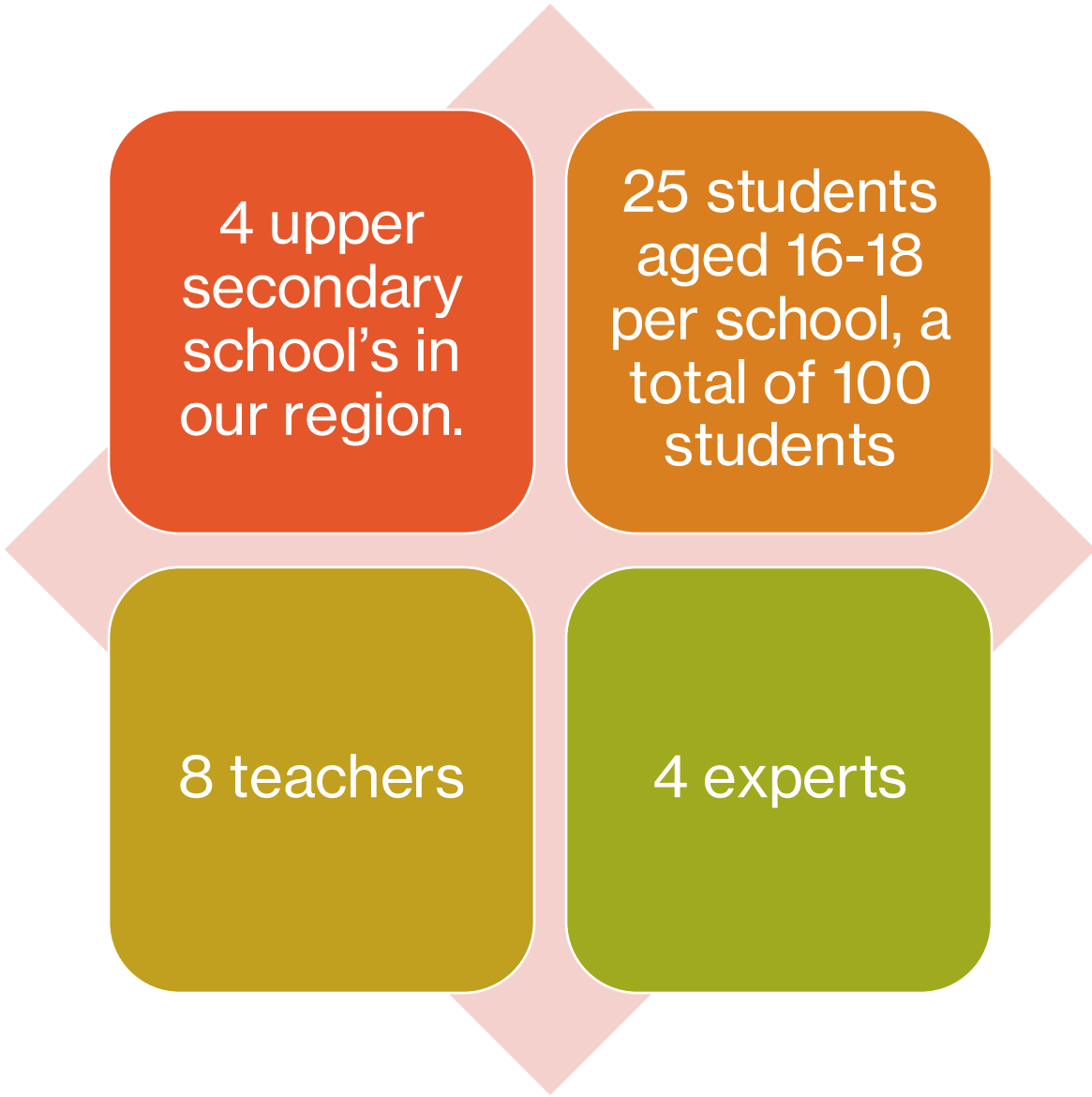
RECYCLING IS YOUR FUTURE

Learning objective

Students develop an **innovative and technical solution** to **improve recycling rates** and **raise awareness** using soft skills and STEAM approach. By the end of this project, students will be more knowledgeable in waste management, statistical analysis, teamwork and prototype development. An innovative solution for recycling will have been developed to motivate citizens to recycle more and better.

WHO WILL PARTICIPATE?



PHASE 1

PHASE 1
Day 1

Introduction: into recycling. Examples of what is happening. Theory overview. Introducing the hackathon + price. Explanation of the solution:

1) It must feature technological and creative solutions.

2) It should aid and simplify recycling for people.

3) The solution should be accessible for all.

4) Your process should be documented digitally.

5) Every group should give their project a NAME and LOGO

PHASE 1
Day 2

CLEAN UP DAY. Cleaning in the community and seeing the problems.

PHASE 1
Day 3

- Creating the **questionnaire** based on the CLEAN UP DAY and their knowledge.
- Questionnaire for the community will be sent via Google Forms to identify the communities' issues and raise awareness. Family and friends will be involved.
- Advertisement for the questionnaire will be organized.

PHASE 1
Day 4

A guided visit to Waste Management – understanding real problems, overseeing process.

PHASE 1
Day 5

Teaching the basics for analysis. Data analysis and statistics for the questionnaire. Reflecting on the analysis. Brainstorming ideas for the hackathon. Expert's perspective – feasible or not?

PHASE 1
Day 6

With having heard from the expert, students continue planning for their project for the hackathon. Working on their idea.

PHASE 1
Day 7

Introducing the process and what students have so far for the expert + feedback + discussion on materials, technology.

PHASE 1
Day 8

* Planning the PROPOSAL for the hackathon.
- Technical analysis of the benefit of their solution.
- PRESENTATION FOR THE PRELIMINARYCOMMITTEE OF EXPERTS + COMMUNITY MEMBER will choose a favorite.
- 4 groups will be selected. 20 people total with 4 projects.

EXPENSES FOR PHASE 1

Stage	Budget	Description	Expense Breakdown	Total Expense
Phase I	15 000 €			
		Expert Counseling	Rates of 50€/H used to calculate total value	1 800 €
		Advertising	1000€ To rent Digital Bilboard and 500€ for Advertise Design	1 500 €
		Teachers Salary	Rates of 20€/H used to calculate Total Value taking into account 8 teachers overall	3 900 €
		Hackathon Uniform	Company Sold each T-shirt for 10€ each and 25€ each jacket taking into account 100 students and 8 Teachers	3 780 €
		Transport	Service paid to transporting company for study visit	2 020 €
		Food	All 4 schools got 250€ for each day to spend on food, which divided for each school would get 62,50€ a day	2 000 €

PHASE 2

EcoHack

HACKATHON

Beautiful location

THREE DAYS, 8-hours per day

Great awards

DAY 1 – DAY 2

WORKING ON THE PROJECT. DEVELOPING INNOVATIVE SOLUTIONS FOR RECYCLING.

An expert for each team will oversee and give advice.

DAY 3

FINISHING THE PROJECT FOR DEVELOPING AN INNOVATIVE SOLUTION FOR RECYCLING. An expert for each team will oversee and give advice.

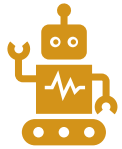
PROJECT PRESENTATION CHOOSING THE WINNER AWARD CEREMONY.

EXPENSES FOR PHASE 2

Stage	Budget	Description	Expense Breakdown	Total Expense
Phase II	100 000 €			
		Prize Money	1º - 30000€, 2º - 20000€ , 3º - 15000€ Where 70€ goes to the upgrading the school and 30% goes to student group	65 000 €
		Experts	Same rates used in Phase I 50€/H for the 3 days of hackathon	4 400 €
		Group Expenses	Given each group 7650€ to spend on materials for projects	30 600 €

STEAM APPROACH

Science in learning about the recycling



Technology used in the solution

Engineering – designing the solution

Art in creating their solution

Mathematics in data analysis

SOFT SKILLS

Proactivity

students are asked to foresee certain problems through cleaning in the community

Problem-solving

finding innovative solutions to solve

Time management

Need to be able to work in the constraints

Conflict management

there should be group hierarchy (leader) to have a clear structure for the group

Decision making

choosing which option to go for

Flexibility

from the expert

THANK YOU FOR YOUR ATTENTION!