

Sustainable Entrepreneurship |

*Innovation and Sustainability:
Building the Enterprises of the Future*

eni corporate university

OUR UNDERSTANDING

The **Rome Technopole Foundation** is Lazio's innovation ecosystem, bringing together universities, research centers, local institutions, trade associations, and businesses.

As part of this initiative, ENI, with the support of ENI Joule, has developed a training program that:

- Promotes the development of a **sustainable mindset**, guiding participants to integrate environmental, social, and economic sustainability principles into the **design and management of their entrepreneurial idea**.
- Provides training on business models that **integrate environmental, social, and economic sustainability**.
- Equips participants **with tools and methodologies to develop innovative solutions addressing global challenges** such as climate change, energy efficiency, etc.
- **Fosters the creation of start-ups or projects aligned with sustainability goals**, with a focus on scaling
2 impactful ideas.

OBJECTIVES



- Develop a sustainable mindset
- Understand the main elements that constitute energy sustainability, such as energy efficiency, renewable energy sources, and environmental impact;
- Identify the competitive and operational advantages resulting from the adoption of sustainability strategies.

TARGET

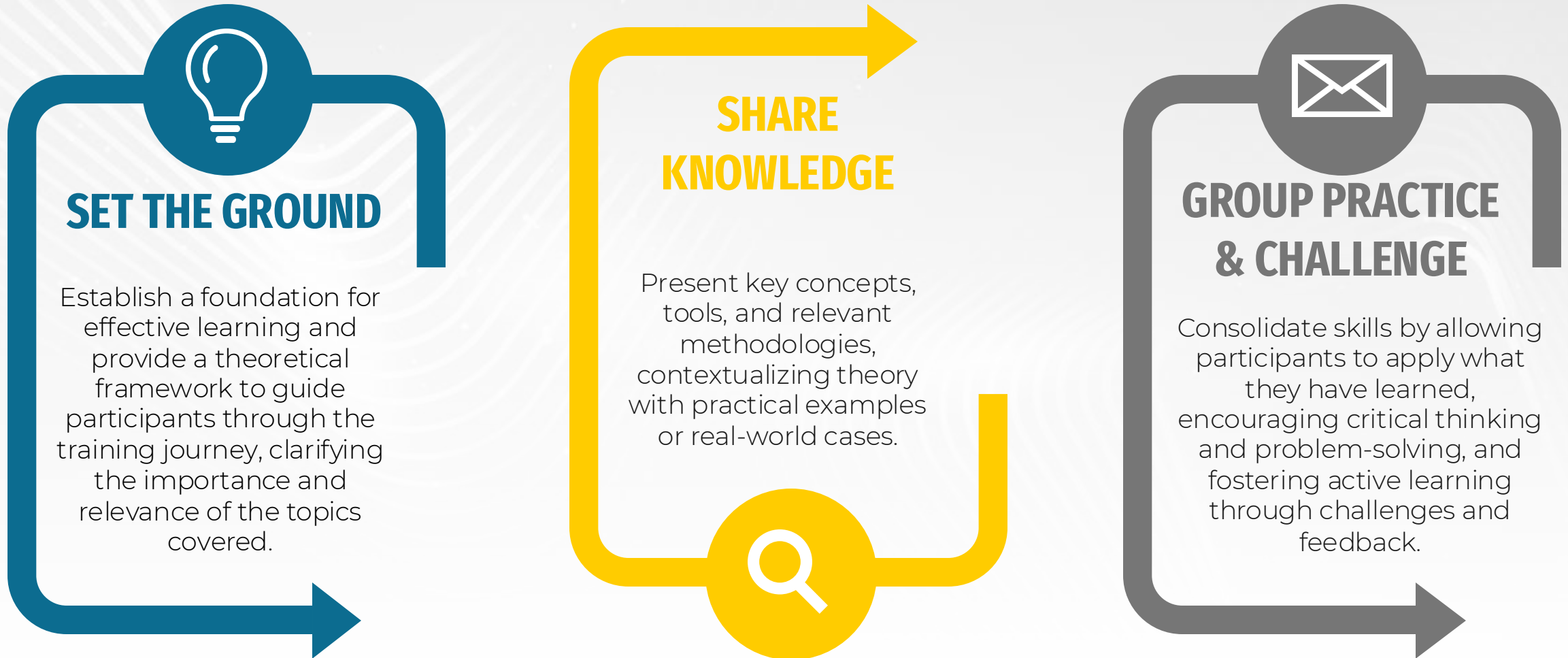


- Approximately 20-25 students enrolled in a secondary education program in technical disciplines, participating in the initiative on a voluntary basis.

Learning Framework



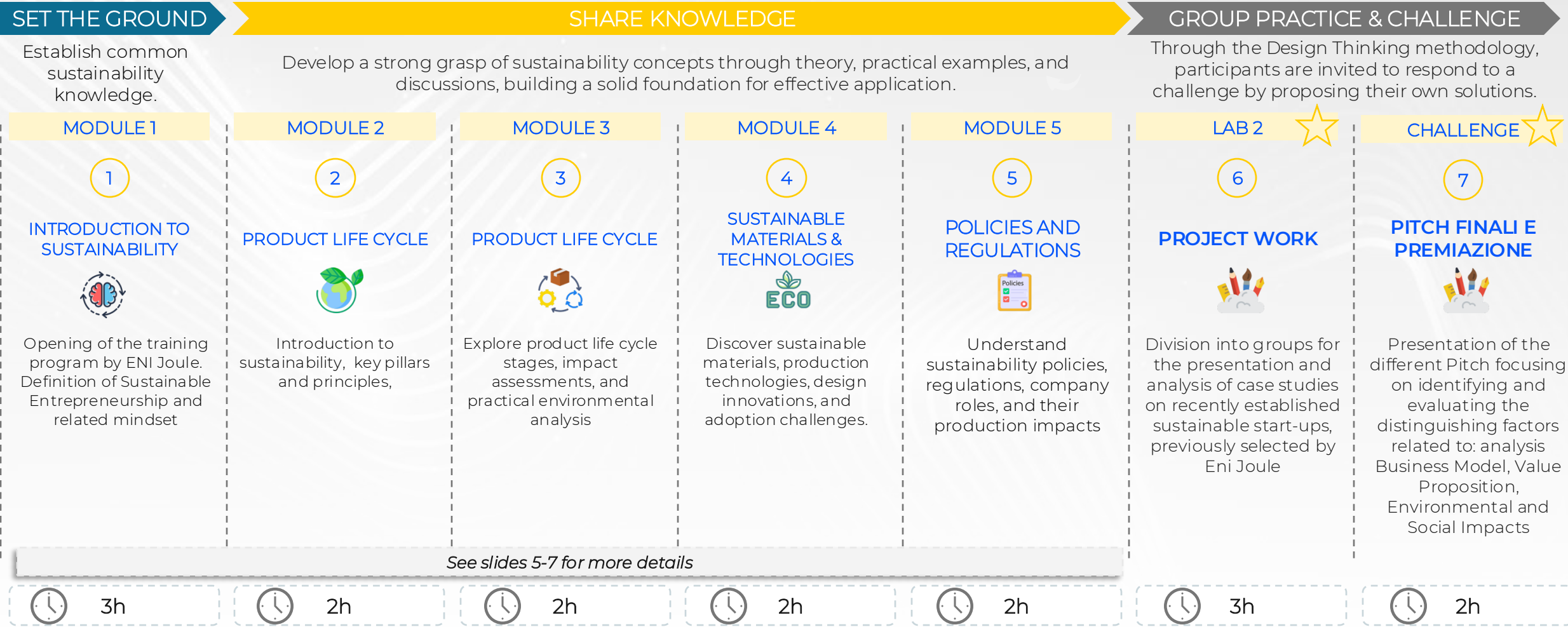
For the training project, we propose a structured approach in three steps – **Set the Ground, Share Knowledge, and Practice & Challenge** – designed to **maximize effectiveness and engagement**. This progressive model combines a solid theoretical foundation with skill transfer and their consolidation through practical application.



Overall Journey Overview



A deep dive into the training modules: each module features practical examples and interactive activities designed to foster hands-on learning and address real-world challenges.



Deep Dive of Training content



SET THE GROUND

SHARE KNOWLEDGE

MODULE 1: INTRO TO SUSTAINABILITY

Duration: 3 hours

Topics:

- ENI's Joule introduction
- Presentation of the GreenComp, developed by the EC, enhanced by personal resources and agentic capacities as a foundation for developing the sustainability mindset, contributing to: recognizing the values of sustainability, imagining sustainable futures, embracing complexity, acting for sustainability
- Group discussion on course expectations and objectives

See slides 6-7

MODULE 2: PRODUCT LIFE CYCLE

Duration: 2 hours

Topics:

- Definition of sustainability
- Importance of sustainability in products
- Core principles of sustainability (environmental, social, economic)
- Companies approach to sustainability-driven transformation
- Principles of circularity and importance of the regulatory wave

MODULE 3: PRODUCT LIFE CYCLE

Duration: 2 hours

Topics:

- Introduction to the product life cycle (LCA)
- Life cycle stages: resource extraction, production, distribution, use, end of life
- Environmental impact assessment methodologies
- Case study: Life cycle analysis of a common product
- Practical activity: Environmental impact assessment of a product chosen by participants
- Case study: lifecycle assessment in food
- Case study: lifecycle assessment in fashion

MODULE 4: SUSTAINABLE MATERIALS & TECH

Duration: 2 hours

Topics:

- Introduction to sustainable materials (biodegradable, recycled, natural)
- Sustainable production technologies (renewable energy, efficient processes)
- Innovations in sustainable design (design for disassembly, eco-design)
- Case study: Products made with sustainable materials and technologies
- Discussion: Challenges and opportunities in adopting sustainable materials & technologies
- Case study: circularity in chemicals
- Case study: sustainable materials in fashion

MODULE 5: POLICIES AND REGULATIONS

Duration: 2 hours

Topics:

- Introduction to environmental policies and regulations
- International, European, and national regulations on product sustainability
- The role of companies in sustainability policies
- Trends in policies and regulation
- Incentives, grants and subsidies to fund innovation
- Discussion: Impacts of regulations on product production and consumption

Sustainable Leadership: Green Skills to Support the Transition

We place the Individual at the Center of the Sustainable Transition by Enhancing Specific Competencies (Green Skills) that Promote Sustainable Behaviors and Practices.

For the development of immersive and experiential programs, the classes leverage the GreenComp, developed by the European Commission, with the aim of enabling participants to take responsible actions and embrace their role as agents of change and transition. This approach contributes to shaping the future of the organization through individual contributions and collective stimulation.

Green Skills– GreenComp

Area		Key Skills		
1	Recognizing the values of sustainability	Valuing sustainability	Supporting equity	Promoting nature
2	Embracing complexity in sustainability	Systemic thinking	Critical thinking	Problem framing
3	Vision of futures	Future literacy	Adaptability	Exploratory thinking
4	Acting for sustainability	Political action	Collective action	Individual initiative

The GreenComp, a sustainability competence framework developed by the European Commission, provides a definition of what sustainability entails as a competence.

The "Roots" of the Sustainability Mindset: Green skills

1

RECOGNIZING THE VALUES OF SUSTAINABILITY

This involves constant reflection on personal values and alignment with the values of sustainability. A sustainable leader is someone who can identify actions that lead toward a sustainable future, drawing lessons from the past and previous generations for the benefit of sustainability. The sustainable leader is aware of their capacity to act, confident in their potential to influence change, and demonstrates a willingness to take action.

2

IMAGINING SUSTAINABLE FUTURES

A sense of the future, ambiguity management, and exploratory thinking are the fundamental elements needed to tackle the challenge of sustainability. In an era where change is constant, adapting to and promoting new approaches despite the challenges of uncertainty is essential to understanding complex sustainability issues and their evolution. Applying creative and transdisciplinary initiatives to thinking can foster a circular society and encourage leaders to use their imagination to envision future scenarios.

3

EMBRACING COMPLEXITY IN SUSTAINABILITY

This means developing a holistic vision of the context in which one operates to assign sustainable meaning to various situations. It requires the ability to identify opportunities and threats so that decisions made are sustainable in the medium-to-long term. A sustainable leader is someone who identifies possible paths to advance the sustainability agenda, understanding reality in relation to other contexts and domains to evaluate alternative possibilities, make decisions, and take action.

4

ACTING FOR SUSTAINABILITY

Identifying one's potential for sustainability to promote individual responsibility in collective action. In this scenario, the sustainable leader serves as a guide capable of positively influencing the collective future by identifying key stakeholders to involve in achieving sustainability. Moreover, the sustainable leader recognizes and respects the perspectives of diverse individuals, valuing everyone's contributions to develop inclusive ideas for a more sustainable future.

They are expressed through:

Values - Personal Resources - Competencies

Our Project Approach



ANALYSIS

- **Desk Analysis** based on available materials useful for configuring and preparing the training program (training program, feedback surveys, previous experiences).
- **Meeting with the ENI representative** to share the training objectives and define the detailed topics to be addressed during the course.

DESIGN

- **Design of the training program and educational materials** for synchronous and virtual delivery, based on the proposed architecture.
- **Macro and micro-design of educational materials.**
- **Definition of case studies to be submitted to participants during the Practice Activity with the ENI representative**, and the definition of the evaluation criteria
- **Preparation of materials and tools to support the challenge.**

DELIVERY

- **Delivery and management of the training program through a team of training experts (trainer) and facilitators (co-trainers).**
- **Execution of activities in the virtual classroom and support during the Project Work**, with the involvement of the ENI representative, followed by the final awards ceremony.

OUTPUT

- Summary document of the main findings, including the final structure of the training program.
- Guidelines for teaching (macro-design).
Educational materials: slides, exercises, canvas and case studies
Evaluation criteria for the challenges
- Trainer's summary document on the delivered



THANKS