GREENATHON IN VET

WP4-A1: Development of the training and green ideathon methodology

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1. Introduction

This methodology has been developed within the framework of the Greenathon in VET project, a capacity-building initiative co-funded by the European Union under Key Action 2: Cooperation for Innovation and the Exchange of Good Practices. The Greenathon project aims to promote green skills, sustainable entrepreneurship, and innovation among VET (Vocational Education and Training) students, encouraging them to address environmental challenges and contribute to a more sustainable future. The primary goal of the Greenathon in VET project is to empower students to generate green business ideas, foster entrepreneurial thinking, and develop practical solutions for sustainability issues in their communities. By focusing on real-world challenges and hands-on activities, the Greenathon methodology helps students use their knowledge of sustainability and entrepreneurship to make a positive impact. The project supports the development of a green mindset that integrates environmental awareness with business practices, ensuring students are prepared to meet the demands of a rapidly changing world. This methodology provides a comprehensive guide for implementing Greenathon ideas in schools and VET settings. It aims to develop green entrepreneurial skills, encourage innovation, and promote sustainability. The document is designed to be accessible for different types of schools, ensuring ease of implementation for both students and teachers. To successfully implement an ideation challenge in the classroom or during a training session, teachers need a structured approach that guides students from team formation to the final pitch. This approach helps students develop essential skills like critical thinking, collaboration, and problem-solving while addressing real-world sustainability challenges. The methodology will be tested through pilot trainings and Greenathon events. During these activities, teachers and students will explore sustainability challenges, learn about green business solutions, and collaborate to develop and pitch innovative ideas. The methodology provides a structured approach, combining theoretical knowledge, practical activities, and reflective learning to enhance student engagement and outcomes. The Greenathon training methodology is supported by a range of resources, including training modules, case studies, and toolkits, which are available to teachers and students. These resources offer guidance on planning and conducting Greenathon activities, and they align with key competence frameworks such as GreenComp , EntreComp , and LifeComp. By participating in the Greenathon project, students will gain valuable skills that promote sustainability, innovation, and community wellbeing.

2. Framework Overview

The Greenathon methodology offers a structured framework for schools to seamlessly integrate green skills and entrepreneurial thinking into their curricula. By following a series of well-defined steps, students are guided to develop sustainable business ideas and present them effectively in an ideathon setting. To maximize the benefits of this approach, it is essential for participating students to engage with the comprehensive training materials available at www.greenathon.eu. These resources are designed to equip both students and educators with the necessary knowledge and tools to foster a culture of sustainability and innovation within educational institutions.

Range and format

The 'Greenathon in VET' training can be done in any sizes of classes from smaller to bigger groups. The training modules are optimal to the average size of classes with 25-30 students. The training can be linked to many topics including Economics and English, therefore, it can be integrated into several subjects. The training can also be conducted as after-class events.

Readiness level of students

No mandatory preliminary requirements can be identified for the VET students. As the modules are complex, VET teachers have the opportunity to adapt the content to the needs of the students and choose which topic is more relevant for their students.

E-learning Platform

The project developed an e-learning platform in 6 languages: English, Slovak, Hungarian, Portuguese, Romanian and Turkish. The platform can be used for (1) presentation of the modules and (2) evaluation of the students' knowledge with the test questions.

1. Register on the platform: check out the content of the modules including the further resources and the classroom activities.
2. Use the platform in the classroom
3. Ask students to register: ask them to send you the results of the test questionnaire.
4. The platform will generate a certificate if students reach 100% in all the module evaluations. They can try completing the test multiple times.

3. Training User Group Selection

The Greenathon training methodology is designed for both VET (Vocational Education and Training) students and educators, ensuring it meets the needs of these two key groups. The primary audience consists of VET students aged 14 to 23 who are studying in fields such as hospitality, manufacturing, information technology, and business. These students are at a stage where they can understand and apply concepts related to sustainability and green entrepreneurship.

Equally important are the VET teachers and trainers who will deliver the Greenathon content. These educators should have a basic understanding of entrepreneurship, sustainability, or related subjects. They should also be willing to use new teaching methods that encourage creativity, problem-solving, and teamwork. Teachers play a key role in guiding students, supporting the ideation process, and creating an environment where students feel encouraged to explore new ideas.

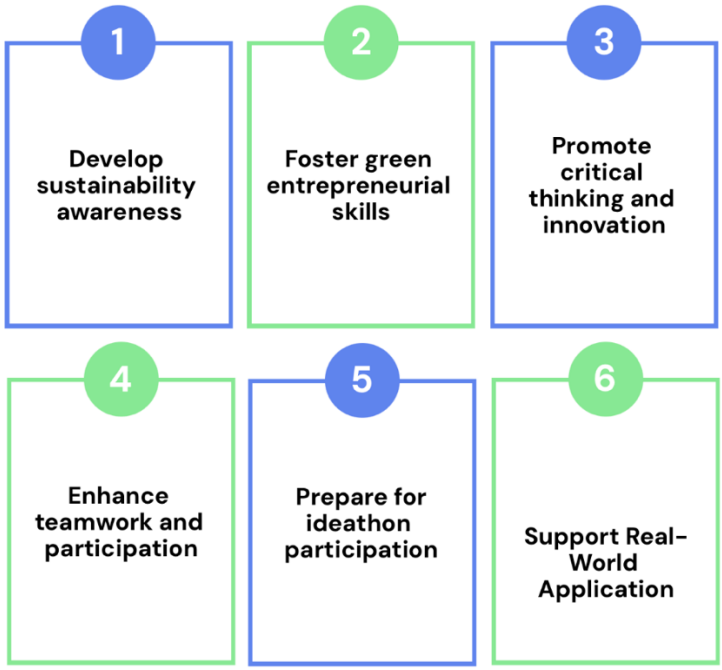
To ensure the training is effective, it is important to understand the needs of both students and teachers before starting. This can be done through surveys, interviews, or group discussions to find out what they already know about sustainability and entrepreneurship. This information helps adjust the training to fill any knowledge gaps and meet the specific needs of each group.

It is also useful to identify any missing elements in the current VET curricula related to green skills and sustainable business practices. By understanding these gaps, the Greenathon methodology can be added in a way that improves and supports existing lessons. This ensures the training is not only interesting and useful but also fits well with the overall goals of VET education.

By carefully selecting the right participants and understanding their needs, the Greenathon training methodology can help create a new generation of students who are ready to tackle environmental challenges and bring positive change to their communities.

4. Training Objectives

The Greenathon training methodology seeks to achieve the following objectives:



1. **Develop sustainability awareness**: equip students with a clear understanding of environmental challenges, including climate change, resource depletion, and biodiversity loss. by the end of the training, students should be able to identify key sustainability issues and their impact on society and the economy.
2. **Foster green entrepreneurial skills**: help students develop the ability to create new and practical solutions to environmental challenges. this includes learning how to think creatively, solve problems, and design business models that are ethical and good for the environment.
3. **Promote critical thinking and innovation**: encourage students to think carefully about environmental problems and explore new ways to solve them. the methodology uses tools like design thinking, brainstorming, and eco-design to support this process.
4. **Enhance teamwork and collaboration**: teach students how to work together to reach common goals. through group activities, students will learn to communicate clearly, share tasks, and use each other's strengths to develop their green business ideas.

5. **Prepare for ideathon participation**: get students ready to take part in the greenathon event by teaching them skills like pitching, presenting, and coming up with ideas quickly. this includes training on how to give a clear and convincing pitch that explains the problem, solution, and impact.
6. **Support Real-World Application**: Give students the confidence and knowledge to put their ideas into action. The training encourages them to create solutions that can be used in their schools, communities, or future careers.

By focusing on these objectives, the Greenathon training methodology helps create students who are aware of environmental issues, ready to innovate, and capable of making a positive impact on their communities.

5. Training Structure and Modules

The Greenathon training is organized into five key modules, each designed to build specific competences related to green entrepreneurship. The modules follow a logical progression from understanding sustainability challenges to preparing for a Greenathon event.

Module 1: Major Challenges of Sustainability and Climate Change

The first module introduces students to major sustainability challenges such as climate change, biodiversity loss, pollution, and food security. Through various activities and interactive learning tools, students explore the causes and impacts of these issues.

- Introduction
- Presentation
- Activities:
    - Field Trip:
    - Create a Mind Map
    - Save The Climate Game (Sustainability Alliance)
    - Sustainability in Schools – Simulation Card Game
    - The Systems Thinking Playbook for Climate Change – A Toolkit for Interactive Learning
- Module 1 Quiz

Module 2: Main Green Solutions

In the second module, students learn about green solutions and tools that address sustainability challenges. This module focuses on renewable energy, circular economy principles, and nature-based solutions.

- Introduction
- Presentation
- Module 2 Quiz

Module 3: Introduction to Green Entrepreneurship

The third module introduces students to green entrepreneurship concepts and sustainable business practices. Students explore social enterprises, green supply chains, and the importance of avoiding greenwashing.

- Introduction
- Presentation
- Activities:
    - Reverse Brainstorming
    - User Persona (for JST)
    - Personas Maker (for JST)
- Module 3 Quiz

Module 4: Basics for Green Idea Development

This module helps students develop and refine their green business ideas using design thinking and other ideation techniques. They also learn the importance of networking and evaluating ideas from multiple perspectives.

- Introduction
- Presentation
- Activities:
    - Identify Challenges and Problems Related to Sustainability and Climate
    - Six Thinking Hats
    - 5 Whys
    - Demonstrate an Understanding of the Process of Design Thinking
    - Evaluate Ideas in a Complex and Multidisciplinary Way
    - Draft an Implementation/Action Plan
    - Acknowledge the Benefits of Networking with Local Businesses, Community, and Professionals
- Module 4 Quiz

Module 5: Preparation for Greenathons

The final module prepares students to confidently participate in the Greenathon event by honing their pitching and teamwork skills.

- Introduction
- Presentation

- Activities:
    - Reverse Brainstorming
    - My Problem and My Solution
    - My First Business Model Canvas
    - Preparing a Pitch Deck
    - Elevator Pitch
- Module 5 Quiz
- Certification

Module Integration and Implementation

Each module is designed to build upon the previous one, ensuring a comprehensive learning experience. Teachers are encouraged to adapt the modules to their specific classroom needs and schedules. The recommended delivery is 90 minutes per week for six weeks, though this can be adjusted as needed.

Teachers and trainers should use a mix of instructional methods, including lectures, group discussions, hands-on activities, and project-based learning. This blended approach ensures that students remain engaged and can apply their knowledge in practical settings.

By the end of the training, students will be well-prepared to participate in a Greenathon event, pitch their green business ideas to a jury, and receive valuable feedback. This real-world application reinforces their learning and builds confidence in creating sustainable solutions.

6. Assessment and Success Indicators

The Greenathon training uses a balanced approach to assessment, combining different methods to check student learning, progress, and readiness for green entrepreneurship. This approach ensures that students not only gain knowledge but also build the skills needed to solve sustainability challenges with creative business ideas.

Assessment Methods

During the training, formative assessments are used to check how well students understand the material and to give quick feedback. These assessments happen throughout each module and include group discussions and brainstorming sessions. Many activities are suggested, for example, in the first modules, students can join field trips, simulations, and games to better

understand sustainability challenges in a fun and engaging way. These activities help teachers see how much students understand and give advice on how to improve their ideas.

As students move forward, formative assessments focus more on using what they have learned in real situations. Activities like brainstorming, role-playing, and design thinking workshops help students find creative solutions to real-world problems. During these tasks, students get immediate feedback from their classmates and teachers. This helps them learn how to work better as a team and improve their ideas over time.

At the end of each module, students take a quiz to check their understanding of the main ideas. These quizzes test topics like sustainability challenges, green solutions, business ideas, and how to develop and present their projects. The e-learning platform provides a convenient way for students to complete these quizzes, receive instant feedback, and track their progress. The quizzes help students see what they know and make sure they are ready for the next module.

The final assessment is a end-of-training assessment. This happens during the Greenathon event, where students present their green business ideas to a panel of teachers or experts. This event tests everything they have learned — from understanding sustainability problems to creating a solid business model and giving a good presentation. The feedback from the jury helps students know what they did well and what they can improve, giving them useful advice and a sense of real-world experience.

Piloting process

The piloting process is a crucial part of measuring the training's success. To ensure the methodology is effective, at least two teachers will complete the pilot training, engaging a total of 25 students each (in total about 50 students per partner organization). These students can be part of one large class, two smaller classes, or even school clubs. Additionally, at least one teacher should oversee the participation of students in the pilot Greenathon event. This event serves as the culmination of the training, where students pitch their ideas and receive feedback. To evaluate and promote the program, a minimum of five students per country will be interviewed about their experience. Their feedback provides valuable insights into what works well and what can be improved. Teachers are also asked to submit a short report detailing their experience with the pilot. These reports should describe how they adapted the schedule, which activities were most relevant and engaging, and any challenges they encountered. This feedback is critical for refining the training and making it more adaptable for different educational settings.

Success Indicators

The success of the Greenathon in VET training is assessed through several key indicators that reflect the knowledge, skills, teamwork, and practical abilities that students develop throughout the program. These indicators also measure the effectiveness of the piloting process and the overall impact on both students and teachers. By the end of the training, students are expected to demonstrate a solid grasp of sustainability concepts and challenges. This understanding is reflected in their performance on the module quizzes, where a score of at least 70% indicates that they have absorbed the essential topics. Beyond quiz results, active participation in discussions and classroom activities offers another way to gauge their comprehension. When students can identify sustainability problems and propose thoughtful solutions during group work and brainstorming sessions, it shows they have developed a deep understanding of the issues at hand.

Skill Development

Throughout the training, students are encouraged to develop critical skills that will help them think and act like green entrepreneurs. These include design thinking, eco-design, and effective brainstorming techniques. By the time they reach Module 5, they should feel confident in their ability to refine and communicate their business ideas. The final Greenathon event provides an opportunity for students to demonstrate these skills by clearly explaining their ideas and delivering a compelling pitch. Confidence in public speaking, clarity of thought, and the ability to present complex ideas simply are key indicators of successful skill development.

Collaboration and Engagement

An essential part of the Greenathon training is learning to work effectively with others. Students are encouraged to participate in group activities, share ideas, and provide constructive feedback to their peers. Teamwork becomes especially important during the preparation for the Greenathon event, where successful collaboration often leads to stronger project outcomes. When students engage actively and support one another in reaching a common goal, it shows they have developed the ability to collaborate and communicate effectively—skills that are essential for future entrepreneurial success.

Practical Application

The ultimate goal of the Greenathon training is for students to create green business ideas that address real-world sustainability challenges. By the end of the program, students should not only have developed creative and practical solutions but also understand how to apply ethical and sustainable business practices. Connecting their ideas with local businesses, community groups, and professionals helps ground their projects in reality. This ability to link classroom learning with real-life applications demonstrates that students are prepared to make a meaningful contribution to the green economy.

Certificate of participation

Upon successfully completing the training and passing the quizzes, students receive a Greenathon certificate of participation. This certificate recognizes their hard work and the skills they have developed, giving them a sense of achievement. More importantly, it encourages them to continue exploring and developing sustainable business ideas in the future. This recognition can inspire students to stay involved in green entrepreneurship, apply their learning to real-world projects, and become active contributors to a more sustainable world.

By focusing on these success indicators, the Greenathon training ensures that students are not only learning about sustainability but are also developing the skills, confidence, and practical experience needed to drive real change in their communities.

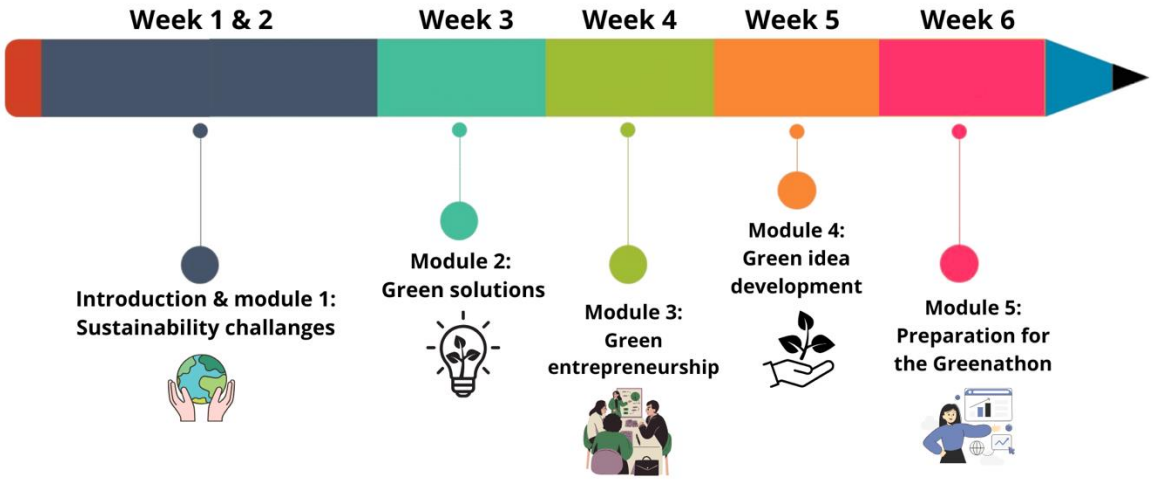
Evaluation questionnaires for teachers and students

The questionnaires in Annexes I and II were developed for the pilot training of the 'Greenathon in VET' project, but can also be used to collect feedback from teachers and students and evaluate the completed trainings.

7. Project Timeline and Milestones

The Greenathon training is designed to be flexible, allowing teachers to adapt it to their own classroom schedules. The program suggests a delivery plan of 90 minutes per week over six weeks, but teachers can adjust the timing, focus, and depth of each module based on their students' needs. Some modules contain more content than others, so teachers can choose the most relevant topics for their students.

Teachers participating in the pilot phase are encouraged to cover all five modules and the Greenathon event. Below is a suggested timeline that teachers can use as a starting point. However, this structure can be adjusted depending on the needs of each classroom.



Week 1-2: introduction and module 1 – Sustainability challenges

This module covers topics like climate change, pollution, biodiversity loss, and food security. Teachers have many activities available to engage students, such as creating mind maps, participating in field trips, and playing educational games.

By the end of this period, students should understand the main sustainability challenges and be ready to explore solutions.

Week 3: module 2 – Green solutions

This module introduces renewable energy, the circular economy, and nature-based solutions. teachers can choose activities and examples that are most relevant to their students' interests or local context. By the end of week 3, students should have a good understanding of potential solutions to sustainability challenges.

Week 4: module 3 – Green entrepreneurship

This module helps students understand sustainable business practices, social enterprises, and the risks of greenwashing. Activities like brainstorming and creating user personas help students

develop their business ideas. At the end of this week, students should have a basic idea of how green entrepreneurship works and how to approach sustainable business planning.

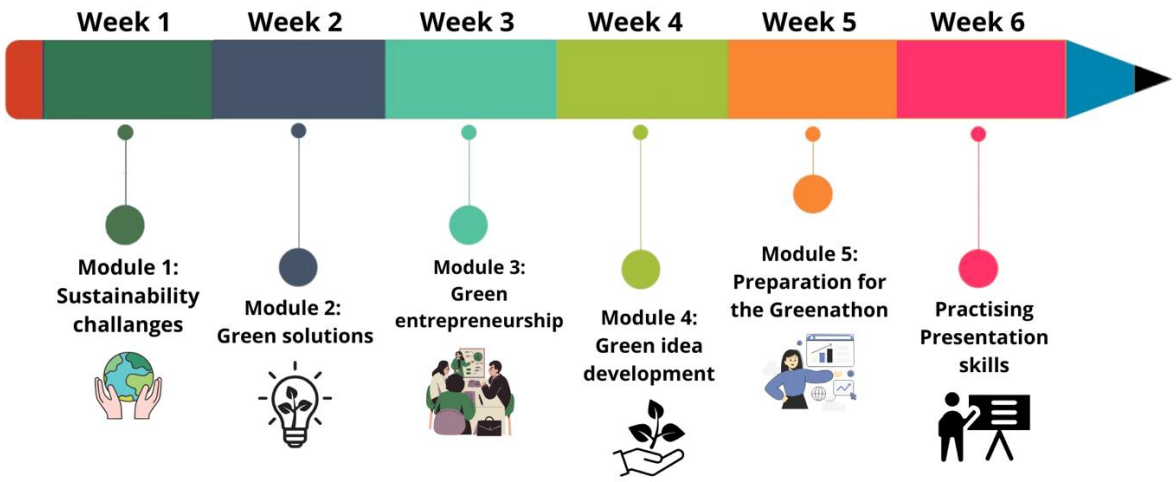
Week 5: module 4 – Green idea development

This module introduces design thinking, brainstorming techniques, and creating a simple business plan. Since this module is quite detailed, teachers can choose the activities that best fit their classroom needs. By the end of week 5, students should have refined their green business ideas and created a basic plan for their project.

Week 6: module 5 – Preparation for the Greenathon

Students practice their pitching skills, create a pitch deck, and work on their teamwork and presentation techniques. Teachers can organize demo presentations or feedback sessions to help students get ready.

Alternatively, Module 1 can be condensed into one week, allowing Week 6 to focus more on pitch practice.



Greenathon event

At the end of the training, hold the **greenathon event** where students present their green business ideas to a jury of teachers, peers, or invited experts. The timing of this event can be

adjusted to fit the school's or classroom schedule. Students will pitch their ideas, receive feedback, and reflect on their learning journey.

Teaching approaches

To make the Greenathon training flexible, interesting, and effective, it's important to use different teaching methods that match different learning styles and classroom situations. By mixing hands-on, group-based, and reflective learning methods, teachers can create an engaging environment. This approach helps students build the skills and knowledge they need for green entrepreneurship. Below are some simple teaching approaches that teachers can use in the Greenathon modules.

- **Flipped Classroom Approach:** in a flipped classroom, students learn the basic theory at home and use class time for practical activities. For example, students can watch videos or read materials about sustainability at home. In class, they do group work, discussions, or hands-on projects based on what they learned. This approach lets students learn at their own speed before class and come prepared to apply their knowledge. The Greenathon's e-learning platform can help provide learning materials for this method.
- **Reflective learning:** reflection helps students think about what they have learned and why it matters. One way to do this is by asking students to keep a journal where they write down their thoughts, challenges, and progress. After activities, teachers can organize group reflection sessions where students share their experiences and what they learned. Self-assessment exercises also help students understand their strengths and areas for improvement. This approach encourages a mindset of continuous learning.
- **Case-based learning and real-world examples:** using real-world examples helps students understand how the things they learn in class apply to real life. Teachers can show case studies of successful green businesses or sustainability projects. Inviting guest speakers like local entrepreneurs or environmental experts can also inspire students. These real-life connections make learning more practical and help students see how they can use their ideas to solve real problems.

8. Preparing the Call for Ideathon

The teacher or school administration should prepare a Call for Ideathon. This step is important to set clear expectations and outline the challenge. This simple document provides structure and helps students understand the purpose, process, and outcomes of the activity. The Call for Ideation should include a project overview that provides a brief introduction to the challenge, explaining the goal and themes. It should also include team formation guidelines, specifying how teams should be formed, ideally with 2 to 4 students per team. Encourage students to form teams spontaneously and promoting collaboration. Deadlines and milestones should be set for each phase of the challenge. Presentation guidelines should outline how the final pitch must be delivered. Evaluation criteria need to be defined to judge the projects effectively. Finally, jury selection could be as simple as one teacher or even involve assembling a panel of teachers or older students who can evaluate the pitches and provide constructive feedback. The next example is given as a basic document designed to help you identify the steps and people who need to be involved.

8.1. Goals and themes

The Greenathon encourages an open competition format, allowing students to propose ideas that truly interest them. This approach gives students the freedom to explore creative and innovative solutions based on their passions and concerns. By allowing students to choose their themes, the competition can inspire greater enthusiasm and engagement.

Alternatively, teachers and organizers can opt to focus on a specific climate change or sustainability challenge. For example, the competition could center around issues like reducing plastic waste, improving energy efficiency, promoting biodiversity, or developing circular economy solutions. This targeted approach can help provide more structure and ensure that student projects align closely with current environmental priorities. Whether using the open or focused approach, the goal is to inspire students to address real-world sustainability challenges with practical, green business ideas.

8.2. Deadlines and milestones

The timeline for the Greenathon should balance giving students enough time to prepare their ideas while maintaining momentum and excitement. It is recommended that there be a period of 3-4 weeks between the publication of the call for submissions and the deadline for submitting projects. This timeframe gives students sufficient time to develop their ideas, refine their solutions, and prepare their materials without losing interest or motivation.

After the submission deadline, the Greenathon event itself can be organized as a one-day event. This event provides a platform for students to present their projects, receive feedback, and celebrate their efforts. Teachers should communicate clear milestones to help students stay on track, such as deadlines for project drafts, feedback sessions, and final submissions. This structured approach ensures that students can manage their time effectively and feel prepared for the event.

8.3. Presentation guidelines

Students can present their ideas in a variety of formats, depending on what best showcases their project and skills. This flexibility allows them to be creative and choose the method that makes them feel most confident. Possible formats include:

- Presentation slides: a PowerPoint, Prezi, or Canva presentation following a fixed structure to ensure clarity and organization.
- Video pitch: a recorded pitch that explains the project concisely and persuasively.
- Prototyping: a physical or digital prototype of the proposed idea to demonstrate how it works.
- Physical visualization: posters, models, or displays that visually represent the project.
- Classcraft virtual classroom/game: using interactive or gamified methods to present the idea in a creative way.

There is no mandatory format, allowing students to choose the method that best fits their idea. Module 5 offers tips and tools to help students prepare their submissions and presentations, including guidance on storytelling, visual design, and public speaking. This support ensures that students can effectively communicate their ideas and feel confident during the Greenathon event.

8.4. Evaluation criteria

To ensure fairness and transparency, student projects are evaluated based on clear and well-defined criteria.

Evaluation criteria	What to check
Creativity	How original and innovative is the solution?
Feasibility	Is your solution practical and achievable?
Impact	What positive effect could the solution have on the community or environment?
Clarity	How clearly and effectively was the idea communicated ?
Teamwork	Did the team collaborate well, and did each member contribute effectively?

The evaluation considers several key aspects:

- Innovation and creativity: how original and creative is the idea? Does it offer a new approach to solving a sustainability challenge?
- Feasibility: can the idea be realistically implemented? Are the steps and resources needed clearly explained?
- Impact and relevance: does the idea address an important sustainability issue? What potential impact could it have on the environment or community?
- Presentation quality and clarity: how well is the idea communicated? Is the presentation clear, engaging, and well-structured?
- Teamwork and collaboration: if the project is a group effort, how effectively did the team work together?

These criteria help ensure that the evaluation process is balanced and that students receive constructive feedback on different aspects of their work.

8.5. Jury selection

The jury plays a crucial role in evaluating the student projects and providing meaningful feedback. The jury should be made up of individuals who have relevant expertise and experience in fields related to sustainability, entrepreneurship, and education. A diverse jury can offer different perspectives and make the evaluation process more balanced and insightful. Ideal jury members can include:

- Sustainability experts: professionals who work in environmental science, renewable energy, or climate action.
- Entrepreneurs: business owners, particularly those involved in green businesses or social enterprises.
- Educators: teachers or trainers with experience in sustainability education.
- Community leaders: individuals who are active in local environmental or social initiatives.

The selection of a diverse and knowledgeable jury helps ensure that students receive valuable insights and encouragement. Jury members should be briefed on the goals of the Greenathon, the evaluation criteria, and the importance of providing constructive and supportive feedback to students.

9. Ideathon Call Example

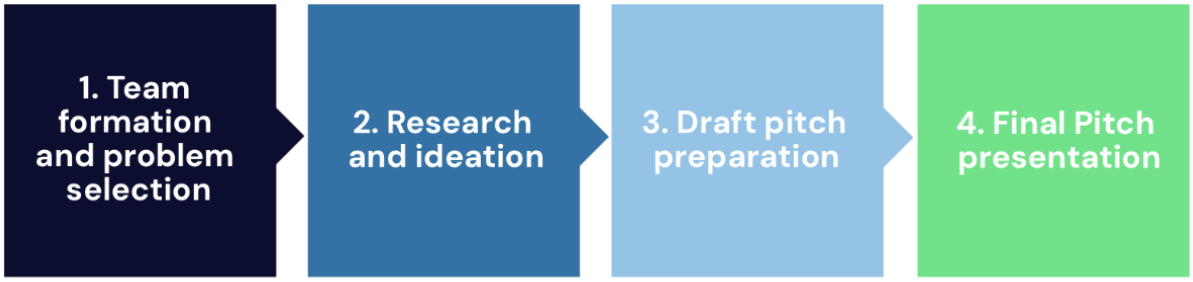
Greenathon challenge 2025

Welcome to the Greenathon Challenge 2025! This ideation challenge aims to inspire you to develop creative and practical solutions to local sustainability issues. We want you to investigate real-world environmental problems and come up with innovative ideas to address them. You can focus on topics such as energy efficiency, waste reduction, sustainable food practices, or climate change. This is an opportunity to make a difference in your community, learn valuable skills, and have fun working as a team!

Team formation guidelines

-Teams should consist of 2 to 4 students.
-Form your teams spontaneously, selecting members who bring different strengths and ideas to the group.
- Choose a name for your team.
-Deadline for team formation: (Insert date)

Project Phases



1. Team formation and problem selection: form your team and select a specific sustainability issue you want to address.
2. Research and ideation: investigate the problem your team selected, research possible solutions, and brainstorm creative ideas.
3. Draft pitch preparation: develop your pitch, including your problem statement, research findings, and proposed solution.
4. Final Pitch Presentation: present your final pitch to the jury.

The final pitch presentations will take place on (Insert date) at (Insert time) in (Insert location).

Presentation Guidelines

Your pitch should be maximum 5 minutes long and cover the following key sections:

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1. Problem statement: clearly define the problem you are addressing and explain why it matters.
2. Research findings: summarize the research you conducted and any data or evidence you collected.
3. Proposed solution: describe your solution, explaining how it works and why it is effective.
4. Potential impact: outline the positive impact your solution could have on the community or environment.
5. Team roles: briefly mention the roles each team member played in the project.

You are free to use slides (ppt format), videos, prototypes, or models to enhance your presentation.

Evaluation criteria

Your project will be evaluated based on the following criteria by a panel of teachers.

Jury panel

The jury will provide constructive feedback and select winning teams based on the evaluation criteria. Members of the jury panel are:
(Insert Name and Surname)
(Insert Name and Surname)
(Insert Name and Surname)

Prizes and Recognition

Winning teams will receive:

a) Certificates of Achievement
b) Recognition on the school's website or social media
c) Additional prizes chosen by the teacher or the school

If you have any questions, please contact (Insert teacher's name and email).

Good luck and let your creativity shine.

10. Forming Green Teams

The first step in the process is forming Green Teams. Encourage students to create their own teams spontaneously, with each team consisting of 2 to 4 members. This approach promotes student ownership, creativity, and collaboration. To ensure effective coordination and execution, ask students to assign clear roles within their teams. For example to decide who will be the presentation lead – the student who will be responsible for the presentation of the final pitch. This student-driven structure empowers participants to take initiative, fostering a deeper learning experience and enhancing teamwork skills. Each team should choose a team name. It is recommended that a teacher be assigned as the main contact person to answer questions and facilitate communication. Each Green Team should provide this teacher with a contact email to ensure smooth communication from the time of registration until the day of the final pitch presentation. This process can be simplified in case that the ideation challenge is being organized within a single classroom.

Learn more about team roles in Module 5.

11.Research and Ideathon

Once Green Teams have formed and roles have been assigned, students enter the Research and Ideation phase. In this stage, they are tasked with exploring real-world sustainability challenges, understanding the context of these issues, and brainstorming solutions that are both practical and innovative. The goals of this phase are to:

Goal 1	Goal 2	Goal 3
Develop critical thinking and problem-solving skills	Encourage curiosity and exploration of sustainability topics	Foster creativity in developing green business ideas

Module 4 includes many tools and methods that students can use. To ensure students navigate this phase successfully, the selected teacher needs to provide strategic support without taking over the process. This is especially important if the ideation challenge is being organized within a single classroom. If the ideation challenge is organized at a school level, the selected teacher can share documents with ideas and successful case studies by emailing them to the participants. The role of a teacher here is that of a facilitator and guide.

Key Actions for research and ideathon are:

1. Explore real-world challenges: teams should research current environmental or sustainability issues that are relevant to their local community or connected to the subjects they are studying at school. This ensures their work is both meaningful and applicable to real-world situations they can relate to. Encourage students to explore diverse resources to identify pressing challenges or opportunities for improvement. Teams should research current environmental or sustainability issues relevant to their community or school. They can investigate how energy is used in their school, homes, or local community, exploring ways to reduce energy consumption, promote renewable energy sources, or improve existing infrastructure to be more energy-efficient. Examples might include optimizing classroom lighting, introducing solar panels, or encouraging energy-saving practices. They should also examine waste management practices within the school, community, or nearby businesses, focusing on reducing single-use plastics, improving recycling programs, or promoting composting. Potential solutions could involve awareness campaigns or innovative ways to upcycle materials. Additionally, teams can research the environmental impact of food production and consumption in their local area. This could involve exploring ways to reduce food waste, sourcing food from local and sustainable providers. Possible initiatives include school garden projects or food rescue programs. Students could also identify how climate change affects their region or biodiversity loss in their region, and propose solutions like tree-planting initiatives, educational campaigns, or strategies for reducing carbon footprints or to improve biodiversity.

2. Identify a specific problem: each team should narrow down their research to a specific problem they care about and want to solve. The problem should be connected to their local community or something they are studying at school. Choosing a problem they are passionate about will keep them motivated and excited to work on a solution. To help define the problem clearly, teams can ask themselves questions like: *Who is affected by this problem? What causes it? Why is it important to solve this? What positive changes would solving this problem bring?* By answering these questions, they can better understand the issue and focus on what matters most. A clear and specific problem is

easier to solve. For example, instead of tackling a big topic like “pollution,” a team could focus on “reducing plastic waste from school lunches” or “improving air quality around playgrounds.” A specific problem makes it easier to come up with focused ideas, measure results, and create practical solutions that can actually work. Teams should also write a short description of their problem. This should explain what the problem is, where it happens, who is affected, and what could happen if it isn’t solved. Having this description will help them stay focused and on track while working on their project. By choosing a clear, specific problem they care about, students will feel more involved and responsible. This will help them come up with creative solutions and make the whole process more enjoyable and rewarding.

3. Brainstorm solutions: teams should use creative brainstorming techniques, such as mind mapping, brainstorming sessions, or the "How might we" approach, to generate a range of potential solutions.

4. Evaluate feasibility: encourage teams to assess the feasibility of their ideas by considering factors such as practicality, impact, and available resources.

12.The Greenathon Event

To ensure a successful Greenathon event, careful planning and coordination are essential. Begin by selecting a suitable location that can comfortably accommodate all participating teams, the jury, and any audience members. A school auditorium, multipurpose hall, or large classroom with ample seating and presentation space is ideal. Ensure the venue has the necessary technical

equipment, such as a projector, microphones, a sound system, and a laptop for student presentations.

The jury must receive the evaluation criteria in advance to ensure they understand how to assess the presentations effectively. These criteria should cover key aspects such as creativity, feasibility, impact, clarity, and teamwork. Providing the criteria ahead of time allows jurors to offer consistent and fair evaluations while giving constructive feedback to the students.

Prepare a detailed event agenda outlining key phases: an introduction, student presentations, Q&A sessions, jury deliberation, and the announcement of winners. Ensure the event runs smoothly by assigning roles such as a moderator to introduce teams, keep time, and facilitate Q&A, and a technical assistant to manage presentations and equipment.

Finally, plan for prizes and recognition to motivate students. Certificates of achievement, small trophies, or recognition on the school's website or social media can celebrate student efforts and success. Having these elements well-organized will create an inspiring and professional event that encourages creativity, collaboration, and a commitment to sustainability.

Don't forget to document the entire Greenathon process to capture the event's success and learning moments. Include photos, videos, and testimonials from students, teachers, and jury members. This documentation can serve multiple purposes: showcasing the event to the school community, providing inspiration for future Greenathon events, and offering valuable insights for improving subsequent events. Sharing these materials on the school's website, social media channels, or newsletters can celebrate student achievements and promote a culture of sustainability and innovation.

13. Post-Event Phase and Evaluation

The Post-Event Phase is essential to consolidate the learning experience and ensure that the Greenathon has a lasting impact on students and the school community. After the Greenathon event, it is important to organize a reflection session for all participating students and teachers. Begin by facilitating group discussions where each team has the opportunity to share their experiences, the challenges they faced, and the lessons they learned throughout the process. These conversations can help students articulate their thoughts, gain confidence, and understand the value of teamwork and problem-solving. In addition to discussions, collecting feedback through anonymous surveys or feedback forms can provide deeper insights into what worked well and what areas need improvement for future Greenathons. This approach allows for honest and constructive feedback, ensuring that the event can evolve and become even more impactful over time. Teachers should also take time to reflect on the effectiveness of the methodology, considering what strategies were most successful and what adjustments could enhance the experience. This reflection helps refine the structure and delivery of future events. These activities help students learn better and gather useful feedback. This leads to ongoing improvements and builds a stronger culture of sustainability and innovation in the school.

For the piloting Greenathons, the questions present in Annex 3 were developed to evaluate the conducted competitions. These questions are adequate for interviews with the participating students, and their responses can be used as articles/news pieces in school magazines, websites and social media, and for making promotional videos.

14. Tips for Implementing the Greenathon in VET Schools

The Greenathon methodology is specifically designed to meet the needs of Vocational Education and Training (VET) schools, where practical skills and real-world applications are essential. By focusing on industry-relevant sustainability challenges, the Greenathon can effectively equip VET

students with green entrepreneurial skills and innovative thinking. Here are some tips to successfully implement the Greenathon in VET schools. Focus on industry-specific challenges that align with the students' areas of study. For example, hospitality students could develop ideas for reducing food waste or creating eco-friendly restaurant practices, while students in manufacturing programs could explore sustainable production methods or energy-efficient technologies. This approach helps students see the direct relevance of sustainability to their future careers. Encourage hands-on projects and practical demonstrations. VET students often learn best by doing, so allow them to create prototypes, models, or working demonstrations of their green solutions. This can make the ideathon experience more engaging and provide tangible results that students can showcase. Incorporate real-world scenarios and case studies to inspire students and provide context for their ideas. Share examples of businesses or professionals who have successfully implemented sustainable practices. When possible, invite to the final event guest speakers from relevant industries to share insights and give feedback on student projects. Provide structured support during the research and ideation phase. While encouraging student independence, offer resources such as articles, videos, and toolkits that are specific to their vocational fields. Teachers can act as facilitators, guiding students through brainstorming sessions, research methods, and problem-solving techniques. Emphasize the development of business and entrepreneurial skills alongside sustainability. Encourage students to think about the feasibility, market potential, and economic benefits of their ideas. This helps them prepare not only for the ideathon but also for future entrepreneurial ventures or careers.

By focusing on practical applications, industry relevance, and hands-on learning, the Greenathon can become a valuable tool for equipping VET students with the skills and mindset needed for a sustainable future.

Annexes

The following annexes provide comprehensive questionnaires designed to gather valuable feedback from teachers, students, and jury members who participated in the Greenathon project. Collecting this feedback is crucial for evaluating the clarity, usefulness, and overall effectiveness of the training materials, instructions, and the Greenathon event itself. This process ensures that the Greenathon methodology can continually evolve and improve, making future training sessions and events even more impactful and engaging.

Each questionnaire targets a specific group to address their unique experiences and perspectives. The insights gained will help identify strengths and areas for improvement in the instructional content, the event structure, and the resources provided. By carefully analyzing this feedback, we aim to support educators in delivering high-quality sustainability and entrepreneurship training, ensure students are equipped with the necessary skills and knowledge, and refine the Greenathon event to better meet the needs of all participants.

1. **Annex I**: Teacher Evaluation Questionnaire – This questionnaire is designed to collect feedback from teachers who facilitated the Greenathon training. It focuses on the clarity, relevance, and practicality of the training materials, as well as the ease of implementing the modules and activities. Teachers' insights will help us understand how well the resources support teaching objectives and where improvements can be made.

2. **Annex II**: Student Feedback Questionnaire – This questionnaire captures students' feedback on the training materials, activities, and their overall learning experience. It aims to gauge how effectively the modules conveyed key sustainability and entrepreneurship concepts, how engaging the activities were, and what skills the students developed. Their feedback will help ensure the training remains engaging, informative, and relevant to their needs.

3. **Annex III**: Greenathon Event Evaluation Questionnaire – This questionnaire gathers feedback from students, teachers, and jury members on the Greenathon event. It evaluates the preparation materials, instructions, event organization, and overall experience. By understanding how each group experienced the event, we can improve the structure, resources, and processes to make future Greenathons more effective and rewarding.

Annex I
Teacher Evaluation Questionnaire

Your feedback is essential for improving the Greenathon training materials and instructions. This questionnaire is designed to gather your insights on the clarity, usefulness, and implementation of the resources provided. Your responses will help us make future Greenathon events more effective and beneficial for both educators and students.

1. The training materials (modules, toolkits, case studies) were clear and easy to understand.
   ☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

2. The instructions for implementing the Greenathon training were well-organized and easy to follow.
   ☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

3. The content of the training modules was relevant to green entrepreneurship and sustainability.
   ☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

4. The examples and case studies provided in the materials helped illustrate key concepts effectively.
   ☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

5. The resources provided (e-learning platform, toolkits, guides) supported the delivery of the training.
   ☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

6. The activities and exercises in the modules were practical and easy to implement.
   ☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

7. The materials provided enough detail to help you run the Greenathon event smoothly.
   ☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

8. What aspects of the materials or instructions were most helpful?

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9. What aspects of the materials or instructions could be improved?

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Annex II
Student Feedback Questionnaire

We value your thoughts and experiences! This questionnaire will help us understand how the Greenathon training materials and activities supported your learning. Your feedback will help us improve the training and make it even better for future participants.

Clarity and Usefulness of Materials

1. The training materials (modules, toolkits, guides) were easy to understand.
   ☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

2. The instructions for the Greenathon activities were clear and easy to follow.
   ☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

3. The examples and case studies helped me understand green entrepreneurship better.
   ☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

4. The activities and exercises helped me learn new skills in sustainability and entrepreneurship.
   ☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

Effectiveness of Materials

5. The materials provided useful information for developing our green business ideas.
   ☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

6. The training modules helped me prepare for the Greenathon event.
   ☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

7. What did you like most about the materials and instructions provided?

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8. What changes would you suggest to improve the materials or instructions?

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Annex III (For Students)
Greenathon Event Evaluation Questions

We want to hear about your experience with the Greenathon event. Your feedback will help us evaluate the effectiveness of the event and improve future Greenathon activities. Please share your thoughts on the instructions, materials, and overall organization.

1. The instructions for preparing our pitch were clear and helpful.
   ☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

2. The materials provided (guides, templates, examples) helped us prepare for the Greenathon.
   ☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

3. The training activities helped us understand how to create and present our ideas.
   ☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

4. The time given to prepare and present your pitch was sufficient.
   ☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

5. The Greenathon event gave us a chance to improve our teamwork skills.
   ☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

6. What part of the materials or instructions helped you the most during the event?

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Annex III (For Teachers)
Greenathon Event Evaluation Questions

We want to hear about your experience with the Greenathon event. Your feedback will help us evaluate the effectiveness of the event and improve future Greenathon activities. Please share your thoughts on the instructions, materials, and overall organization.

1. The instructions and resources provided for the Greenathon event were easy to use.
   ☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

2. The materials helped the students prepare effectively for their presentations.
   ☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

3. The materials provided were aligned with the learning objectives of the Greenathon.
   ☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

4. The Greenathon event inspired students to think more about sustainability and entrepreneurship.
   ☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

5. What improvements could be made to the materials or instructions for the Greenathon event?

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Annex III (For Jury Members)
Greenathon Event Evaluation Questions

We want to hear about your experience with the Greenathon event. Your feedback will help us evaluate the effectiveness of the event and improve future Greenathon activities. Please share your thoughts on the instructions, materials, and overall organization.

1. The students' presentations reflected a good understanding of the provided materials and instructions.
   ☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

2. The provided evaluation criteria were clear and easy to apply.
   ☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

3. The structure and content of the Greenathon event were clear and well-supported by the provided materials.
   ☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

4. The event encouraged innovative thinking and practical solutions among the students.
   ☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

7. What suggestions do you have for improving the resources or instructions for future Greenathons?

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