

EcoSense

Interactive Training Methodology

Responsible Environmental Behaviour Through Digital Innovations

Item	Information
Programme	Erasmus+ KA210-SCH - Small-scale partnerships in school education
Project No.	2025-1-LT01-KA210-SCH-000356935
Coordinator	Jurbarkas d. Skirsnemunės Jurgis Baltrušaitis Basic School, Lithuania
Partners	Lithuania, Slovakia and Greece
Public platform	https://myecosense.eu/
Scope	A common methodology applicable to all 17 Sustainable Development Goals (SDGs)
Version	Revised consolidated methodology, September 2026



1. Purpose of the methodology

The EcoSense Interactive Training Methodology is a common educational framework created within the Erasmus+ EcoSense project. It supports teachers in integrating sustainable development education into regular lessons through a combination of classroom learning, outdoor and hands-on activities, digital tools, collaborative tasks and practical action.

The methodology is designed primarily for students aged 13-15, while remaining adaptable to other age groups and different school contexts. It is practical, inclusive, digital, interdisciplinary and openly reusable through the EcoSense Virtual Learning Centre.

The EcoSense methodology covers all 17 Sustainable Development Goals. It is not restricted to environmental SDGs only. Teachers may develop activities connected with any SDG, provided that the activity follows the common EcoSense principles: active learning, digital integration, collaboration, inclusion, reflection, real-life relevance and a clear link to sustainable development.

2. Main objectives

- Develop students' understanding of sustainable development in its environmental, social and economic dimensions.
- Promote responsible behaviour, active citizenship and practical sustainable choices.
- Strengthen students' digital, communication, teamwork, creativity and problem-solving competences.
- Support teachers with a common, easy-to-use structure for designing SDG-related lessons.
- Combine subject learning with practical, outdoor and digital activities.
- Ensure inclusive participation of students with different abilities and learning needs.
- Promote international cooperation and exchange of good practice.
- Provide open, transferable educational resources through the Virtual Learning Centre.

3. EcoSense thematic framework: all 17 Sustainable Development Goals

All 17 United Nations Sustainable Development Goals can be used within the EcoSense methodology. The SDGs provide a broad thematic framework that allows teachers from different subjects to connect curriculum content with real-life sustainability challenges.

SDG	Goal	Possible EcoSense learning focus
SDG 1	No Poverty	Social inclusion, access to resources, inequality, responsible community support and the relationship between poverty and sustainability.
SDG 2	Zero Hunger	Food security, sustainable agriculture, local food, food waste, healthy diets and responsible consumption.

SDG	Goal	Possible EcoSense learning focus
SDG 3	Good Health and Well-Being	Healthy lifestyles, environmental health, safe choices, well-being, prevention and responsible behaviour.
SDG 4	Quality Education	Inclusive learning, equal access to education, digital learning, lifelong learning and education for sustainable development.
SDG 5	Gender Equality	Equal opportunities, participation, respectful relationships, stereotypes and inclusion.
SDG 6	Clean Water and Sanitation	Water quality, drinking-water treatment, sanitation, wastewater, water conservation and responsible use.
SDG 7	Affordable and Clean Energy	Energy saving, renewable energy, energy efficiency and responsible energy use.
SDG 8	Decent Work and Economic Growth	Responsible work, green jobs, sustainable entrepreneurship, fair working conditions and future skills.
SDG 9	Industry, Innovation and Infrastructure	Sustainable innovation, green technologies, infrastructure, digital solutions and problem-solving.
SDG 10	Reduced Inequalities	Inclusion, equal opportunities, accessibility, participation and respect for diversity.
SDG 11	Sustainable Cities and Communities	Sustainable settlements, transport, green spaces, waste, accessibility, resilience and local planning.
SDG 12	Responsible Consumption and Production	Consumption choices, resource efficiency, waste reduction, reuse, repair, recycling and sustainable products.
SDG 13	Climate Action	Climate change, mitigation, adaptation, carbon footprint, climate awareness and local action.
SDG 14	Life Below Water	Marine and freshwater ecosystems, plastic pollution, biodiversity, water protection and human impact.
SDG 15	Life on Land	Biodiversity, forests, soil, habitats, ecosystem protection and local nature monitoring.
SDG 16	Peace, Justice and Strong Institutions	Participation, fairness, human rights, responsible decision-making, dialogue and community trust.
SDG 17	Partnerships for the Goals	International cooperation, teamwork, school partnerships, shared responsibility and joint sustainability actions.

The examples above are indicative. They do not limit teachers to these subtopics. A single EcoSense activity may also connect several SDGs where this is pedagogically meaningful.

4. Core principles of the EcoSense approach

Principle	Application
SDG-based and interdisciplinary	Activities are connected to one or more SDGs and may integrate several school subjects.
Practical learning	Students investigate, observe, test, map, create, discuss or take action instead of learning only through theory.
Digital integration	Interactive worksheets, quizzes, QR-linked activities and the Virtual Learning Centre support learning and access.
Inclusion	Tasks can be simplified, extended or presented in different formats for mixed-ability groups.
Collaboration	Pair and group tasks promote communication, shared responsibility and international cooperation.
Local-to-global connection	Students begin with local or everyday examples and connect them to wider global challenges.
Reflection and action	Each activity encourages students to reflect on learning and identify a realistic action or behavioural change.
Transferability	Activities are structured so that they can be adapted and reused in different schools and countries.

5. EcoSense learning environments

Environment	Typical methods
Classroom	Short input, reading, vocabulary, discussion, source analysis, problem-solution tasks, action planning and presentations.
Outdoor / hands-on	Field observation, school-ground mapping, experiments, community investigation, eco-actions and practical tasks.
Digital	Virtual Learning Centre, Wordwall, Liveworksheets, QR tasks, digital quizzes, online reflection and student-created digital products.

6. Recommended EcoSense learning cycle

1. Engage - introduce a real sustainability issue, question, image, story, local example or challenge.
2. Learn - provide essential subject knowledge and key vocabulary linked to the selected SDG or SDGs.
3. Investigate - students read, observe, test, compare, map, interview, calculate or collect information.
4. Interact digitally - use an online task, digital worksheet, quiz, multimedia resource or QR-linked activity.
5. Collaborate and create - students work in pairs or groups and produce a meaningful result.
6. Act - connect learning to a practical behaviour, school action, community proposal or awareness activity.
7. Reflect and assess - students evaluate what they learned, how they participated and what action they can take next.

7. Common EcoSense lesson-plan template

Section	Content
TOPIC / SDG	The selected SDG or SDGs and a clear practical lesson title.
CLASS / DURATION / PREPARED BY	Target group, time and author/organisation.
LEARNING TASK	What students will learn, investigate, create or demonstrate.
GOALS / COMPETENCES	General and subject-specific competences.
INTEGRATION WITH OTHER SUBJECTS	Cross-curricular links.
MATERIALS / EQUIPMENT	Physical resources, digital devices, worksheets and safety equipment.
LEARNING ACTIVITIES	Sequence of classroom, outdoor, hands-on and digital tasks.
REFLECTION / ASSESSMENT	Reflection prompts, teacher observation, criteria or digital feedback.
APPENDICES / LINKS	Student sheets, reading texts, experiment instructions, answer keys and digital activity links.

8. Examples of modules already developed or used within EcoSense

The methodology applies to all 17 SDGs. The modules below are examples of themes already developed or used within current EcoSense project materials. They illustrate how the common methodology can be applied; they are not the full thematic scope of EcoSense.

9. Digital tools and the Virtual Learning Centre

Digital tools are selected according to the learning purpose. The Virtual Learning Centre serves as the central access point for lesson plans, interactive activities, sustainability challenges, project examples and open educational resources connected with all SDG themes.

Tool / format	Possible use
Virtual Learning Centre	Central access to methodology, lessons, project examples and challenges.
Wordwall	Vocabulary, matching, quizzes and revision.
Liveworksheets	Interactive reading, comprehension, sequencing, gap-fill and reflection.
QR / IRQ-linked tasks	Fast access to location-based or activity-specific digital resources.
Other digital tools	Nearpod, Genially, Google Forms, Wizer or similar tools where pedagogically useful.

10. Inclusion and differentiation

- Use short, clear instructions and visible examples.
- Provide word banks, visual prompts or partially completed tables where needed.
- Allow oral, written, visual, practical or digital responses.
- Use mixed-ability pairs and peer support.

- Reduce task length while preserving the main learning objective for students who need support.
- Provide extension tasks for students who need additional challenge.
- Adapt outdoor and practical activities for safe and meaningful participation.

11. Assessment and reflection

Area	Possible evidence
Knowledge	Comprehension, vocabulary, explanations and correct use of concepts.
Practical skills	Observation sheets, experiment results, maps, checklists and completed tasks.
Digital competence	Use of VLC, interactive activities and digital products.
Collaboration	Group roles, communication and shared outcomes.
Sustainability awareness	Quality of proposed solutions and links between actions and sustainable development.
Reflection	Exit tickets, self-assessment, short written reflections and feedback forms.

Suggested reflection prompts:

- In this lesson I learned that...
- It was interesting that...
- I would like to learn more about...
- One action I can take is...
- How does this activity connect to the selected SDG or SDGs?

12. Pilot testing and quality assurance

- Partners pilot EcoSense modules in real lessons and learning activities.
- Teachers and students provide feedback on clarity, engagement, usefulness and accessibility.
- Evidence may include student work, photographs, reflections, questionnaires and VLC uploads.
- Partners review results during project meetings and adjust materials when necessary.
- Quality criteria include practicality, inclusion, digital usability, relevance to sustainable development and transferability.

13. Green Challenge and Eco Ambassador approach

The methodology extends beyond individual lessons through sustainability challenges and student leadership. The Green Challenge encourages repeated everyday actions, while Eco Ambassadors help share sustainable practices, SDG knowledge and project ideas with classmates and the wider school community.

14. Teacher checklist for a new EcoSense activity

No.	Question
1	Is the activity clearly connected to one or more of the 17 SDGs?
2	Is the learning task clear and measurable?
3	Do students actively investigate, discuss, create, solve or act?
4	Is there a meaningful digital element where appropriate?
5	Can the task be adapted for different abilities?
6	Does the activity connect subject learning with real-life sustainable development?
7	Is collaboration included where useful?
8	Is reflection or assessment included?
9	Are materials and links easy to access and reuse?
10	Can the activity or its results be shared through the VLC?

17. Sustainability and long-term use

- Integrate EcoSense activities into regular subject teaching across different SDG themes.
- Continue to update the Virtual Learning Centre with new resources and modules.
- Repeat the Green Challenge with new groups of students.
- Use demonstration lessons to spread the methodology within and beyond partner schools.
- Develop the EcoSense Ambassador Network.
- Share project materials openly with other schools and education professionals.

18. Project partners and contribution

Partner	Contribution
Lithuania - Jurbarkas d. Skirsnemunės Jurgis Baltrušaitis Basic School	Project coordination, methodology leadership, lesson-plan structure, local activities and integration of project outputs.
Slovakia - Základná škola Štefana Senčíka, Starý Tekov	Outdoor learning, practical activities, inclusive learning and international training/piloting contribution.
Greece - Theodoropoulos Schools	Digital educational tools, QR-linked learning, STEAM approaches and international learning contribution.

19. Main project resources

EcoSense Virtual Learning Centre: <https://myecosense.eu/>

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