

Introduction

The Hidden Cost of AI.

In this workshop, students (13-16) uncover the environmental impact of the digital world. They learn about the energy consumption of AI and data centers, calculate digital carbon footprints, and design innovative AI solutions to build a greener future.

Key Goals

- **Understand:** Data center energy.
- **Calculate:** Digital footprints.
- **Design:** AI for sustainability.
- **Reflect:** On personal habits.

Resources

- **Game:** "Guess the Impact".
- **Tech:** Mind Mapping Tools.
- **Video:** "Hidden Cost of Digital Life".
- **AI:** ChatGPT for research.



Environment & AI

AI and the Carbon Footprint



**Co-funded by
the European Union**

Co-funded by the European Union.

Target Group: 13-16 y.o.
SmAile Project

Learning Outcomes

Knowledge:

- CO₂ equivalents.
- Energy cost of AI models.

Skills:

- Researching emissions.
- Collaborative design.

Values

- Ecological responsibility.
- Sustainable innovation.

1. Guess the Impact

Research Game: Students match digital activities to their environmental cost. *Streaming HD Video vs. Training an AI Model.*

2. AI Solutions

Design Mission: Teams invent AI-based systems to solve environmental problems.

- Smart Energy Grids.

- AI for Waste Reduction.
- Efficient Transport Algorithms.

3. Reflection

Action Plan: Students commit to one change in their digital habits to reduce their carbon footprint.

Padlet: "What surprised me most about the cost of the internet?"