

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

PT-DS03-IN01

## CLIMATE CRISIS AND FAIR TRANSITION

Higher education

Creation of a curricular unit focused on the climate crisis and fair transition, integrating scientific, ethical, political, and practical perspectives. The intervention addresses the need to empower university students to critically understand climate challenges, while fostering their ability to imagine, debate, and co-create systemic solutions. It adopts participatory, interdisciplinary methods, encouraging collective reflection and civic engagement. The unit aims to build both knowledge and action-oriented competences, positioning students as active agents of the climate transition.



# Relevant difficulties

- Need for continuous updating: the fast-evolving nature of the climate crisis requires constant revision of content and pedagogical approaches.
- Voluntary nature of the course: as the unit is optional, it may only reach a self-selected group of students already interested in climate issues, limiting its broader transformative potential.
- Measuring long-term impact: It may be challenging to assess whether the course leads to sustained behavioural or civic action beyond the classroom.
- Integration into broader curriculum: the course might remain a niche offer unless further institutional alignment promotes more widespread inclusion of climate transition themes.

#### Resources

Resources	
Human	***
Time	000
Costs	€

### Individual Competences

### **Collective Competences**

### Technical-material Competences

- Critical understanding of the climate crisis through systemic, scientific and ethical lenses.
- Reflective autonomy in engaging with complexity and recognising the intersectionality of climate and social justice.
- Agency and responsibility to act as informed citizens and professionals in the face of climate emergencies.
- Deliberation and co-creation: students engage in collective reflection, discussion and solutionbuilding.
- Solidarity and fairness: exploration of the just transition fosters shared ethical positioning.
- Institutional and community awareness: understanding the roles of different actors (government, industry, academia, civil society) in addressing the crisis.
- Climate science literacy and knowledge of sustainability tools and indicators.
- Ability to analyse policy, emissions data, and transition strategies.
- Practical skills in scenario planning, systems thinking, and participatory methodologies.





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### Sustainability competences in place in the intervention



The curricular unit engaged students deeply through participatory methods, critical discussion, and personal reflection. The open-ended, systemic nature of the topic encouraged students to connect academic content with their values and experiences. The engagement was supported by interdisciplinary teaching and real-world problem-solving.

### Engagement



### Connections

The intervention connected scientific, political, ethical, and economic dimensions of the climate crisis, breaking disciplinary silos. It linked classroom learning with external debates on energy, inequality, climate justice, and governance. It also connected the university context with the global climate agenda, and encouraged students to see their role beyond the academic environment — as future professionals, citizens, and community members.



### Change

The intervention is expected to foster changes in students' mindsets, emotional awareness, and sense of agency. Through exposure to systemic and participatory approaches, students may begin to see themselves not only as learners but as future professionals and citizens capable of contributing to the climate transition. It is anticipated that this unit will encourage students to engage more critically with their academic paths and their roles in society. Instructors may also begin to shift their pedagogical approach, incorporating more interdisciplinary and reflective elements into their teaching.



#### Action

The course is designed to promote transformative action, both in students' thinking and in their capacity to develop climate-related solutions. Through scenario-building, group work, roleplay, and practical projects, students are expected to explore real-world challenges and co-create potential responses. Although implementation is not guaranteed, the intervention aims to prepare students to initiate or contribute to sustainability transitions in academic, professional, and civic contexts.

