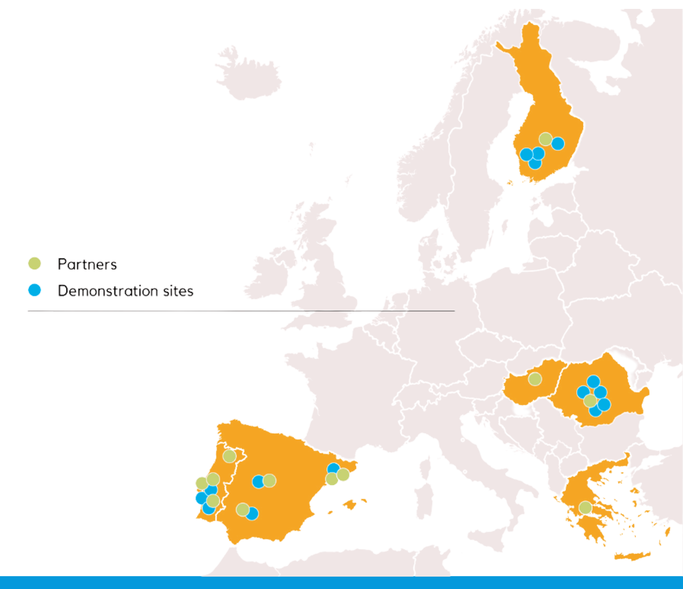
ECF4CLIM aims to collaboratively develop and validate a European Competence Framework for sustainability in education. It aims to empower both citizens and the school community to take action against climate change.

Working hand-in hand with 13 schools and universities in Finland, Portugal, Romania and Spain - our Demonstration Sites (DS).
So far, our main outcomes are:



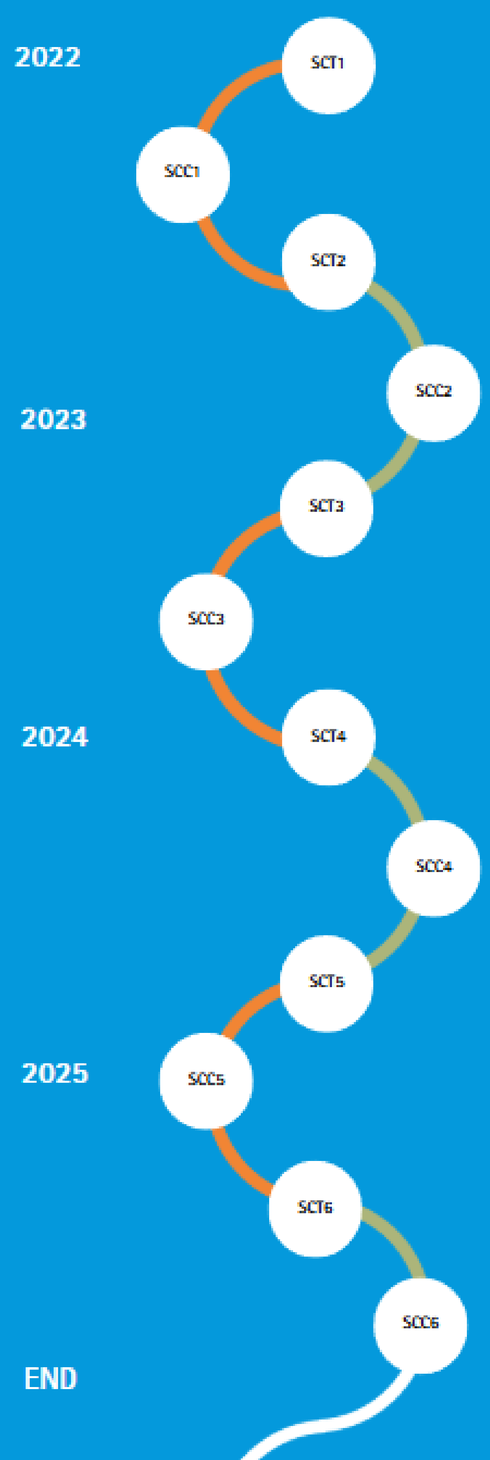
Co-designing our European Competence Framework (ECF)

We undertook extensive international crowdsourcing and analysis of relevant academic literature, other ECFs, policy frameworks and national curricula. Our first ECF is a living document, a roadmap, designed to provide actionable knowledge and understanding of how to translate the normative and conceptual ideas into everyday practices for strengthening sustainability literacy in schools and universities. The first ECF has been reviewed by selected experts to confirm that we are on the right track.

Our ECF is structured as a Roadmap and aims to provide tools for different stakeholders to map and foster the enablers and overcome the constraints of sustainability in various educational contexts. It draws from the results of the extensive international ECF4CLIM crowdsourcing workshops, document analysis and literature review and it is based on, and further develops, the sustainability competencies outlined in GreenComp. The initial ECF has been reviewed by selected experts to confirm that we are on the right track. The final, validated version is due to the end of the project.

Our analytical framework

We understand sustainability competences as the ability to act within planetary boundaries, ensuring that our actions and decisions support the long-term well-being of humans, other living entities, and ecosystems. In our project, sustainability competences consider three dimensions: individual competences, collective competences and technical-material (or environmental) competences and their multiple interactions.



Our novel hybrid participatory approach: Sustainability Competence Teams (SCT) and Committees (SCC)s

The ECF4CLIM hybrid participatory approach, rooted in participatory action research and partly based on the STAVE tool (Systematic Tool for Behavioural Assumption, Validation and Exploration) encourage students, teachers, staff and external stakeholders to work together to assess sustainability competences and reflect on the impact of actions. By emphasising creativity, transdisciplinarity and iterative reflection, it supports transformative change and enhances institutional capacity to address sustainability challenges.

IIn each of our 13 Demonstration Sites (DS) in Finland, Portugal, Romania and Spain, we have established two types of innovative organisational structures: Sustainability Competence Teams (SCTs), composed of students, teachers and staff, and Sustainability Competence Committees (SCCs), which also include representatives from the wider education community, such as families, experts, authorities, NGOs, etc. Each of them meets up to six times over the course of the project to encourage reflexivity and deliberation. At this stage, around 800 participants are actively involved in our SCTs and SCCs.

Establishing the baseline of sustainability competences at our demonstration sites (DS)

Employing a wide range of quantitative and qualitative methods, the project established the initial state of play at schools and universities in terms of the individual and collective competences and the technical-material competences. The methods include: environmental KPIs, environmental audits, short surveys, interviews, documentary analysis, and reconvened focus groups (SCT/SCC session 1).

Co-implementing practical, replicable and context-adapted interventions

To support the participatory implementation of our interventions several monitoring mechanisms are in place: intervention templates (the research team, in close collaboration with the DSs, collects information on the interventions); monthly reporting; and SCT/SCC sessions 3 & 4 (to promote reflection on the interventions and gather initial evidence on the impact of the interventions on sustainability competences).

SCT1/SCC1

SCT2/SCC2

SCT3/SCC3

SCT4/SCC4

SCT5/SCC5

SCT6/SCC6

Co-designing interventions to foster the acquisition of competences

Drawing on the empirical evidence from the baseline assessment and through the participatory and deliberative process in SCT/SCC session 2 , each demonstration site co-designed a tailor-made initial set of interventions to foster sustainability competences and climate action. The co-designed interventions include behavioural (e.g., changing habits, routines, social norms, organisational structures, etc.) and structural (e.g. small-scale retrofitting solutions, green spaces, green procurement procedures) measures. Out of 159, 73 interventions were selected for implementation.

Participatory evaluation of the intervention and of the project as a whole

The theory-based stakeholder evaluation guides our evaluation approach to explore the relationships between the interventions (and the whole project) and sustainability competences. On the one hand we analyse the expected and observed outcomes of the intervention (and of the whole project), and on the other hand the expected and observed relationships between the intervention (and the whole project) and its outcomes. (SCT/SCC sessions 5 & 6).

EMBODYING VALUES

STEP 1. ENGAGEMENT
Engages people through reflection and inclusive dialogue on the values of sustainability.

EMBRACING COMPLEXITY

STEP 2. CONNECTIONS
Finds systemic connections between everyday life to promote critical thinking.

ENVISIONING SUSTAINABLE FUTURES

STEP 3. VISIONS
Maps possibilities for change and envisions desirable futures.

ACTING FOR SUSTAINABILITY

STEP 4. ACTION
Develops and executes an action plan and evaluates the results.

Digital platform

The Digital Platform is developed to strengthen environmental awareness and to stimulate the participation of the educational communities towards behavioural changes contributing to higher levels of sustainability. It is aimed to act as a safe space for interaction among the various ECF4CLIM actors. We have worked together to create a diverse range of digital tools designed to facilitate shifts in both individual and collective behaviours, habits, routines, and social norms.

Crowdsourcing processes

Through online discussions we collect data from different types of communities to have their voice heard in the process.

The aim of crowdsourcing is to find out the barriers and possibilities in sustainability education at schools and universities, and outline what kind of tools educators and other stakeholders have for promoting sustainability competences. We will collect **data from different types of communities to have their voice heard in the process**.

More info

Tools for Environmental Assessment

It gives access to a set of user-friendly tools for educational communities and citizens: the **Environmental footprint calculator**, the **retrofitting toolkits 1 & 2**, and the **Sustainability Interventions Evaluation**.

More info

Monitoring & Data Tools

The IoT Ecosystem functions as a data aggregator, collecting information, including energy consumption and temperatures, from various schools and universities participating in the ECF4CLIM project. **The tool provides dynamic calculation and visual analytics over key performance indicator (KPI) measurements** and helps the educational community to test different interventions aimed to improve the KPIs.

More info

Learning Space

It gives access to educational resources designed to improve citizens' awareness, learning and capacity for climate actions and sustainability.

These educational materials are divided into **materials for students, for teachers** and **games**.

More info

Ecf4clim

https://ecf4clim.eu/

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