



D7.3 ECF4CLIM digital platform – module 1: crowdsourcing







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WHO WE ARE

The ECF consortium consists of ten partners. The project is coordinated by Centro de Investigaciones Energeticas, Medioambientales y Tecnologicas-CIEMAT.

Name	Country	Logo
Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas CIEMAT	ES	
Instituto Superior Técnico. University of Lisbon. IST	PT	
Universidad de Sevilla USE	ES	
University of Jyväskylä JYU	FI	
Universitat Autònoma de Barcelona UAB	ES	
Meda Research Ltd MedaResearch	RO	
Instituto de Soldadura e Qualidade ISQ	PT	
Trebag Szellemi Tulajdon Es Projektmenedzser Korlatolt Felelossegu Tarsasag TREBAG	HU	
Smartwatt Energy Services SA Smartwatt	PT	
Que Technologies Kefalaioouchiki Etaireia QUE	GR	



ABOUT THE PROJECT

Through a multidisciplinary, transdisciplinary and participatory process, ECF4CLIM develops, tests and validates a European Competence Framework (ECF) for transformational change, which will empower the educational community to take action against climate change and towards sustainable development.

Applying a novel hybrid participatory approach, rooted in participatory action research and citizen science, ECF4CLIM co-designs the ECF in selected schools and universities, by: 1) elaborating an initial ECF, supported by crowdsourcing of ideas and analysis of existing ECFs; 2) establishing the baseline of individual and collective competences, as well as environmental performance indicators; 3) implementing practical, replicable and context adapted technical, behavioural, and organisational interventions that foster the acquisition of competences; 4) evaluating the ability of the interventions to strengthen sustainability competences and environmental performance; and 5) validating the ECF.

The proposed ECF is unique in that it encompasses the interacting STEM-related, digital and social competences, and systematically explores individual, organisational and institutional factors that enable or constrain the desired change. The novel hybrid participatory approach provides the broad educational community with: an ECF adaptable to a range of settings; new ways of collaboration between public, private and third-sector bodies; and innovative organisational models of engagement and action for sustainability (Sustainability Competence Teams and Committees).

To encourage learning-by-doing, several novel tools will be co-designed with and made available to citizens, including a digital platform for crowdsourcing, IoT solutions for real-time monitoring of selected parameters, and a digital learning space. Participation of various SMEs in the consortium maximises the broad adoption and applicability of the ECF for the required transformational change towards sustainability.



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1. EXECUTIVE SUMMARY

This document is the deliverable D7.3 – task 7.2 - which aims at describing the main achievements concerning the integration of the crowdsourcing module into ECF4CLIM’s digital platform. This task belongs to the work package 7 of the ECF4CLIM Project, which has been funded by the European Commission under the H2020-European Green Deal Call, under the grant agreement no. 101036505.

The purpose of the crowdsourcing tool is to collect citizen opinions on how to conceptualise the competences of climate action and sustainable development, in opposition to strategies based on desk research/literature review. As such, an appropriate integration of these tools is crucial to ensure the objectives of the project namely to strengthen environmental awareness amongst citizens and promote the engagement of the entire educational community in action towards behavioural changes towards sustainability. Moreover, the digital platform acts as a unique entry point for the citizen users to access the resources made available by the project.

As a conclusion of this task, the Digital Platform has been evolved to encompass two new sections, namely Discussion Workshops and Online Discussions, which will be used to ensure the collection of crowdsourcing data. These two new sections are interconnected with each other, and allow a quick navigation to the external tools selected (eDelphi).

2. DIGITAL PLATFORM – CROWDSOURCING MODULE

The aim of the crowdsourcing module 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. For that purpose, two different tools will be used, namely the Discussion Workshops and Online Discussions. Taking this into account, the digital platform has been updated to consider an entry point to the Crowdsourcing Module, which is accessible by clicking on the button *Details*, as depicted in Figure 1.

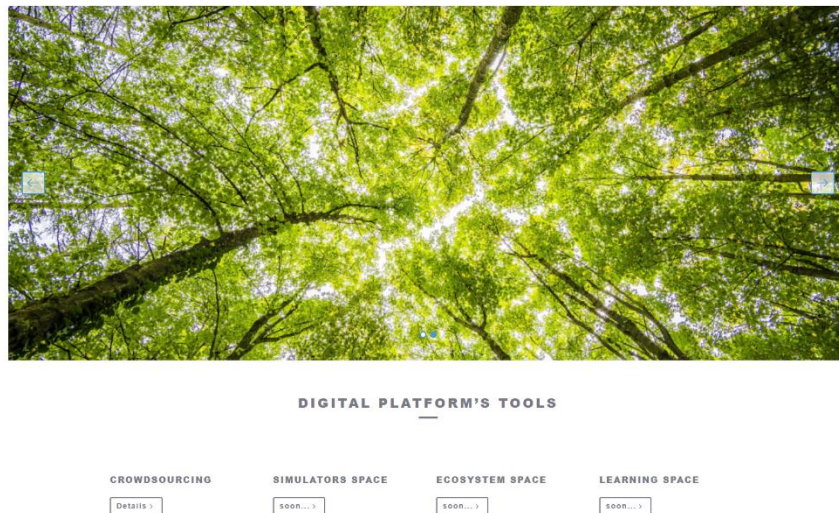


Figure 1 - Crowdsourcing Module's Entry point

When clicking on this button, the user is redirected to the main page of the crowdsourcing module (Home Page). This page is illustrated in Figure 2. Besides allowing access to different sections, this page also provides a brief explanation about the crowdsourcing activities and respective goals.

CROWDSOURCING

Crowdsourcing activities – How can sustainability competences be promoted in education?

One of the main purposes of the ECF4CLIM project is to consider, together with teachers, the student, experts and other stakeholders, what enables or prevents us from working in schools for sustainability education. This question is a part of the larger question, how the objectives of the European sustainability competence framework (GreenComp <https://ec.europa.eu/jrc/en/greencomp>) could be achieved on personal and collective level in everyday life of schools and universities.

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. Data will be collected through:

- DISCUSSION WORKSHOPS
- ONLINE DISCUSSIONS ON eDELPHI

The data collection process will carefully follow ethical guidelines.

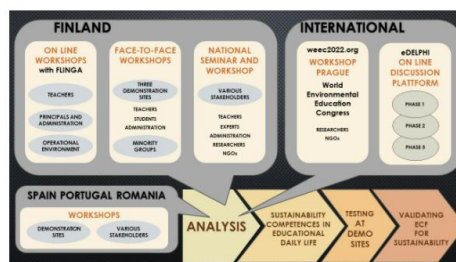
Figure 2 - Crowdsourcing Module's Home Page.

Discussion Workshops Section

When entering the Discussion Workshops section, the user is presented with a general overview of the approach that will be used and the key goals. This overview is presented alongside the inclusion of several pictures in order to enhance the user experience while facilitating the explanations regarding the importance of the discussion workshops and the way they will be carried out.

CROWDSOURCING > DISCUSSION WORKSHOPS

Discussion workshops will take place in every partner country both at demonstration sites and with wider audience of stakeholders.



The discussion workshops will include an introduction to the theme and a brainstorming session on what kind of competences are needed, when we move towards a carbon free and sustainable society. The main discussions will focus on sustainability education toolbox:

- What kind of tools are needed for sustainability education when we move towards a carbon free and sustainable society?
- What kind of tools do educators and other stakeholders have, need and are missing for promoting sustainability competences?

Figure 3 - Discussion Workshops Page - Introduction.

Therefore, the competences and the tools needed for their promotion are pondered both from individual and collective perspectives and from the aspect of the everyday life of schools and universities. The tools will be evaluated by pondering what kind of tools work well, which tools could be used more, what is not working and what hinders the use of these tools. On Flinga platform discussion workshop participants can make sticky notes on their different tools and summaries.



The springboard for discussions is GreenComp - European Sustainability Competence Framework.



The competence framework and the main competence areas of GreenComp have been visualized through a metaphor of bee pollination. Bees, flowers, nectar and beehives represent the four areas of the framework. As a simile of a highly-developed natural system, the metaphor highlights the interplay and dynamics between the four areas and 12 competences of GreenComp.

[See more GreenComp](#)

Figure 4 - Discussion Workshops Page - Approach Explanation.

It is also possible to consult more information about the GreenComp framework by clicking on the link available at the bottom of the page (see Figure 4).

Online Discussions Section

The online discussion section is supported by eDelphi crowdsourcing tool. As such, the digital platform provides some contextual information concerning the activities that will take place and provides a direct link to the crowdsourcing tool. The preview of the Online Discussion Section can be found in Figure 5.

CROWDSOURCING > ONLINE DISCUSSIONS EDELPHI

The online discussions on eDelphi will take place in between March and mid-May 2022. The goal is to deepen the understanding of issues evolved in the stakeholder discussions on sustainability competences and issues related to operationalizing them in different educational settings. Different kinds of stakeholders will be invited and are warmly welcome to participate in discussions e.g. teachers and students, researchers, professionals, environmental educators in formal and nonformal education, officials, national Advisory Boards of ECF4CLIM.

The discussions will be facilitated and analyzed by the University of Jyväskylä, Finland.

There will be different themes under discussion on the eDelphi platform. Participants will evaluate certain ideas, write their comments and comment on others' ideas. Discussions will go on in Finnish, Portuguese, Romania and Spanish languages at the same time, but on different tabs. Thus, the participants will be able to see the answers and follow discussions in the different languages. Inputs will be in English, with links to the translation. After the first stage of the discussion, the theme will change (the topics of discussion will be chosen based on the results of the previous discussions), and the participants will be re-invited by the Platform to join the discussion, thus ideas expressed will be developed further.

[Navigate to eDelphi](#)

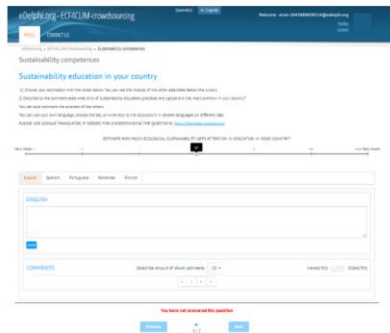


Figure 5 – Online Discussions Section.

Considering that the Crowdsourcing is based on an ongoing multiphase discussion process, the module will be continuously updated whenever new information from the project activities is created or new functionalities are required. Hence, this deliverable shall be seen as a live document that may be updated whenever needed.