

ECF4CLIM - A EUROPEAN COMPETENCE FRAMEWORK FOR A LOW CARBON ECONOMY AND SUSTAINABILITY THROUGH EDUCATION

PT-DS01-IN09
PROMOTING PROPER WASTE
SORTING AND ENCOURAGING ECOFRIENDLY BEHAVIOURS THROUGH
INTER-CLASS COMPETITIONS.
SCHOOL WASTE PRODUCTION

A school-wide competition was organized to encourage students to separate waste correctly. The contest involved all 8th-grade classes, each guided by a teacher responsible for coordinating and motivating their group. Points were awarded based on the total weight of recyclable materials brought to school, regardless of their origin. Students were encouraged to collect materials not only from their daily school activity but also from home or their neighbourhood, promoting family involvement and broader community engagement. The competition was monitored and managed by a team of teachers and school staff, who were responsible for weighing the materials and updating the scoreboard.

This model combined an internal awareness campaign with participation in an external competition (Valor Sul), which rewarded each kilogram collected with a monetary value. While this dual purpose increased engagement, it also raised challenges such as uneven contributions between students and the perception of unfair advantage by those who brought waste from outside the school. Despite these issues, the initiative helped raise environmental awareness and promoted teamwork and collaboration among teachers, students and staff.











- Motivation driven more by prizes than internalised environmental values.
- Uneven engagement from teachers and limited involvement from families.
- Competition rules were not clearly defined or consistently applied, generating confusion and frustration.
- Recyclable waste was measured by weight, which, combined with unclear rules, encouraged some students to bring waste from outside the school.

Relevant difficulties

- The action was implemented in parallel with an external contest (Valor Sul), which influenced its structure and objectives.
- The municipal waste collection service does not enter the school grounds, creating logistical difficulties for regular disposal and monitoring.
- Recycling bins were missing from several key school areas (e.g., outdoor/common spaces).
- Lack of long-term planning and follow-up actions limited sustained behavioural change.

Resources

Human	***
Time	000
Costs	€





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Individual Competences	Collective Competences	Technical-material Competences
 ✓ Awareness of environmental issues, particularly recycling. ✓ Responsibility for personal actions and waste. ✓ Motivation to contribute to class efforts, although participation was also influenced by the prospect of external recognition and the collective performance of the class. ✓ Exposure to the connection between individual behaviour and community-wide environmental goals. 	 ✓ Coordination within the class to manage waste, guided by a teacher assigned to each class. ✓ Cooperation between students, teachers, and staff, with teachers and school staff overseeing the points system, measurement and reporting. ✓ Shared responsibility within the school community, promoted through structured coordination rather than autonomous student-led organisation. 	 ✓ Proper use of eco-bags and recycling bins. ✓ Sorting waste by material. ✓ Understanding of recycling logistics and challenges (e.g., collection, external companies), especially through participation in an external competition (Valorsul), which helped contextualise recycling beyond the school space.

Sustainability competences in place in the intervention



Engagement

The intervention actively engaged students through a competitive format, which initially boosted participation. However, motivation was mostly extrinsic (prize-driven), and engagement decreased after the competition ended. Each class was supported by a teacher who promoted participation and collection. Scoring and monitoring were handled mainly by staff and teachers, not students. Although the community generally welcomed the initiative, low student protagonism and unclear rules limited deeper engagement. Family participation was likely higher, as waste brought from home contributed directly to class scores.



Connections

The intervention aligned with environmental education curricula (science, citizenship) and was connected to an external recycling competition promoted by Valorsul. This dual structure allowed the school to leverage ECF4CLIM goals while participating in a broader initiative. Cooperation with municipal waste services was initiated, although communication limitations with families and external actors reduced systemic coordination.



Change

The intervention triggered increased awareness of recycling and promoted behavioural change among participating students, some of whom continued these habits at home. However, long-term impact is uncertain due to structural constraints and minimal student-led governance. The lack of shared rules and reliance on external motivation created uneven levels of responsibility and engagement.



Action

A school-wide waste separation competition was held, involving waste collection, weighing, and scoring by class. Eco-bags were placed in classrooms, and bins were monitored. Teachers and school staff managed logistics, while students contributed waste brought from home and school. Points were awarded based on weight, not material separation, and aligned with the rules of an external recycling campaign (Valorsul). Despite its success in generating enthusiasm, challenges included inconsistent rule application, competition manipulation, and limited integration of sustainability learning beyond the prize-oriented activity.

