



D8.2

Clustering Plan

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D8.2. Clustering Plan

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 Sercuces SA Smartwatt	PT	
Que Technologies Kefalaiouchiki 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 (Science, Technology, Engineering, and Mathematics)-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 8.2, **Clustering Plan**, of the project **ECF4CLIM** funded by the European Commission under the **H2020- European Green Deal Call**, under the grant agreement no. **101036505**.

The objective of the Clustering Plan is to identify similar projects in the current call and to plan the liaison and coordination activities in order to stimulate the synergies among them.

The deliverable presents the initial planning for the clustering activities. Improvements may be introduced during the implementation of the ECF4CLIM project based on the common arrangements with other projects and detailed analysis. The deliverable presents the following clustering activities: (1) coordination with JRC common reference framework on sustainability competence, (2) coordination with the sister project GreenSCENT, (3) coordination with other projects, (4) activities in the frame of the Climate Pact.

The Action Plan between the projects ECF4CLIM and GreenSCENT is included in a separate annex.

2. OBJECTIVES

The clustering activities undertaken in ECF4CLIM are planned to ensure the liaison and coordination with other projects funded under this call, and which work towards developing an ECF for climate change and sustainable development

The objective of the Clustering Plan is **to identify the projects and to plan the liaison and coordination activities in order to stimulate the synergies and to create the optimal appropriate conditions for a common work.**



3. METHODOLOGY

The Clustering Plan is a practical tool to be used at the coordination level both for the planning and monitoring of common activities with the projects identified as having common work in the field of building and implementing ECF.

The methodology is based on the following steps:

- (1) Identification of the projects funded under this call and having potential to develop synergic activities with ECF4CLIM,
- (2) Contacting the coordinators of the identified projects and identifying the common objectives and possible cooperation,
- (3) Establish the clustering activities and define a planning
- (4) Implement and monitor the clustering activities
- (5) Periodic analysis of the clustering results, and review of the planning according with the progress of the projects, including corrective measures if needed,
- (6) Reporting to the SC on the results of the clustering activities.

This deliverable is setting-up the framework of the clustering activities by identifying the projects and by defining the initial set of actions to support the clustering. During the planned discussions with all the identified projects the new appeared elements may improve the initial Clustering Plan.

4 COORDINATION WITH JRC COMMON REFERENCE FRAMEWORK ON SUSTAINABILITY COMPETENCE (GREENCOMP)

The JRC in coordination with Commission's Directorate General for Education, Youth, Sport and Culture is developing a common reference framework on Sustainability competences (GreenComp). GreenComp should be ready by the end of 2021 or early in 2022. Following the suggestions by our Project Officer and Policy Officer, the JRC competence framework is to be considered as a starting point of the competence framework developed in ECF4CLIM. Notably, GreenComp will also provide the basis for GreenSCENT, our sister project. Therefore, early coordination and follow-ups with the GreenComp team is crucial.

Coordination activities with GreenComp have already started, as both projects ECF4CLIM and GreenSCENT participated in the second expert workshop on a European competence framework on sustainability held on September 15th 2021. The workshop objectives were to gather feedback on the European Commission's draft competence framework on sustainability. An updated version of the framework, building on the input



received at the expert workshop of 7 April 2021 was presented and around 20 key research and practitioner experts participated.

Comments received during or shortly after the second workshop are being used to refine the conceptual model and framework. A third workshop to validate the conceptual model and framework with stakeholders from Member States is also planned before the final publication of the conceptual model and framework in December 2021 or early 2022. This publication should be treated as a living document subject to further refinement and improvements especially from the work performed under ECF4CLIM and GreenSCENT.

Also, as part of these coordination activities, JRC and DG EAC representatives were invited to participate in the ECF4CLIM kick off meeting held on October 18th 2021.

After this first contact, another meeting was held on November 19th 2021 with JRC and DG EAC representatives and representatives from ECF4CLIM and GreenSCENT in order to go a little bit more in-depth on the methodological approach of both projects and the exploitation of possible synergies

Further interactions are expected in future.

5 COORDINATION WITH OUR SISTER PROJECT GREENSCENT

Another project was funded under the Green Deal call topic 10.3 “Enabling citizens to act on climate change, for sustainable development and environmental protection through education, citizen science, observation initiatives, and civic engagement”, subtopic 1: “Enabling citizens to act on climate change and for sustainable development through education”. This project is called **GreenSCENT** and is coordinated by the Università Telematica Internazionale UNINETTUNO (Italy).

A detailed Action Plan for the Interaction with our sister project GreenSCENT has been developed already in the GA preparation phase. The Action Plan is included in Annex I.

The two projects agreed about a shared strategy for continuous and mutual updates, synergies development and definition of Joint activities.

GreenSCENT and ECF4CLIM will setup a set of mechanism for collaborating on a regular basis. One or two “project ambassador” will be nominated by the two projects. They will take care of:

- Organize regular meetings for synchronization, updating and joint activities development among the two projects,



- Create a shared platform and calendar of events so that each project can keep up to date with events and invite where possible members of the other sister project,
- Proposing new ideas for publications,
- Organizing panels for future conferences.

The two projects discussed the possibility of using the “Advisory board” as the tool supporting the mutual participation of Coordination team members in the respective sister project.

Furthermore, both projects have a similar approach in drafting the 1st release of their CFs that can be summarized with three set of activities:

- Meta-analysis/desk research, performed by consortium experts;
- Co-design/Citizen Engagement/participatory approach
- Advisory board involvement; we will use this as a bridge among the two projects

As GreenSCENT will end a year earlier, ECF4CLIM commits to consider SCENT findings & proposals in the elaboration of recommendations on key components and requirements for the ECF.

Finally, both projects already foresaw, at the proposal level, specific activities and tasks focused on the interaction with the sister project. GreenSCENT Task 6.2 “SCENT clustering and peer learning activities” defines a clear strategy for the interaction with the sister project, while ECF4CLIM Task 8.4. “Clustering Activities Plan” is dedicated to liaison and coordination with other projects funded under this call.

As part of these coordination activities, the GreenSCENT Project coordinator, Alessandro Caforio, was invited to participate in the ECF4CLIM kick off meeting held on October 18th 2021.

6 COORDINATION WITH OTHER PROJECTS FUNDED UNDER THIS CALL

There are other projects funded under the Green Deal call, topic 10.3: “Enabling citizens to act on climate change, for sustainable development and environmental protection through education, citizen science, observation initiatives, and civic engagement” in Subtopic 2: “Enabling citizens to act on climate change and for sustainable development through better monitoring and observing of the environment and their environmental impacts”

These projects are the following:



- **SOCIO-BEE.** Wearables and droneS fOr City Socio- Environmental Observations and BEhavioral ChangE, coordinated by the ETHNIKO KENTRO EREVNAS KAI TECHNOLOGIKIS ANAPTYXIS (Greece).
- **PSLifestyle.** Co-Creating Positive and Sustainable Lifestyle Tool with and for European Citizens coordinated by SUOMEN ITSENAISYYDEN JUHLARAHASTO (Finland).
- **CompAir.** Community Observation Measurement & Participation in AIR Science coordinated by VLAAMSE GEWEST (Belgium).
- **I-CHANGE.** Individual Change of HABits Needed for Green European transition coordinated by Centro Internazionale in Monitoraggio Ambientale -Fondazione CIMA (Italy).
- **AURORA.** Achieving a new European Energy Awareness coordinated by UNIVERSIDAD POLITECNICA DE MADRID (Spain).

A common event to facilitate the coordination and exploitation of synergies among these projects will be organized early 2022.

In the meantime, two topics of interest for interactions have been identified:

- Dissemination,
- Carbon footprint calculator.

Contact persons in each consortium for these topics have been identified and will engage in preliminary conversations on these topics. In ECF4CLIM the contact persons are:

- Dissemination: Marian Constantin from Meda Research as WP8 leader,
- Carbon footprint calculator: Ana Rosa Gamarra from CIEMAT in charge of the development of the Environmental Footprint Calculator in ECF4CLIM.

7 ACTIVITIES IN THE FRAMEWORK OF THE CLIMATE PACT

This task also includes efforts to communicate, invite and stimulate the educational communities and other stakeholders to participate in climate action and build a greener Europe in the framework of the Climate Pact.

The European Climate Pact is an EU-wide initiative inviting people, communities and organizations to participate in climate action and build a greener Europe.

The Pact is an EU-wide initiative that invites people, communities and organizations to:

- Connect and share knowledge,
- Learn about climate change,
- Develop, implement and scale up solutions.



At the level of ECF4CLIM project the initiative is considered as very interesting and promising and the project will encourage the participation of the schools and involved in the activities of development of ECF.

The activities of the ECF4CLIM project are fully in line with all four areas (Green areas, Green transport, Green buildings and Green skills) of the Climate Pact. ECF4CLIM project will pursue action in all four areas, by encouraging the participating educational establishments to become Climate Pact Ambassadors, make pledges of the climate-friendly actions implemented, or register in ECF4CLIM events.

Information concerning the environmental interventions implemented in WP5 and evaluated in WP6 could be communicated to the other participants on Climate Pact activities in order to spread knowledge and awareness and collectively develop and implement climate solutions. Possible participation will be proposed in the Sustainable Competences teams and Committee's meetings.

8 ANNEX I.

Action Plan - GreenSCENT - ECF4CLIM

Clarification of UAB role in the two projects

The UAB is one of the largest public universities in Spain, and there is no relationship or contact between the two UAB teams in the two granted projects. Still, it is a good opportunity for the teams to meet and agree on joint actions to benefit both projects both in terms of communication and impact.

GreenSCENT

The team who will participate in GreenSCENT works at the **Faculty of Translation** where they research **media accessibility**.

Their expertise is on offering access to information and media content towards full inclusion of all citizens. It is for this reason UAB will be leading the communication of GreenSCENT, because we want to make sure we target all, but especially those who are vulnerable. The UAB team will liaise with PANGEANIC (subcontracting) to secure translations of all their materials, and also will make sure communication is accessible to fulfil EU European Accessibility Act and the two directives: Web Accessibility and AVMSD.

The research group is led by Prof. Pilar Orero. The key staff involved in the proposal is:

- Prof. Pilar Orero
- Dr. Anna Matamala
- Dr. Estella Oncins

ECF4CLIM

In ECF4CLIM, the UAB contribution is carried out by the **Institute of Government and Public Policy (IGOP)**, a research centre of the Universitat Autònoma de Barcelona (UAB). IGOP is a consolidated Research Group created in 1990 and re-founded in 2002 composed of social science researchers, mainly of the political science and sociology areas. IGOP is developing a great number of research projects on the topics related with public policies, governance, sustainability, social movements and public participation. IGOP has four research lines: Citizen participation and social engagement (mechanisms and participative processes); Public policies (education, social exclusion, migrations, environment and sustainability), Public management (innovative government processes); and Latin America (democratization, actors and policies).

In ECF4CLIM, IGOP-UAB will co-lead with CIEMAT-CISOT the WP5, designing and coordinating the whole process of evaluation, and will be involved in other work



packages, most notably in WP3 assessing individual and collective competences, and in WP4 designing and conveying the behavioural intervention.

The key staff involved is **Josep Espluga Trenc** Phd in Sociology. In addition, a **post-doctoral researcher** and a **technical researcher** of support will be recruited. Both researchers will work in close collaboration with and under the supervision of J. Espluga, contributing to data collection and analysis and to design and coordinate the tasks assigned to the UAB for the whole project, especially WP5.

Actions avoiding overlaps among pilot sites/activities

The two projects have three pilot/demonstration countries in common: Finland, Spain and Romania. While GreenSCENT already provided a provisional description of pilot/demonstration activities, educational level, and countries impacted by them, in EC4CLM these aspects will be completely co-designed.

ECF4CLIM does not have a list of predefined competences to be tested through the interventions at the demonstration sites. The hybrid participatory approach employed entails a collaborative process within the educational community, whereby experts in the relevant technical areas will support the design of interventions and acquisition of competences. Based on the design of the initial assessment (baseline assessment) and taking into account the specific local requirements and needs, the portfolio of solutions will be co-designed and jointly implemented on the sites. The solutions will include structural (e.g., small-scale retrofitting solutions, creation of green spaces, green procurement procedures), and behavioural measures (habits, routines, social norms, etc.). As no specific interventions and/or topics for the interventions are predefined (beyond the baseline results and the local needs), close interaction will be kept with GreenSCENT to avoid overlaps among sites/activities, especially in our common countries

In GreenSCENT, there is still space for pilot refinement and adjustments; the two projects will proceed in synergy, avoiding overlapping in pilot/demonstrators and countries, trying to experiment with different demonstrators and Green Deal focus areas in the three countries.

GreenSCENT Use case scenarios for demonstrators from the proposal

Case Scenario		Title of the pilot	Pilot Site
1	Environment Monitoring	"SCENT app to monitor the environment":	EU-wide, involving both schools and universities in the consortium, and EU citizenship at large.
2	SCENT citizen journalism	"SCENT citizen journalism to contribute to monitor the environment in a specific area or territory"	EU-wide, involving high schools and universities in the consortium, and EU citizenship at large.
3	Interactive documentary	SCENT powered interactive documentaries	Secondary schools and universities in the consortium (Italy, Spain, Finland, Romania, Serbia)
4	SCENT citizen science to quantify microplastics in beach sand	SCENT citizen science to quantify microplastics in beach sand	From primary to upper secondary school (Spain)
5	Open Innovation	Leveraging the OpenIDEO platform to engage users and generate solutions on climate change in the area of 'Farm to Fork'.	EU-wide, involving both schools and universities in the consortium, and EU citizenship at large.
6	Climathon	Climathon	Universities in the consortium (Serbia, Spain, Italy) and EU experts (EQF level: 7/8)
7	Cleanair@schools/nature-based solutions	Cleanair@schools, citizen science initiative at schools for Air Quality	Primary schools in Spain and Serbia (30 schools in total)
8	SCENT Augmented Reality application	SCENT Augmented Reality application	Secondary schools and universities in the consortium (Italy, Spain, Finland, Romania, Serbia)
9	Citizen Engagement	Youth Design Assemblies	4 Youth assemblies organized in countries hosting secondary schools and universities in the consortium (Italy, Finland, Romania, Serbia)



Demonstrator	Educational Level		Citizens
	Primary and Secondary school	Higher Education	
SCENT app and platform	ES, FI, RO, SB	IT, ES	EU
Interactive documentaries	IT	ES	
Microplastics citizen science	ES	SB	
Open Innovation (OpenIDEO)		IT ES SB	EU
Climathon	ES SB		
Cleanair@schools	ES SB		
SCENT Augmented Reality app	ES FI RO SB		
Youth Design Assemblies			EU

ECF4CLIM demonstration sites

	Geographical location	Educational Level
Finland	Not yet selected	The Finnish Association of Nature and Environment Schools (https://www.luontokoulut.fi/?lang=en) Pre-school, primary and secondary education
	Jyväskylä	University of Jyväskylä (https://www.jyu.fi/en) University
Romania	Dragasani (Valcea)	Scoala Gimnaziala Nicolae Balcescu (http://www.firme.info/scoala-gimnaziala-nicolae-balcescu-municipiul-dragasani-judetul-valcea-cui2573721/) Primary education
	Mioveni	Liceul Teoretic Iulia Zamfirescu (http://www.iuliazamfirescu.ro/) Secondary education

	Pitesti (Arges)	Universitatea din Pitesti (https://www.upit.ro/) University
Portugal	Loures (Lisbon)	Escola EB1/JI Prior Velho (http://www.eduga.pt/) Primary education
	Loures (Lisbon)	EB de Camarate (http://www.aec.edu.pt/) Secondary education
	Lisbon	Instituto Superior Técnico from University of Lisbon University
Spain	Alcalá de Henares (Madrid)	CEIP Mozart (https://www.ceipmozart.com/) Primary education
	Tomares (Seville)	IES Itaca (https://www.iesitaca.org/) Secondary education
	Barcelona	Universitat Autònoma de Barcelona University

In addition, the project will cooperate with a number of additional educational institutions, which will be venues for selected testing activities, the so-called network partners. They are prepared to become demonstration sites in case any of the schools or universities abandon the project.

Collaboration strategy in projects implementation

The two projects agreed about a shared strategy for continuous and mutual updates, synergies development and definition of Joint activities.

SCENT and ECF4CLIM will setup a set of mechanism for collaborating on a regular basis. One or two “project ambassador” will be nominated by the two projects. They will take care of:

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Furthermore, both the projects have a similar approach in drafting the 1st release of their CFs, that can be summarized with three set of activities:

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The two projects discussed the possibility to formalize the roles of using the “Advisory board” as the tool supporting the mutual participation of Coordination team members in the respective sister project.

Finally, both the projects already foresaw, at proposal level, specific activities and tasks focused on the interaction with the sister project.

SCENT

SCENT Task 6.2 “*SCENT clustering and peer learning activities*” defines a clear strategy for the interaction with the sister project:

“T6.2 will establish synergies with sister projects under the subtopic, and other ongoing projects on citizen science. Regarding sister projects, learning on specific focus areas of the green deal, methodological/educational questions, SCENT will carry out bilateral meetings centering the information exchange and mutual d other relevant aspects. The objective is to learn from each other (peer-learning), build on each other’s inputs and avoid duplication of work. When possible, also joint clustering activities will be organised to maximize the impact of all the projects, enable information exchange and share the educational outcomes on the competence framework, best practices and results of the different pilot activities. During the project, there will be at least a bi-lateral meeting per year with each of the sister projects. These meetings will help define the content and structure of two on-line peer-learning workshops that will be organised between M12 and M36 and that will aim to reach the broader community of practice”

ECF4CLIM

ECF4CLIM Task 8.4. *Clustering Activities Plan* is dedicated to liaison and coordination with other projects funded under this call, and which work towards developing an ECF for climate change and sustainable development. A series of periodic meetings and joint activities will be organised. A detailed plan for these clustering activities will be developed during the first months of the project (M3).