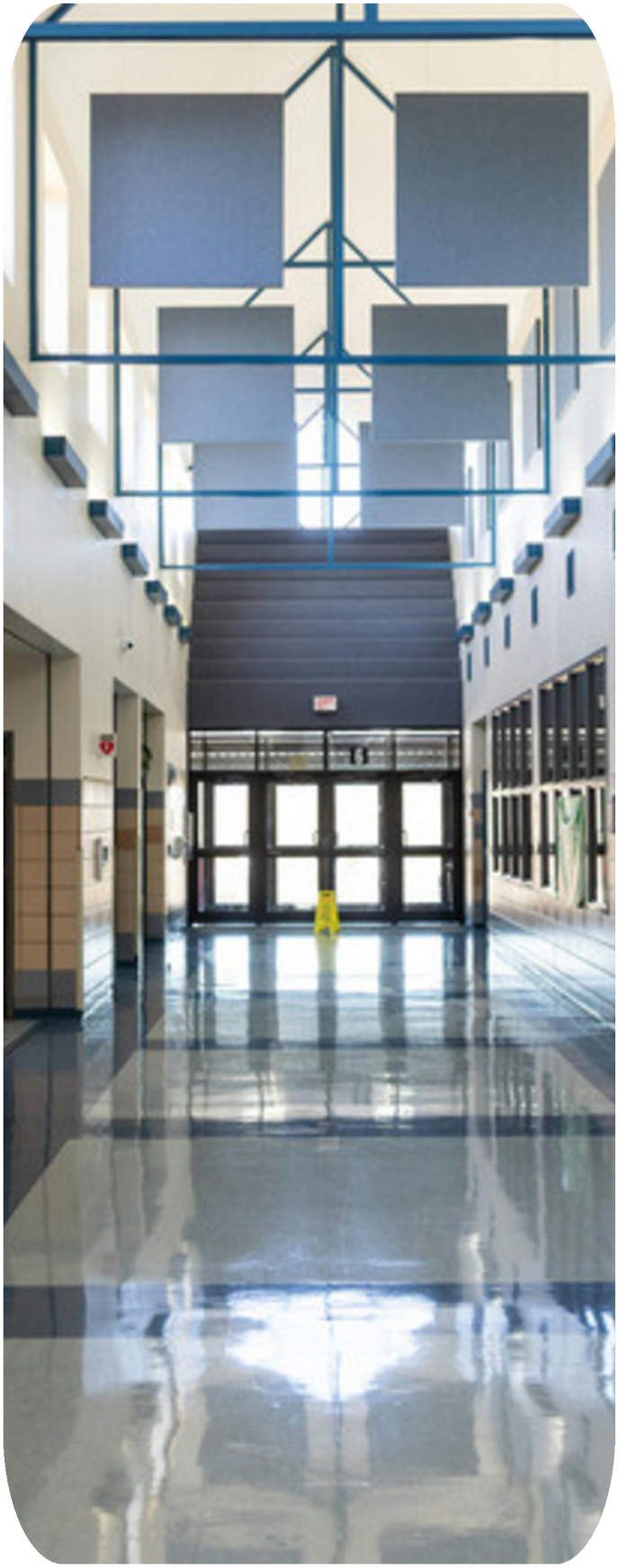
- Replace conventional lighting with LED bulbs.
- Maximise the use of natural daylight.
- Install motion sensors in corridors, toilets and storage areas.
- Switch off lights when classrooms are unoccupied.

ICT equipment

- Configure computers in energy-saving mode.
- Turn off interactive whiteboards, projectors and computers after lessons.
- Disconnect chargers when not in use.

Student engagement

- Create student-led campaigns promoting energy-saving habits.
- Monitor electricity consumption and share results with the school community.



Paper Reduction and Digitization 02

- Use digital learning platforms for homework submission.
- Share teaching materials electronically.
- Encourage digital note-taking where appropriate.
- Configure printers for double-sided printing.
- Print only when pedagogically necessary.
- Reuse single-sided printed paper.
- Use electronic signatures for administrative documentation.



Waste Management and Recycling 03

- Recycling bins in every classroom.
- Separate collection of paper, plastics and organic waste.
- Battery collection points.
- WEEE collection for obsolete ICT equipment.
- Reuse textbooks whenever possible.
- Organise school recycling campaigns.
- Create student eco-monitors responsible for recycling in each classroom.



Sustainable materials 04

- Purchase recycled paper.
- Choose FSC/PEFC-certified paper.
- Buy recycled notebooks and stationery.
- Use refillable markers.
- Purchase durable classroom furniture.
- Select energy-efficient ICT equipment.
- Choose environmentally friendly cleaning products.



Plastic reduction 05



- Encourage reusable water bottles.
- Install drinking water refill stations.
- Eliminate disposable cups in staff rooms.
- Avoid single-use plastics during school events.
- Promote reusable lunch containers.

Sustainable mobility 06

- Encourage walking and cycling.
- Provide bicycle parking.
- Promote public transport.
- Organise Bike to School Days.
- Promote safe school routes.
- Encourage staff to use sustainable transport.



Environmental Awareness 07

Environmental sustainability should not only be reflected in the school's daily operations but also embedded within teaching and learning. Schools play a key role in developing students' environmental awareness, critical thinking and responsible behaviours.

- Integrate sustainability across different subjects.
- Develop interdisciplinary environmental projects.
- Celebrate Earth Day and World Environment Day.
- Organise environmental workshops.
- Invite local environmental organisations.
- Participate in Erasmus+ sustainability projects.



CHECKLIST

Evaluate the sustainability level of your educational center



ENERGY CONSUMPTION

- [ ] LED lighting is used throughout most of the school.
- [ ] Classrooms make maximum use of natural daylight.
- [ ] Heating and air conditioning systems are operated according to energy-efficient guidelines.
- [ ] Computers, projectors and interactive displays are switched off at the end of the school day.
- [ ] ICT equipment is configured in energy-saving mode.
- [ ] The school uses electricity from renewable energy sources whenever possible.

DIGITALIZATION

- [ ] Digital learning platforms are used to share teaching materials and assignments.
- [ ] Administrative documentation is managed digitally whenever possible.
- [ ] Printers are configured for double-sided printing by default.
- [ ] Printing is limited to essential educational and administrative purposes.
- [ ] Electronic signatures are used for administrative procedures where applicable.

WASTE MANAGEMENT AND RECYCLING

- [ ] Clearly labelled recycling bins are available throughout the school.
- [ ] Separate collection points are provided for batteries and small electronic devices.
- [ ] Waste Electrical and Electronic Equipment (WEEE) is disposed of through authorised collection systems.
- [ ] Textbooks and school materials are reused or exchanged whenever possible.
- [ ] Students actively participate in recycling initiatives and environmental campaigns.

SUSTAINABLE MATERIALS

- [ ] Recycled or FSC/PEFC-certified paper is used whenever possible.
- [ ] School supplies made from recycled or environmentally friendly materials are prioritised.
- [ ] Energy-efficient ICT equipment and appliances are purchased whenever possible.
- [ ] Environmentally friendly cleaning products are used within the school.

PLASTIC REDUCTION

- [ ] Single-use plastics have been eliminated or significantly reduced.
- [ ] Drinking water refill stations are available for students and staff.
- [ ] Students and staff are encouraged to use reusable water bottles and lunch containers.
- [ ] Reusable tableware is used during school events and celebrations.

SUSTAINABLE MOBILITY

- [ ] Walking and cycling to school are actively encouraged.
- [ ] Secure bicycle parking is available.
- [ ] Students and staff are encouraged to use public transport.
- [ ] Sustainable travel initiatives (such as Bike to School Days or Walk to School campaigns) are organised.
- [ ] Staff are encouraged to use sustainable transport whenever possible.

EDUCATION FOR SUSTAINABILITY

- [ ] Sustainability topics are integrated across different curriculum subjects.
- [ ] The school develops environmental projects throughout the academic year.
- [ ] Students actively participate in sustainability initiatives and environmental campaigns.
- [ ] Environmental awareness events (e.g. Earth Day or World Environment Day) are organised regularly.
- [ ] Teachers receive opportunities for professional development in Education for Sustainable Development (ESD).

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