

Introduction

Is the internet invisible?

In this workshop, students (8-12) discover the physical side of the digital world. They learn about the carbon footprint of AI, calculate their own digital impact, and design futuristic Eco-Cities that use technology to save the planet.

Key Goals

- **Learn:** About Data Centers.
- **Calc:** Digital Footprints.
- **Build:** Eco-Cities (Minecraft).
- **Act:** Reduce digital waste.

Resources

- **Sim:** Data Center Game.
- **Tech:** Minecraft / SimCity.
- **Video:** "Inside the Cloud".
- **Calc:** Carbon Footprint Tool.



Environment & AI

The Carbon Footprint



**Co-funded by
the European Union**

Co-funded by the European Union.

Target Group: 8-12 y.o.
SmAile Project

Learning Outcomes

Knowledge:

- Understanding CO₂ equivalents.
- Energy use of AI training.

Skills:

- Problem solving.
- Collaborative design.

Values

- Ecological responsibility.
- Sustainable thinking.

1. My Digital Footprint

Data Center Sim: Students role-play as servers processing data to understand the heat and energy involved. They calculate the impact of streaming vs. reading.

2. AI Eco-Builder

Design Challenge: Using Minecraft or paper, teams build a Green City. **Features:**

- Smart energy grids.

- Efficient public transport.
- AI recycling systems.

3. Reflection

Action Plan: Students identify one digital habit they can change to help the environment.

Discussion: "How can we use AI to protect nature?"