D5.1

Definition of interventions and actions to be implemented.

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Version	1.0		

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-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.

LEGAL NOTICE

TABLE OF CONTENTS

1. Executive Summary

D5.1 comprises tasks 5.1 and 5.2 of the ECF4CLIM project and describes the interventions identified by the demonstration sites with a potential to promote sustainability competences as detailed in the ECF4CLIM Roadmap. The measures to be implemented are defined, selected, and evaluated through the hybrid participatory process developed in the framework of the ECF4CLIM project, Sustainability Competence Teams (SCTs) and Committees (SCCs). The proposed measures are associated with the different parts of the ECF4CLIM Roadmap, described in D3.3.

D5.1 presents 87 measures proposed by the demonstration sites. These measures arise from the hybrid participatory process initiated at each demonstration site at the beginning of the ECF4CLIM project. The first list of the 159 measures was generated in the second series of Sustainability Competence Teams meetings, held at all demonstration sites between November 2022 and February 2023.

From this list of proposed measures, the Sustainability Competence Committee meetings held between February 2023 and April 2023 categorised and selected 87 actions to be implemented. Twenty-one of the measures were initiated during the school year 2022-23, with the rest to be executed during the school years 2023-24 and 2024-25.

The proposed measures present common aspects, aimed at improving sustainability competences and environmental performance, but represent a wide range of approaches. Many (24) focus on energy, while at the same time seek broader changes in individual and collective sustainability competences.

Seventeen of the proposed measures aim at reducing water consumption, either via the installation of water metering devices or through awareness campaigns. Most of the 21 measures targeted at waste management include training for the educational community, recycling, and improving understanding of the material cycle , including through visits to waste treatment plants. Twelve measures are designed to expand of green spaces at the schools and universities or improve the maintenance and use of the existing green spaces. The proposed measures included those aimed at involving participants in the maintenance and care of school gardens, as well as raising awareness and understanding of the role of green spaces in biodiversity protection and improvement of human wellbeing. Twelve of the proposed measures seek to promote more sustainable food supply and consumption. Nine measures are concerned with improving air quality, and the understanding of its impact on health and wellbeing. Finally, four measures targeted transport networks and sustainable mobility.

Forty-two measures have as their main objective to introduce or improve the existing teaching and course content on sustainability, organise extracurricular sustainability-related activities, and promote the participation of educational community members in dissemination and awareness events.

The selected measures are categorised according to their main purpose, that is, whether they are expected to foster changes in the individuals (people), in the educational system, or in the environmental performance at the demonstration sites. The country and environmental sector analysis indicates the main area.

The planning and monitoring of the measures is an integral part of the efforts to improve the individual and collective sustainability competences of the participating groups and individuals.

The participatory planning and monitoring process will be documented in D5.2. The descriptions of the objectives, timing, cost, necessary resources, allocation of responsibilities, risks, and the essential preconditions for the proposed measure to reach its objectives also provides a baseline for the periodic evaluation of the measures, and for a continuous critical re-evaluation of the basic assumptions underpinning the proposed measures.

2. CONTEXT, AIMS AND STRUCTURE

The identification and selection of the interventions (measures) is conducted as part of the hybrid participatory process initiated in WP4 and following the European Competence Framework methodology defined in WP3. The educational communities involved in the project engaged in a participatory process through iterative discussion meetings, where all educational communities had the opportunity to identify, analyse, and propose measures designed to improve sustainable competences in their schools and universities. The participatory-deliberative methodology for co-designing and co-creating specific measures at Sustainability Competence Teams and Committees (SCTs and SCCs) is described in D4.4 titled "Compilation of measures co-designed by the educational communities and presented at school and university events".

This document presents the measures that the demonstration sites proposed, categorised and selected at the second series of SCT and SCC meetings, outlining their main characteristics, their relation with the ECF4CLIM Roadmap, their sustainability areas, and their expected impacts.

3. PROPOSED MEASURES TEMPLATE

To collect the needed information, the demonstration sites were asked to fill a template for each of the measures proposed at the second SCT and SCC meetings. The template shows a visual and intuitive structure of information to facilitate the identification and definition of each measure. The template used for collecting data from the demonstration sites are shown in 9. References

Bianchi, G., Pisiotis, U., Cabrera Giraldez, M. (2022). GreenComp – The European sustainability competence framework. Bacigalupo, M., Punie, Y. (editors), EUR 30955 EN, Publications Office of the European Union, Luxembourg; doi:10.2760/13286, JRC128040.

Heikkinen, H., Nokkala, T.; Lehtonen, A., Mykrä, N. (2022). The development of initial ECF. Deliverable D3.3, ECF4CLIM project, European Competence Framework for a Low Carbon Economy and Sustainability through Education.

Espluga, J., Lehtonen, M., Prades, A., & German, S. (2023). Compilation of measures co-designed by the educational communities and presented at school and university events. Deliverable D4.4, ECF4CLIM project, European Competence Framework for a Low Carbon Economy and Sustainability through Education.

Lage J.,Faria T.,Almeida M.,Stratis A.,Andriopoulos P. (2023). Baseline assessment of the environmental performance. Deliverable D4.3, ECF4CLIM project, European Competence Framework for a Low Carbon Economy and Sustainability through Education.

Byttebier, I., Vullings, R., & Spaas, G. (2009). Creativity today : tools for a creative attitude. Amsterdam: BIS publishers.

10. ANNEX 1: TEMPLATE FORMAT. The fields included in the template were:

- Name of the measure
- Country
- Demonstration site
- Type of measure (behavioural, structural, structural/behavioural)
- Description
- Objectives
- Current state of the measure and the expected time needed for execution
- Will there be any costs? (Yes/No)
- Relation of the measure to the competences outlined in the ECF4CLIM Roadmap (D3.3)
- Expected main impact of the measure: either behavioural or structural
- Additional information: Any other information considered relevant (estimated cost, URL links, images related to the selected measure, etc.)

The template is open and flexible, and can thus be adapted and/or expanded along the way.

This template is designed to standardise data collection and presentation, but also serves as a key tool for both continuous and ex post evaluation (Wp6). This allows the creation of an integrated catalogue of the ECF4CLIM measures, their execution and impact, and also facilitates the transfer of lessons to other sites with similar needs.

4. DEMONSTRATION SITES INVOLVED

All the interventions shown in this Deliverable have been proposed by the ECF4CLIM demonstration sites. A brief description of the involved demonstration sites is shown below.

Romania

a) Nicolae Balcescu School

This public primary school is located in Dragasani town, Olt County. It has more than 500 students (6-15 years old) and over 30 teachers. Dragasani is a little town of about 18000 inhabitants in the south of the country. The main economic sectors and job providers are wine growing, small companies producing components for the automotive sector, and services. The town has suffered from socioeconomic decline for the last three decades.

Illustration 1.- Nicolae Balcescu School photographs.

b) Sercaia School

This public primary school located in the rural area of Brasov County, Transilvania region of Romania has 270 students (age 4 to 14 years), 10 classrooms, one computer science lab, one history lab, a sports hall, a separate building that hosts the kindergarten, a large green space where students spend their breaks, and a parking space outside the schoolyard.

Illustration 2.- Sercaia School photographs.

c) Lulia Zamfirrescu High School

This public high school located in Mioveni town, Arges county, has more than 1300 students (6-19 years old) and more than 60 teachers. The students come mainly from the town of Mioveni and its neighbourhoods. Although small (approximately 35000 inhabitants), Mioveni is very dynamic and experiencing rapid development. The local economy is dominated by industry (automotive and nuclear fuel). This demonstration site was selected as representative of a modern high school in Romania, having a recently built infrastructure (2006) and students predominantly originating from the local area.

Illustration 3.- Lulia Zamfirrescu school photographs.

d) University of Pitesti

This Romanian university is relatively young (founded in 1962), and has expanded rapidly since 1990. There are more than 9000 students across the three university cycles, bachelor's, master's, and doctorate, in the following faculties: sciences, informatics, physical education and sports; mechanics and technology; theology, literature, history and arts; electronics, communications and computers, economics and law; education sciences, social sciences and psychology. Most of the students are of the age between 19 and 24, originating from the local region (dominantly Arges, Olt, Teleorman, and Valcea counties). The number of international students is low, typically less than 50. Pitesti is a medium-sized and reasonably prosperous town in Romania (around 180,000 inhabitants), with automotive industry, petrochemistry, services and commerce as the main economic sectors. The University of Pitesti has been recognised as a good provider of human resources for the regional labour market. The demonstration site is the Faculty of Science.

Illustration 4.- Pitesti University photographs photographs.

Spain

a) IES Itaca

IES Itaca is a public high school situated in Tomares County, Spain. The school has over 600 students and 50 teachers who are committed to developing sustainability-related courses and study programmes. Tomares is located to the west of Seville and is the fourth most populated town in the Aljarafe region, the largest urban agglomeration in the south of Spain. The town has recently experienced significant population growth, tripling its population in the last thirty years. Thanks to its geographical location and regional development, Tomares has a good socioeconomic status.

IES Itaca has been working on sustainability initiatives for a long time. The school has participated in projects funded by the EU Commission, such as ClimAct, and has been promoting critical thinking through academic pathways via the Young Researchers program. The school's efforts demonstrate its solid commitment to promoting sustainability education in Seville and the surrounding areas.

Ilustation 5.- IES Itaca photographs.

b) CEIP Mozart

The CEIP Mozart public primary school is in the Alcalá de Henares district, in the Autonomous Community (AC) of Madrid. Created in 2008, it is the youngest district in the city, both in terms of housing stock and demography. It is the only district in the Madrid AC whose population has grown in the past two years. It is the district with the highest percentage of child population in Spain/Madrid CA. The school has 670 students distributed among ten elementary school classes (1st, 2nd, and 3rd grades) and 18 primary school classes (from 1st to 6th grade). The school is committed to sustainability, having participated in Eco-school programs for some years already. Recently, the school obtained the Green Flag Award for Eco-schools. The school has established a garden, which allows school classes to enage in activities from the creation of the seedbeds all the way to harvesting of the produce. The garden is the pride of the school. The school has elaborated an "Eco-Code" to promote environmental values and raise awareness about sustainability. Within the Eco-Schools initiatives, CEIP Mozart has developed its own Eco-code to encompass the sutainability objectives and the underlying philosophy of their commitment to the planet (Ecocódigo del CEIP Mozart – MOZART (madrid.org)

Ilustation 6.- CEIP Mozart.

c) Universitat Autònoma de Barcelona

UAB is a Spanish public university that runs 105 undergraduate courses covering a wide range of fields, including humanities and arts and social, health, experimental, and technical sciences. In addition, UAB offers 67 doctoral programs and 265 postgraduate programs, including Erasmus Mundus master's degrees. UAB has more than 40,000 students and 3760 teachers and

researchers. The UAB is located in the metropolitan area of Barcelona, in an industry-dominated county, Vallès Occidental. The metropolitan area of Barcelona has a population of about 4 million. The UAB is the second largest university in the area, after the University of Barcelona (UB). The demonstration site is the Faculty of Political Science and Sociology.

Illustration 7.- Universitat Autònoma de Barcelona photographs.

Finland

a) Juhannuskylä school

Juhannuskylä school is a public primary and lower secondary school, from grade 0 (for pupils 5-6 years of age) to grade 9 (14-15 years). In 2021-2022, the school had 831 pupils (vipunen.fi), of which 2/3 were in lower secondary school (grades 7-9), and about 90 teachers, of which about 1/6 are class teachers teaching multiple subjects for grades 1-6. Juhannuskylän koulu is in Tampere, the country's third largest city by population, and operates under the municipal administration, as do most public schools in Finland. In socioeconomic terms, the school admission area is of average Finnish level.

b) SAMKE upper secondary school

Sammon keskuslukio (Sampo upper secondary school) is a public upper secondary school operated by Tampere municipality. In 2021-2022, the school had all in all 912 pupils and about 50 teachers. Most of the pupils are 15-20 years of age. Students come mostly from Tampere, but also from the surrounding areas. The Finnish government provides subsidies for both public and private upper general schools.

c) University of Jyväskylä

This public research university, conducting teaching and research in all major disciplines, is located in Jyväskylä, the country's 7th -largest city in central Finland. The university aspires to be a global leader in the study of learning, well-being, and basic natural phenomena, with sustainability as among its core values. The university is ranked among the top three per cent in the world. Of the 14,000 students, 3,9 % come from abroad, and the rest from all regions of Finland. About 15 % of the applicants are admitted to JYU. About half of the 2,600 employees have permanent posts. Two-thirds of the employees are researchers and teachers, with 13 % of foreign nationality. The demonstration site is the Faculty of Education.

Portugal

a) EB Bobadela

EB Bobadela is a public elementary school (ISCED 1 and 2) operating under the municipality of Loures in the district of Lisbon. The school is in the parish "União das Freguesias de Santa Iria de Azóia, São João da Talha e Bobadela". The school has a community of 910 people, including 792 pupils, 81 teachers, 7 administrative staff, and 30 auxiliary staff. Many children attend school from the neighbourhoods of the parish of Bobadela.

b) EB Camarate

A public school (ISCED 1 and 2), EB Camarate operates under the municipality of Loures in the district of Lisbon. In 2021-2022, the school community comprised 877 people, including 741 pupils, 102 teachers, 9 administrative staff, and 25 auxiliary staff. The area of 11.57 km2 and 34 943 inhabitants has a high unemployment rate of around 18% and includes social housing neighbourhoods with several persisting social problems.

c) Instituto Superior Técnico

IST is a faculty of the University of Lisbon, the largest Portuguese public school of engineering, architecture, science, and technology. It is considered one of the most renowned engineering institutions in Europe. The university campus in Alameda was built in 1937 and was the first autonomous campus in the Portuguese university system. Today, IST has three campuses – in Alameda, Tagus Park and Bobadela – with 11,000 students and 900 professors/researchers from various nationalities.

Considering all 13 demonstration sites involved in this process and the amount of information to work with, an identification code was assigned to each school (Table 1).

Measure Identifier	Country	Demonstration site
SP-DS01	SPAIN	IES ITACA
SP-DS02	SPAIN	CEIP MOZART
SP-DS03	SPAIN	UNIVERSITAT AUTÒNOMA DE BARCELONA
PT-DS01	PORTUGAL	EB BOBADELA
PT-DS02	PORTUGAL	EB CAMARATE
PT-DS03	PORTUGAL	INSTITUTO SUPERIOR TÉCNICO
RM-DS01	ROMANIA	NICOLAE BALCESCU SCHOOL
RM-DS02	ROMANIA	SERCAIA SCHOOL
RM-DS03	ROMANIA	LULIA ZAMFIRESCH HIGH SCHOOL
RM-DS04	ROMANIA	UNIVERSITY OF PITESTI
FN-DS01	FINLAND	JUHANNUSKYLÄ SCHOOL
FN-DS02	FINLAND	SAMKE UPPER SECONDARY SCHOOL
FN-DS03	FINLAND	UNIVERSITY OF JYVÄSKYLÄ

Table 1.- Demonstration Site codes.

The identification of measures is presented based on these codes, including the demonstration site number and the identification number of the measure. The identifiers start with IN. For

example, the first measure proposed in Juhannuskylä school will be *FN-DS01-IN01*, the second *FN-DS01-IN02, etc*.

5. DATA COLLECTION PROCEDURE

Based on the preliminary list of measures outlined at the 2nd SCTs, a final list was discussed and agreed upon at the 2nd SCCs for implementation in each educational institution. The 2nd SCCs took place between February and April 2023 at all demonstration sites (Table 2).

Demonstration site	Date of 2nd SCCs
IES ITACA	APRIL 30TH
CEIP MOZART	FEBRUARY 13TH
UNIVERSITAT AUTÒNOMA DE BARCELONA	APRIL 13TH
EB BOBADELA	MARCH 22ND
EB CAMARATE	MARCH 29TH
INSTITUTO SUPERIOR TÉCNICO	MARCH 3RD
NICOLAE BALCESCU SCHOOL	FEBRUARY 27TH
SERCAIA SCHOOL	FEBRUARY 27TH
LULIA ZAMFIRESCH HIGH SCHOOL	FEBRUARY 27TH
UNIVERSITY OF PITESTI	FEBRUARY 27TH
JUHANNUSKYLÄ SCHOOL	MARCH 15TH
SAMKE UPPER SECONDARY SCHOOL	MARCH 15TH
UNIVERSITY OF JYVÄSKYLÄ	MARCH 14TH

Table 2.- Dates of the 2nd SCC meetings.

While the SCTs involve students, teachers and staff, the SCCs involve the wider educational community. A total of 101 people participated in the second series of SCCs, including representatives from students, teachers and administrative staff, other representatives from demonstration sites (directors or sustainability experts), as well as from local/regional authorities and parents' associations. One SCC was convenet in Spain and Portugal at each demonstration site. In Romania and Finland, a single SCC was organised for the entire country.

To select the final measures to be implemented, a participative-deliberative process was carried out, applying the "NOW/HOW/WOW" methodology (Vullings, Byttebier & Spaas, 2009). This method involves a matrix in 2X2 format, shown in Figure 1. The X-axis denotes the originality of the idea, while the Y-axis denotes its feasibility. Each idea is defined as normal or original on the horizontal axis and as easy or impossible to implement on the vertical axis. This creates three categories: NOW, WOW!, and HOW:

- **NOW**: Measures in this group can be implemented easily and are considered ordinary ideas. The measures included here will have low risk, high acceptability and maturity, and will have existing examples to follow.
- **WOW!**: Measures in this group are innovative and easy to implement within the current reality.
- **HOW?**: Measures in this group are original and innovative but currently difficult to execute given the existing technological, institutional, individual or economic constraints. The measures included here are ideas for the future.
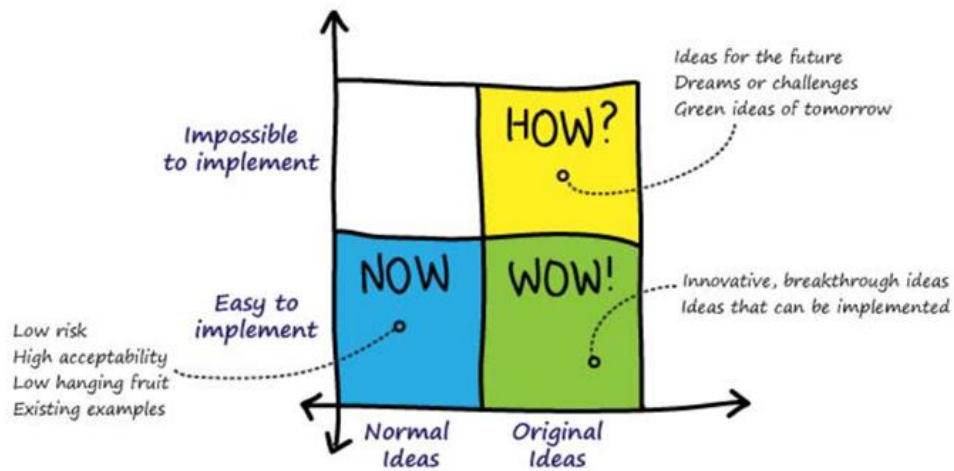
Figure 1.- Matrix of NOW/HOW/WOW methodology.

The participants of the 2nd SCCs classified all measures into one of these three groups and obtained a final categorisation for the measures according to their priority. Considering this categorisation, the participants identified and selected the measures to implement at each demonstration site.

According to the SCC2 reports, the main reasons for classifying actions in the "HOW" group were, among others, the high cost of the proposed measures, the short time for their implementation, and the scale, effort and involvement required for implementation. Furthermore, in the selection process, the demonstration sites prioritized those proposals most appropriate in each context, under the current institutional circumstances.

Illustration 8.- SCC2 meetings. Selection of measures to be implemented in each demonstration site.

This methodology was instrumental in generating debate and reflection among the participants and selecting the final measures to implement at each demonstration site.

6. LIST OF PROPOSED AND SELECTED MEASURES

6.1. Proposed and selected measures by DS

This section lists at each demonstration site the measures proposed. Detailed information about all the measures can be found in 11. Annex 2. They are classified in the following tables by demonstration site. It is important to note that this list has been created as a result of the SCT2 and SCC2 meetings, but modifications or new measures can be proposed during the co-implementation process.

SITE 1: SP-DS01. *IES ITACA*

Measure identifier	Name/short description	EFC4CLIM roadmap competencies group related	Measure type	Selected (Yes/No)
SP-DS01-IN01	Measure SP-DS01-IN01: Measuring the impact of shading projected by trees	Engagement, Connections, Vision, Action	Behavioural	No
SP-DS01-IN02	Measure SP-DS01-IN02: Internal regulations for equipment repair	Engagement, Connections, Action	Behavioural	No
SP-DS01-IN03	Measure SP-DS01-IN03: Photovoltaics	Engagement, Connections, Action	Behavioural	No
SP-DS01-IN04	Measure SP-DS01-IN04: Environmental programs. Sustainability awareness. Dynamic awareness.	Engagement, Connections, Vision	Behavioural	Yes
SP-DS01-IN05	Measure SP-DS01-IN05: Sustainability research FAB-IDI program	Engagement, Vision, Action	Structural/ Behavioural	Yes
SP-DS01-IN06	Measure SP-DS01-IN06: Pergolas with vegetation	Connections, Action	Structural	Yes
SP-DS01-IN07	Measure SP-DS01-IN07: Garden box	Connections, Vision, Action	Behavioural	Yes
SP-DS01-IN08	Measure SP-DS01-IN08: Proper use of sorting garbage containers.	Engagement, Connections, Action	Structural/ Behavioural	Yes
SP-DS01-IN09	Measure SP-DS01-IN09: Waste recycling	Engagement, Connections	Behavioural	Yes
SP-DS01-IN10	Improving confort Measure SP-DS01-IN10: Nebulised water assisted temperature controlled	Connections, Action	Structural	Yes

Table 3.- List of proposed/selected measures SP-DS01.

SITE 2: SP-DS02. *CEIP MOZART*

Measure identifier	Name/short description	EFC4CLIM roadmap competencies group related	Measure type	Selected (Yes/No)
SP-DS02-IN01	Measure SP-DS02-IN01: Umbralejo Field Trip - Experiential environmental education	Engagement, Connections, Vision,	Behavioural	Yes
SP-DS02-IN02	Measure SP-DS02-IN02: Linking the school garden with sustainable food styles	Engagement, Connections, Vision,	Behavioural	Yes
SP-DS02-IN03	Measure SP-DS02-IN03: Reuse- CO2 & Water Market. Exchange T-shirts "Change things by changing things"	Connections, Vision, Action	Behavioural	Yes
SP-DS02-IN04	Measure SP-DS02-IN04: Visit to the municipal composting plant + Promoting sustainable work in the school garden.	Engagement, Connections, Action	Behavioural	Yes
SP-DS02-IN05	Measure SP-DS02-IN05: Making the invisible visible: participatory air quality monitoring with PurpleAir sensors. Citizen science at school	Engagement, Connections, Action	Behavioural	Yes
SP-DS02-IN06	Measure SP-DS02-IN06: Installation of PV solar panels instalation + learning and awareness activity on renewable energy	Engagement, Connections, Vision, Action	Structural/Behavioural	Yes
SP-DS02-IN07	Measure SP-DS02-IN07: Planting trees in the school	Engagement, Connections, Vision, Action	Structural/Behavioural	Yes
SP-DS02-IN08	Measure SP-DS02-IN08: Installation of high quality insulating windows	Engagement, Connections	Structural/Behavioural	Yes

SP-DS02-IN09	Measure SP-DS02-IN09: Expand the school garden: The garden as "Pride of the school"	Engagement, Connections, Action	Structural/Behavioural	Yes
SP-DS02-IN10	Measure SP-DS02-IN10: ECF4CLIM learning space	Engagement, Connections, Vision, Action	Behavioural	Yes

Table 4.- List of proposed/selected measures SP-DS02.

SITE 3 DS-SP03. *UNIVERSITAT AUTÒNOMA DE BARCELONA*

Measure identifier	Name/short description	EFC4CLIM roadmap competencies group related	Measure type	Selected (Yes/No)
SP-DS03-IN01	Measure SP-DS03-IN01: Improving thermal insulation	Engagement, Connections	Structural	No
SP-DS03-IN02	Measure SP-DS03-IN02: Installing energy-saving mechanisms	Engagement, Connections	Structural/ Behavioural	Yes
SP-DS03-IN03	Measure SP-DS03-IN03: In-door spaces reform	Engagement, Connections, Vision, Action	Structural/ Behavioural	Yes
SP-DS03-IN04	Measure SP-DS03-IN04: Outdoor spaces arrangement	Engagement, Connections, Vision, Action	Structural/ Behavioural	No
SP-DS03-IN05	Measure SP-DS03-IN05: Promote the 'reuse' of objects	Engagement, Connections, Vision, Action	Behavioural	Yes
SP-DS03-IN06	Measure SP-DS03-IN06: Improve the waste system management at Faculty level	Engagement, Vision, Action	Structural/ Behavioural	Yes
SP-DS03-IN07	Measure SP-DS03-IN07: Facilitate transversal learning spaces	Engagement, Connections, Vision, Action	Behavioural	Yes
SP-DS03-IN08	Measure SP-DS03-IN08: Promote environmental volunteers on Campus	Engagement, Action	Behavioural	Yes
SP-DS03-IN09	Measure SP-DS03-IN09: Make visible data on environmental impacts	Engagement, Connections, Action	Structural/ Behavioural	Yes
SP-DS03-IN10	Measure SP-DS03-IN10: Repository of good practices	Engagement, Connections, Vision, Action	Behavioural	Yes
SP-DS03-IN11	Measure SP-DS03-IN11: Designing a more sustainable food system at the university	Engagement, Connections, Vision, Action	Structural/ Behavioural	Yes

SP-DS03-IN12	Measure SP-DS03-IN12: Don't waste food	Engagement, Action	Structural/ Behavioural	Yes
SP-DS03-IN13	Measure SP-DS03-IN13: Promote walking	Engagement, Connections, Action	Behavioural	Yes
SP-DS03-IN14	Measure SP-DS03-IN14: Promote shared/common working and teaching spaces	Engagement, Action	Behavioural	No

Table 5.- List of proposed/selected measures SP-DS03.

SITE 4: PT-DS01. *EB BOBADELA*

Measure identifier	Name/short description	EFC4CLIM roadmap competencies group related	Measure type	Selected (Yes/No)
PT-DS01-IN01	Measure PT-DS01-IN01: Install faucets with sensors or flow reducers	Engagement, Connections, Vision, Action	Structural	No
PT-DS01-IN02	1. Measure PT-DS01-IN02: Field trips related to water	Engagement, Connections, Action	Behavioural	Yes
PT-DS01-IN03	2. Measure PT-DS01-IN03: Implement solar panels at the school	Engagement, Connections, Vision, Action	Structural/Behavioural	Yes
PT-DS01-IN04	Measure PT-DS01-IN04: Implement efficient lighting systems (LED)	Engagement, Connections, Vision, Action	Structural	No
PT-DS01-IN05	Measure PT-DS01-IN05: Implement double-glazed windows and thermal blinds	Connections,	Structural	Yes
PT-DS01-IN06	5. Measure PT-DS01-IN06: Energy route: ADENE	Engagement, Connections, Vision, Action	Behavioural	Yes
PT-DS01-IN07	6. Measure PT-DS01-IN07: Integrate the assessment of energy consumption into the disciplines	Engagement, Connections, Vision, Action	Behavioural	Yes
PT-DS01-IN08	7. Measure PT-DS01-IN08: Implement more recycling bins inside the school according to the needs	Engagement, Connections, Vision, Action	Structural/Behavioural	Yes
PT-DS01-IN09	Measure PT-DS01-IN09: Competition to promote a efficient waste separation	Engagement, Connections, Vision, Action	Structural/Behavioural	Yes

Table 6.- List of proposed/selected measures PT-DS01.

SITE 5: PT-DS02. *EB CAMARATE*

Measure identifier	Name/short description	EFC4CLIM roadmap competencies group related	Measure type	Selected (Yes/No)
PT-DS02-IN01	Measure PT-DS02-IN01: Improve the bus and bike lanes network	Engagement, Connections, Action	Behavioural	No
PT-DS02-IN02	Measure PT-DS02-IN02: Learning how to drive a bicycle	Engagement, Connections, Vision, Action	Structural/ Behavioural	Yes
PT-DS02-IN03	Measure PT-DS02-IN03: Reactivate the school's biological garden	Engagement, Connections, Vision, Action	Behavioural	Yes
PT-DS02-IN04	Measure PT-DS02-IN04: Raising awareness of the role of green species in air quality	Engagement, Connections, Vision, Action	Behavioural	Yes
PT-DS02-IN05	Measure PT-DS02-IN05: Promote awareness of behavioural habits to reduce water consumption	Engagement, Connections, Vision, Action	Structural	No
PT-DS02-IN06	Measure PT-DS02-IN06: Implement efficient lighting systems (LED)	Engagement, Connections, Vision, Action	Behavioural	Yes
PT-DS02-IN07	Measure PT-DS02-IN07: Energy route: ADENE	Engagement, Connections, Vision, Action	Behavioural	No
PT-DS02-IN08	Measure PT-DS02-IN08: Integrate the assessment of energy consumption into the disciplines	Engagement, Connections, Vision, Action	Behavioural	Yes
PT-DS02-IN09	Measure PT-DS02-IN09: Awareness actions on the correct selective separation of waste and the impact on the environment	Engagement, Connections, Vision, Action	Structural/ Behavioural	Yes
PT-DS02-IN10	Measure PT-DS02-IN10: Competition to promote a efficient waste separation	Engagement, Connections,	Behavioural	Yes
PT-DS02-IN11	Measure PT-DS02-IN11: Field trips related to the	Engagement, Connections, Action	Behavioural	Yes

	production, treatment, and recycling of waste			

Table 7.- List of proposed/selected measures PT-DS02.

SITE 6: PT-DS03. *INSTITUTO SUPERIOR TÉCNICO*

Measure identifier	Name/short description	EFC4CLIM roadmap competencies group related	Measure type	Selected (Yes/No)
PT-DS03-IN01	Measure PT-DS03-IN01: "Climate Crisis and Fair Transition"	Engagement, Connections, Vision, Action	Structural/Behavioural	Yes
PT-DS03-IN02	Measure PT-DS03-IN02: Master and doctoral theses in the field of sustainability	Connections, Vision	Structural/Behavioural	Yes
PT-DS03-IN03	Measure PT-DS03-IN03: Remove cars from the Alameda campus	Engagement, Connections, Vision, Action	Structural/Behavioural	No
PT-DS03-IN04	Measure PT-DS03-IN04: Installation of air quality sensors in classrooms	Action	Structural	Yes
PT-DS03-IN05	Measure PT-DS03-IN05: Solar panelsMeasure PT-DS03-IN05: Solar panels	Action	Structural	Yes
PT-DS03-IN06	Measure PT-DS03-IN06: "Technical + Green" Project	Engagement, Vision	Structural/Behavioural	Yes
PT-DS03IN07	Measure PT-DS03-IN07: Communication and community involvement	Engagement, Connections, Vision, Action	Structural/Behavioural	Yes
PT-DS03-IN08	Measure PT-DS03-IN08: IST's activities and strategic plan	Engagement, Connections, Vision, Action	Structural/Behavioural	No
PT-DS03-IN09	Measure PT-DS03-IN09: "Bio Técnico" Project	Engagement, Connections, Vision, Action	Structural/Behavioural	Yes
PT-DS03-IN10	Measure PT-DS03-IN10: "Técnico makes the difference" Project	Engagement, Connections	Structural/Behavioural	Yes

Table 8.- List of proposed/selected measures PT-DS03.

SITE 7: RM-DS01. *School Nicolae Balcescu*

Measure identifier	Name/short description	EFC4CLIM roadmap competencies group related	Measure type	Selected (Yes/No)
RM-DS01-IN01	Measure RM-DS01-IN01: (Solar hot Water) Installation of solar panel for water heating	Engagement, Connections, Vision, Action	Behavioural	Yes
RM-DS01-IN02	Measure RM-DS01-IN02: (Tr Trainers) Training for trainers (sustainability dedicated course)	Engagement, Connections, Vision, Action	Behavioural	Yes
RM-DS01-IN03	Measure RM-DS01-IN03: (Water Sensors) Water sensors at the sanitary facilities	Connections, Vision, Action	Structural/Behavioural	No
RM-DS01-IN04	Measure RM-DS01-IN04: (Lighting) Intelligent lighting	Connections, Vision, Action	Structural/Behavioural	No
RM-DS01-IN05	Measure RM-DS01-IN05: (Waste) Improvement of the selective waste management	Engagement, Action	Behavioural	No
RM-DS01-IN06	Measure RM-DS01-IN06: (Energy building) Energy monitoring system in the building	Engagement, Connections	Structural/Behavioural	No

Table 9.- List of proposed/selected measures RM-DS01.

SITE 8: RM-DS02. *Sercaia School*

Measure identifier	Name/short description	EFC4CLIM roadmap competencies group related	Measure type	Selected (Yes/No)
RM-DS02-IN01	Measure RM-DS02-IN01: (Solar hot Water) Installation of solar panels for water heating	Engagement, Connections	Structural/ Behavioural	Yes

Measure identifier	Name/short description	EFC4CLIM roadmap competencies group related	Measure type	Selected (Yes/No)
RM-DS02-IN02	Measure RM-DS02-IN02: (Tr Trainers) Training for trainers (sustainability dedicated course)	Engagement, Connections, Vision, Action	Behavioural	Yes
RM-DS02-IN03	Measure RM-DS02-IN03: (LED Lighting) LED lighting in the school	Engagement, Connections, Vision, Action	Structural/ Behavioural	No
RM-DS02-IN04	Measure RM-DS02-IN04: (Sustainability course) Sustainability of the planet (course)	Engagement, Connections, Vision, Action	Behavioural	No
RM-DS02-IN05	Measure RM-DS02-IN05: (Active) Supporting the activities of groups approaching sustainability	Engagement, Connections, Vision, Action	Structural/ Behavioural	Yes
RM-DS02-IN06	Measure RM-DS02-IN06: (Water Sensors) Water sensors at the sanitary facilities	Connections, Vision, Action	Structural/ Behavioural	Yes

Table 10.- List of proposed/selected measures RM-DS02.

SITE 9: RM-DS03. IULIA ZAMFIRESCU HIGH SCHOOL

Measure identifier	Name/short description	EFC4CLIM roadmap competencies group related	Measure type	Selected (Yes/No)
RM-DS03-IN01	Measure RM-DS03-IN01: (Water Sensors) Infrastructure improvement - water sensors at the sanitary facilities	Engagement, Connections, Vision, Action	Structural/ Behavioural	Yes
RM-DS03-IN02	Measure RM-DS03-IN02: (Solar hot Water) Infrastructure improvement - installation of solar panels for water heating	Engagement, Connections	Structural/ Behavioural	No

		Engagement, Connections, Vision, Action	Behavioural	Yes
RM-DS03-IN03	Measure RM-DS03-IN03: Teacher training (courses) in the field of sustainability	Engagement, Connections, Vision, Action	Behavioural	Yes
RM-DS03-IN04	Measure RM-DS03-IN04: (Energy building) Energy monitoring system in the building	Engagement, Connections	Structural/ Behavioural	No
RM-DS03-IN05	Measure RM-DS03-IN05: (Digital) Extending the school digitalisation	Engagement, Connections, Vision, Action	Structural/ Behavioural	No
RM-DS03-IN06	Measure RM-DS03-IN06: (Extracurricular) Extending the extracurricular activities regarding sustainability (thematic visits, actions in nature, greening)	Engagement, Connections, Vision, Action	Structural/ Behavioural	Yes

Table 11.- List of proposed/selected measures RM-DS03.

SITE 10: RM-DS04. UNIVERSITY OF PITESTI

Measure identifier	Name/short description	EFC4CLIM roadmap competencies group related	Measure type	Selected (Yes/No)
RM-DS04-IN01	Measure RM-DS04-IN01: Programme "train the trainers" for sustainability	Engagement, Connections, Vision, Action	Structural/ Behavioural	Yes
RM-DS04-IN02	Measure RM-DS04-IN02: Development of educational materials for sustainability	Engagement, Connections, Vision, Action	Structural/ Behavioural	Yes
RM-DS04-IN03	Measure RM-DS04-IN03: Set-up a lab dedicated to sustainability	Engagement, Connections, Vision, Action	Structural/ Behavioural	No
RM-DS04-IN04	Measure RM-DS04-IN04: Improvement of infrastructure – installing smart sensors to the water in toilets	Engagement, Connections, Vision, Action	Structural/ Behavioural	No

Measure identifier	Name/short description	EFC4CLIM roadmap competencies group related	Measure type	Selected (Yes/No)
RM-DS04-IN05	Measure RM-DS04-IN05: Improvement of infrastructure – installing smart lightening	Connections, Vision, Action	Structural/ Behavioural	No
RM-DS04-IN06	Measure RM-DS04-IN06: Improvement of infrastructure – installing system for energy monitoring in the buildings	Engagement, Connections	Structural/ Behavioural	No

Table 12.- List of proposed/selected measures RM-DS04.

SITE 11: FN-DS01. *JUHANNUSKYLÄ KOULU*

Measure identifier	Name/short description	EFC4CLIM roadmap competencies group related	Measure type	Selected (Yes/No)
FN-DS01-IN01	Measure FN-DS01-IN01: Strategy for fostering collective will-formation for sustainability among personnel	Connections	Structural	Yes
FN-DS01-IN02	Measure FN-DS01-IN02: A CLEAN ENVIRONMENT: Instruction and campaign	Engagement, Action	Behavioural	Yes
FN-DS01-IN03	Measure FN-DS01-IN03: A CLEAN ENVIRONMENT: Reward for success	Action	Behavioural	Yes
FN-DS01-IN04	Measure FN-DS01-IN04: A CLEAN ENVIRONMENT: Cleaning day	Connections, Action	Behavioural	Yes
FN-DS01-IN05	Measure FN-DS01-IN05: Attitude: Educational study day for teachers	Engagement, Action	Behavioural	Yes
FN-DS01-IN06	Measure FN-DS01-IN06: Attitude: Information for students	Engagement, Action	Behavioural	Yes

FN-DS01-IN07	Measure FN-DS01-IN07: Attitude: Vegetarian cooking recipes contest	Engagement, Action	Behavioural	Yes
FN-DS01-IN08	Measure FN-DS01-IN08: Attitude: Art supplies storage room rearranged and in order	Engagement, Action	Structural/ Behavioural	Yes
FN-DS01-IN09	Measure FN-DS01-IN09: Strategy for fostering collective will-formation for sustainability among personnel	Vision	Behavioural	Yes

Table 13.- List of proposed/selected measures FN-DS01.

SITE 12: FN-DS02. *SAMKE UPPER SECONDARY SCHOOL*

Measure identifier	Name/short description	EFC4CLIM roadmap competencies group related	Measure type	Selected (Yes/No)
FN-DS02-IN01	Measure FN-DS02-IN01: RECYCLING: Advertisement	Engagement, Action	Behavioural	Yes
FN-DS02-IN02	Measure FN-DS02-IN02: RECYCLING: Collecting bottles -> transporting	Action	Structural/ Behavioural	Yes
FN-DS02-IN03	Measure FN-DS02-IN03: RECYCLING: Piggy bank -> savings for a trip	Engagement	Structural/ Behavioural	Yes
FN-DS02-IN04	Measure FN-DS02-IN04: RECYCLING: Sorting points	Action	Structural	Yes
FN-DS02-IN05	Measure FN-DS02-IN05: RECYCLING: Depository room	Action	Structural	Yes
FN-DS02-IN06	Measure FN-DS02-IN06: FOOD: Measuring the amount of bio waste	Connections	Structural/ Behavioural	Yes
FN-DS02-IN07	Measure FN-DS02-IN07: FOOD: Selling leftover food	Vision, Action	Structural/ Behavioural	Yes
FN-DS02-IN08		Engagement, Action	Behavioural	Yes

Measure identifier	Name/short description	EFC4CLIM roadmap competencies group related	Measure type	Selected (Yes/No)
	Measure FN-DS02-IN08: FOOD: Reminders about reducing waste in the canteen			
FN-DS02-IN09	Measure FN-DS02-IN09: FOOD: Making an address and an inquiry about the quality of plant-based food in schools	Engagement, Connections	Behavioural	Yes
FN-DS02-IN10	Measure FN-DS02-IN10: Designing a strategy for sustainability education for the whole school	Vision	Behavioural	Yes

Table 14.- List of proposed/selected measures FN-DS02.

SITE 13: FN-DS03. UNIVERSITY OF JYVÄSKYLÄ

Measure identifier	Name/short description	EFC4CLIM roadmap competencies group related	Measure type	Selected (Yes/No)
FN-DS03-IN01	Measure FN-DS03-IN01: DISCUSSIONS AND COACHING ON SUSTAINABILITY AND CURRICULA DEVELOPMENT WITH TEACHERS AND STUDENTS: Seminar and a panel discussion on sustainability and curricula, dialogue between personnel and students.	Engagement, Connections, Vision,	Structural/ Behavioural	Yes
FN-DS03-IN02	Measure FN-DS03-IN02: DISCUSSIONS AND COACHING ON SUSTAINABILITY AND CURRICULA	Engagement, Connections, Vision,	Structural	Yes

	DEVELOPMENT WITH TEACHERS AND STUDENTS: Sustainability breakfast: ecological sustainability and curriculum work.			
FN-DS03-IN03	Measure FN-DS03-IN03: DISCUSSIONS AND COACHING ON SUSTAINABILITY AND CURRICULA DEVELOPMENT WITH TEACHERS AND STUDENTS: Coaching students and teachers in promotion of sustainability competences and discussions.	Engagement, Connections, Vision,	Behavioural	Yes
FN-DS03-IN04	Measure FN-DS03-IN04: DISCUSSIONS AND COACHING ON SUSTAINABILITY AND CURRICULA DEVELOPMENT WITH TEACHERS AND STUDENTS: Contacting curriculum development representatives.	Connections, Vision	Structural	Yes
FN-DS03-IN05	Measure FN-DS03-IN05: FROM SUSTAINABILITY COMPETENCES IN CURRICULA TO PRACTICE AND PEDAGOGY: Pilot course and prepairing material on sustainability competences for psychology students.	Action	Behavioural	Yes
FN-DS03-IN06	Measure FN-DS03-IN06: FROM SUSTAINABILITY COMPETENCES IN CURRICULA TO PRACTICE AND PEDAGOGY: Preparing concrete teaching and study materials of each step of the Roadmap.	Action	Behavioural	Yes

FN-DS03-IN07	Measure FN-DS03-IN07: FROM SUSTAINABILITY COMPETENCES IN CURRICULA TO PRACTICE AND PEDAGOGY: Pedagogical Escape Room "Save the Planet" for students and teachers about the Roadmap for Sustainability Competences.	Engagement, Connections, Vision, Action	Behavioural	Yes

Table 15.- List of proposed/selected measures FN-DS03.

6.2. Measures discarded or proposed to be executed after the project

Some of the suggested measures were deemed as suitable and of interest to the schools but were finally discarded from execution during the ECF4CLIM lifetime. Some of them were rejected due to the excessive implementation workload (or their scale). Another common reason was lack of an appropriate time slot within the national educational programme.

The list of measures discarded is summarised in Table 16.

Measure name
Measure SP-DS01-IN01: Measuring the impact of shading projected by trees
6. Measure SP-DS01-IN02: Internal regulations for equipment repair
7. Measure SP-DS01-IN03: Photovoltaics
Measure PT-DS01-IN01: Install faucets with sensors or flow reducers
3. Measure PT-DS01-IN04: Implement efficient lighting systems (LED)
Measure PT-DS02-IN01: Improve the bus and bike lanes network
Measure PT-DS02-IN05: Promote awareness of behavioural habits to reduce water consumption
Measure PT-DS02-IN06: Implement efficient lighting systems (LED)
2. Measure PT-DS03-IN03: Remove cars from the Alameda campus
Measure PT-DS03-IN08: IST's activities and strategic plan
Measure RM-DS01-IN03: (Water Sensors) Water sensors at the sanitary facilities
a. Measure RM-DS01-IN04: (Lighting) Intelligent lighting
Measure RM-DS01-IN05: (Waste) Improvement of the selective waste management
Measure RM-DS01-IN06: (Energy building) Energy monitoring system in the building
c. Measure RM-DS02-IN03: (LED Lighting) LED lighting in the school
d. Measure RM-DS02-IN04: (Sustainability course) Sustainability of the planet (course)
Measure RM-DS03-IN05: (Digital) Extending the school digitalisation
Measure RM-DS03-IN02: (Solar hot Water) Infrastructure improvement - installation of solar panels for water heating
3. Measure RM-DS03-IN04: (Energy building) Energy monitoring system in the building
Measure RM-DS03-IN05: (Digital) Extending the school digitalisation
2. Measure RM-DS04-IN03: Set-up a lab dedicated to sustainability
3. Measure RM-DS04-IN04: Improvement of infrastructure – installing smart sensors to the water in toilets
Measure RM-DS04-IN05: Improvement of infrastructure – installing smart lightening
4. Measure RM-DS04-IN06: Improvement of infrastructure – installing system for energy monitoring in the buildings
Measure SP-DS03-IN01: Improving thermal insulation

| c. |
| Measure SP-DS03-IN04: Outdoor spaces arrangement |
| d. |
| Measure SP-DS03-IN14: Promote shared/common working and teaching spaces |

Table 16.- List of measures discarded or to be implemented after the project ends.

The demonstration sites described these measures as difficult to implement during the project. They will be reevaluated during the execution to identify if they could be reconsidered because some of the discarding reasons disappear as circumstances change. Moreover, the participants in the demonstration site may change their judgement during the co-implementation process, and move a measure to the category of measures possible to be executed during ECF4CLIM.

7. ANALYSIS AND DISCUSSION

7.1. Analysis of the selected measures by ECF4CLIM Roadmap competence area

This section presents a preliminary analysis of the proposed measures. It is based on the understanding that the research teams have reached about the proposed measures. For those finally implemented, links between the measures and the Roadmap competences will be studied in further detail. Indeed, it will be interesting to see if there are any variations in these expected links as the implementation and reflection progresses.

The percentage of the selected measures categorised by each of the four competence areas of the ECF4CLIM Roadmap is shown in the following figure:
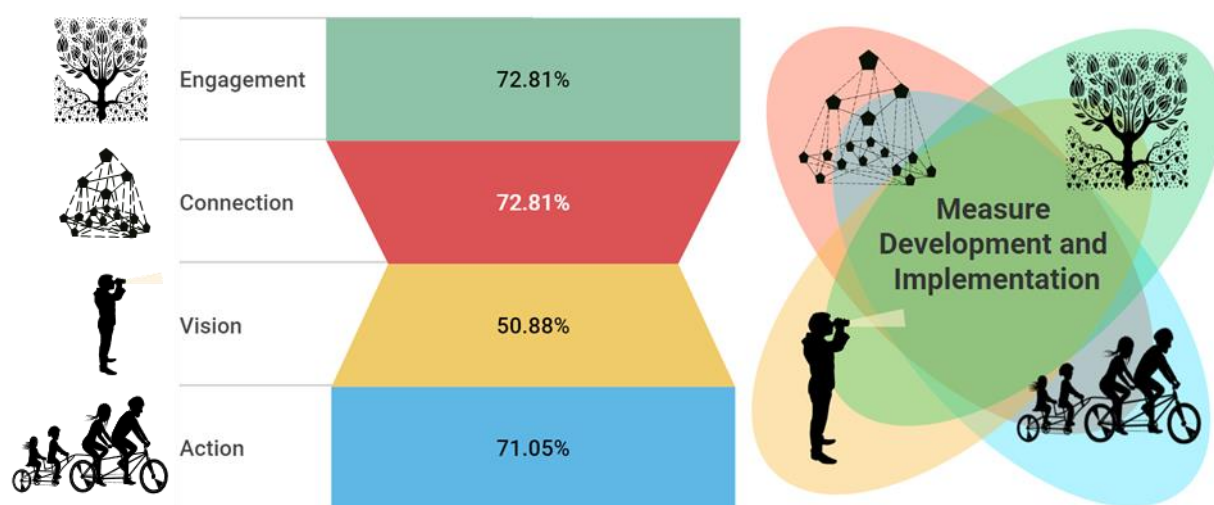
Figure 2.- Relationship between ECF4CLIM Roadmap and selected measures.

A significant number of measures impact more than one competence areas of the ECF4CLIM Roadmap at the same time. In this way, the same measure could deep on different Roadmap competence areas depending on the school educational community goals and needs.

Table ECF4CLIM Engagement measures

Measure name
Measure SP-DS01-IN06: Pergolas with vegetation
Measure SP-DS02-IN06: Installation of PV solar panels instalation + learning and awareness activity on renewable energy
Measure SP-DS02-IN08: Installation of high quality insulating windows
Measure SP-DS01-IN09: Waste recycling
Measure SP-DS02-IN01: Umbralejo Field Trip - Experiential environmental education
b. Measure SP-DS02-IN02: Linking the school garden with sustainable food styles
c. Measure SP-DS02-IN04: Visit to the municipal composting plant + Promoting sustainable work in the school garden
d. Measure SP-DS02-IN05: Making the invisible visible: participatory air quality monitoring with PurpleAir sensors. Citizen science at school

Measure SP-DS02-IN06: Installation of PV solar panels instalation + learning and awareness activity on renewable energy
Measure SP-DS02-IN07: Planting trees in the school
e. Measure SP-DS02-IN08: Installation of high quality insulating windows
Measure SP-DS02-IN09: Expand the school garden: The garden as "Pride of the school"
Measure SP-DS02-IN10: ECF4CLIM learning space
2. Measure PT-DS01-IN02: Field trips related to water
Measure PT-DS01-IN03: Implement solar panels at the school
6. Measure PT-DS01-IN06: Energy route: ADENE
Measure PT-DS01-IN07: Integrate the assessment of energy consumption into the disciplines
8. Measure PT-DS01-IN08: Implement more recycling bins inside the school according to the needs
8. Measure PT-DS01-IN09: Competition to promote a efficient waste separation
1. Measure PT-DS02-IN02: Learning how to drive a bicycle
2. Measure PT-DS02-IN03: Reactivate the school's biological garden
3. Measure PT-DS02-IN04: Raising awareness of the role of green species in air quality
Measure PT-DS02-IN07: Energy route: ADENE
Measure PT-DS02-IN08: Integrate the assessment of energy consumption into the disciplines
Measure PT-DS02-IN10: Competition to promote a efficient waste separation
4. Measure PT-DS02-IN11: Field trips related to the production, treatment, and recycling of waste
Measure PT-DS03-IN01: "Climate Crisis and Fair Transition"
3. Measure PT-DS03-IN06: "Technical + Green" Project
6. Measure PT-DS03-IN07: Communication and community involvement
Measure PT-DS03-IN10: "Técnico makes the difference" Project
Measure RM-DS01-IN01: (Solar hot Water) Installation of solar panel for water heating
Measure RM-DS01-IN02: (Tr Trainers) Training for trainers (sustainability dedicated course)
Measure RM-DS02-IN01: (Solar hot Water) Installation of solar panels for water heating
e. Measure RM-DS02-IN02: (Tr Trainers) Training for trainers (sustainability dedicated course)
Measure RM-DS02-IN05: (Active) Supporting the activities of groups approaching sustainability
Measure RM-DS03-IN01: (Water Sensors) Infrastructure improvement - water sensors at the sanitary facilities
1. Measure RM-DS03-IN03: Teacher training (courses) in the field of sustainability

Measure RM-DS03-IN06: (Extracurricular) Extending the extracurricular activities regarding sustainability (thematic visits, actions in nature, greening)
1. Measure RM-DS04-IN02: Development of educational materials for sustainability
Measure SP-DS03-IN02: Installing energy-saving mechanisms
Measure SP-DS03-IN03: In-door spaces reform
e. Measure SP-DS03-IN05: Promote the 'reuse' of objects
f. Measure SP-DS03-IN06: Improve the waste system management at Faculty level
Measure SP-DS03-IN07: Facilitate transversal learning spaces
g. Measure SP-DS03-IN08: Promote environmental volunteers on Campus
Measure SP-DS03-IN09: Make visible data on environmental impacts
h. Measure SP-DS03-IN10: Repository of good practices
i. Measure SP-DS03-IN11: Designing a more sustainable food system at the university
Measure SP-DS03-IN12: Don't waste food
j. Measure SP-DS03-IN13: Promote walking
a) Measure FN-DS01-IN02: A CLEAN ENVIRONMENT: Instruction and campaign
b) Measure FN-DS01-IN05: Attitude: Educational study day for teachers
c) Measure FN-DS01-IN06: Attitude: Information for students
d) Measure FN-DS01-IN07: Attitude: Vegetarian cooking recipes contest
e) Measure FN-DS01-IN08: Attitude: Art supplies storage room rearranged and in order
Measure FN-DS03-IN01: DISCUSSIONS AND COACHING ON SUSTAINABILITY AND CURRICULA DEVELOPMENT WITH TEACHERS AND STUDENTS: Seminar and a panel discussion on sustainability and curricula, dialogue between personnel and students.
Measure FN-DS03-IN02: DISCUSSIONS AND COACHING ON SUSTAINABILITY AND CURRICULA DEVELOPMENT WITH TEACHERS AND STUDENTS: Sustainability breakfast: ecological sustainability and curriculum work.
Measure FN-DS03-IN03: DISCUSSIONS AND COACHING ON SUSTAINABILITY AND CURRICULA DEVELOPMENT WITH TEACHERS AND STUDENTS: Coaching students and teachers in promotion of sustainability competences and discussions.
a) Measure FN-DS03-IN07: FROM SUSTAINABILITY COMPETENCES IN CURRICULA TO PRACTICE AND PEDAGOGY: Pedagogical Escape Room "Save the Planet" for students and teachers about the Roadmap for Sustainability Competences.
Measure FN-DS02-IN01: RECYCLING: Advertisement
b) Measure FN-DS02-IN03: RECYCLING: Piggy bank -> savings for a trip

d)
Measure FN-DS02-IN08: FOOD: Reminders about reducing waste in the canteen
Measure FN-DS02-IN09: FOOD: Making an address and an inquiry about the quality of plant-based food in schools

Table 17.- List of measures related to the Engagement step.

Table ECF4CLIM Connection measures

Measure name
8. Measure SP-DS01-IN04: Environmental programs. Sustainability awareness. Dynamic awareness.
Measure SP-DS01-IN06: Pergolas with vegetation
Measure SP-DS01-IN07: Garden box
9. Measure SP-DS01-IN08: Proper use of sorting garbage containers.
Measure SP-DS01-IN09: Waste recycling
10. Measure SP-DS01-IN10: Nebulised water assisted temperature controlled
Measure SP-DS02-IN01: Umbralejo Field Trip - Experiential environmental education
f. Measure SP-DS02-IN02: Linking the school garden with sustainable food styles
Measure SP-DS02-IN03: Reuse- CO2 & Water Market. Exchange T-shirts "Change things by changing things"
g. Measure SP-DS02-IN04: Visit to the municipal composting plant + Promoting sustainable work in the school garden
h. Measure SP-DS02-IN05: Making the invisible visible: participatory air quality monitoring with PurpleAir sensors. Citizen science at school
Measure SP-DS02-IN06: Installation of PV solar panels instalation + learning and awareness activity on renewable energy
Measure SP-DS02-IN07: Planting trees in the school
Measure SP-DS02-IN08: Installation of high quality insulating windows
Measure SP-DS02-IN09: Expand the school garden: The garden as "Pride of the school"
Measure SP-DS02-IN10: ECF4CLIM learning space
3. Measure PT-DS01-IN02: Field trips related to water
Measure PT-DS01-IN03: Implement solar panels at the school
4. Measure PT-DS01-IN05: Implement double-glazed windows and thermal blinds
7. Measure PT-DS01-IN06: Energy route: ADENE
Measure PT-DS01-IN07: Integrate the assessment of energy consumption into the disciplines
9. Measure PT-DS01-IN08: Implement more recycling bins inside the school according to the needs

9. Measure PT-DS01-IN09: Competition to promote a efficient waste separation
2. Measure PT-DS02-IN02: Learning how to drive a bicycle
3. Measure PT-DS02-IN03: Reactivate the school's biological garden
4. Measure PT-DS02-IN04: Raising awareness of the role of green species in air quality
Measure PT-DS02-IN07: Energy route: ADENE
Measure PT-DS02-IN08: Integrate the assessment of energy consumption into the disciplines
Measure PT-DS02-IN10: Competition to promote a efficient waste separation
5. Measure PT-DS02-IN11: Field trips related to the production, treatment, and recycling of waste
Measure PT-DS03-IN01: "Climate Crisis and Fair Transition"
7. Measure PT-DS03-IN07: Communication and community involvement
Measure PT-DS03-IN10: "Técnico makes the difference" Project
Measure RM-DS02-IN01: (Solar hot Water) Installation of solar panels for water heating
f. Measure RM-DS02-IN02: (Tr Trainers) Training for trainers (sustainability dedicated course)
Measure RM-DS02-IN05: (Active) Supporting the activities of groups approaching sustainability
Measure RM-DS03-IN01: (Water Sensors) Infrastructure improvement - water sensors at the sanitary facilities
2. Measure RM-DS03-IN03: Teacher training (courses) in the field of sustainability
Measure RM-DS03-IN06: (Extracurricular) Extending the extracurricular activities regarding sustainability (thematic visits, actions in nature, greening)
Measure RM-DS04-IN01: Programme "train the trainers" for sustainability
2. Measure RM-DS04-IN02: Development of educational materials for sustainability
Measure SP-DS03-IN02: Installing energy-saving mechanisms
Measure SP-DS03-IN03: In-door spaces reform
k. Measure SP-DS03-IN05: Promote the 'reuse' of objects
Measure SP-DS03-IN07: Facilitate transversal learning spaces
Measure SP-DS03-IN09: Make visible data on environmental impacts
l. Measure SP-DS03-IN10: Repository of good practices
m. Measure SP-DS03-IN11: Designing a more sustainable food system at the university
n. Measure SP-DS03-IN13: Promote walking
Measure FN-DS01-IN01: Strategy for fostering collective will-formation for sustainability among personnel

f)
Measure FN-DS01-IN04: A CLEAN ENVIRONMENT: Cleaning day
Measure FN-DS03-IN01: DISCUSSIONS AND COACHING ON SUSTAINABILITY AND CURRICULA DEVELOPMENT WITH TEACHERS AND STUDENTS: Seminar and a panel discussion on sustainability and curricula, dialogue between personnel and students.
Measure FN-DS03-IN02: DISCUSSIONS AND COACHING ON SUSTAINABILITY AND CURRICULA DEVELOPMENT WITH TEACHERS AND STUDENTS: Sustainability breakfast: ecological sustainability and curriculum work.
Measure FN-DS03-IN03: DISCUSSIONS AND COACHING ON SUSTAINABILITY AND CURRICULA DEVELOPMENT WITH TEACHERS AND STUDENTS: Coaching students and teachers in promotion of sustainability competences and discussions.
b)
Measure FN-DS03-IN04: DISCUSSIONS AND COACHING ON SUSTAINABILITY AND CURRICULA DEVELOPMENT WITH TEACHERS AND STUDENTS: Contacting curriculum development representatives.
c)
Measure FN-DS03-IN07: FROM SUSTAINABILITY COMPETENCES IN CURRICULA TO PRACTICE AND PEDAGOGY: Pedagogical Escape Room "Save the Planet" for students and teachers about the Roadmap for Sustainability Competences.
e)
Measure FN-DS02-IN06: FOOD: Measuring the amount of bio waste
Measure FN-DS02-IN09: FOOD: Making an address and an inquiry about the quality of plant-based food in schools

Table 18.- List of measures related to the Connections step.

Table ECF4CLIM Vision measures

Measure name
11.
Measure SP-DS01-IN04: Environmental programs. Sustainability awareness. Dynamic awareness.
Measure SP-DS01-IN07: Garden box
Measure SP-DS02-IN01: Umbralejo Field Trip - Experiential environmental education
i.
Measure SP-DS02-IN02: Linking the school garden with sustainable food styles
Measure SP-DS02-IN03: Reuse- CO2 & Water Market. Exchange T-shirts "Change things by changing things"
Measure SP-DS02-IN06: Installation of PV solar panels instalation + learning and awareness activity on renewable energy
Measure SP-DS02-IN07: Planting trees in the school
Measure SP-DS02-IN10: ECF4CLIM learning space
Measure PT-DS01-IN03: Implement solar panels at the school
Measure PT-DS01-IN07: Integrate the assessment of energy consumption into the disciplines
10.
Measure PT-DS01-IN08: Implement more recycling bins inside the school according to the needs
10.
Measure PT-DS01-IN09: Competition to promote a efficient waste separation

4.   Measure PT-DS02-IN03: Reactivate the school's biological garden
5.   Measure PT-DS02-IN04: Raising awareness of the role of green species in air quality
Measure PT-DS02-IN07: Energy route: ADENE
Measure PT-DS02-IN08: Integrate the assessment of energy consumption into the disciplines
Measure PT-DS02-IN10: Competition to promote a efficient waste separation
Measure PT-DS03-IN01: "Climate Crisis and Fair Transition"
8.   Measure PT-DS03-IN07: Communication and community involvement
Measure RM-DS01-IN01: (Solar hot Water) Installation of solar panel for water heating
Measure RM-DS01-IN02: (Tr Trainers) Training for trainers (sustainability dedicated course)
g.   Measure RM-DS02-IN02: (Tr Trainers) Training for trainers (sustainability dedicated course)
Measure RM-DS02-IN05: (Active) Supporting the activities of groups approaching sustainability
Measure RM-DS03-IN01: (Water Sensors) Infrastructure improvement - water sensors at the sanitary facilities
3.   Measure RM-DS03-IN03: Teacher training (courses) in the field of sustainability
Measure RM-DS03-IN06: (Extracurricular) Extending the extracurricular activities regarding sustainability (thematic visits, actions in nature, greening)
Measure RM-DS04-IN01: Programme "train the trainers" for sustainability
3.   Measure RM-DS04-IN02: Development of educational materials for sustainability
Measure SP-DS03-IN03: In-door spaces reform
o.   Measure SP-DS03-IN05: Promote the 'reuse' of objects
Measure SP-DS03-IN07: Facilitate transversal learning spaces
p.   Measure SP-DS03-IN10: Repository of good practices
Measure FN-DS03-IN01: DISCUSSIONS AND COACHING ON SUSTAINABILITY AND CURRICULA DEVELOPMENT WITH TEACHERS AND STUDENTS: Seminar and a panel discussion on sustainability and curricula, dialogue between personnel and students.
Measure FN-DS03-IN02: DISCUSSIONS AND COACHING ON SUSTAINABILITY AND CURRICULA DEVELOPMENT WITH TEACHERS AND STUDENTS: Sustainability breakfast: ecological sustainability and curriculum work.
Measure FN-DS03-IN03: DISCUSSIONS AND COACHING ON SUSTAINABILITY AND CURRICULA DEVELOPMENT WITH TEACHERS AND STUDENTS: Coaching students and teachers in promotion of sustainability competences and discussions.
d)   Measure FN-DS03-IN04: DISCUSSIONS AND COACHING ON SUSTAINABILITY AND CURRICULA DEVELOPMENT WITH TEACHERS AND STUDENTS: Contacting curriculum development representatives.
e)   Measure FN-DS03-IN07: FROM SUSTAINABILITY COMPETENCES IN CURRICULA TO PRACTICE AND PEDAGOGY: Pedagogical Escape Room "Save the Planet" for students and teachers about the Roadmap for Sustainability Competences.
f)

Measure FN-DS02-IN07: FOOD: Selling leftover food

Table 19.- List of measures related to the Vision step.

Table ECF4CLIM Action measures

Measure name
Measure SP-DS01-IN05: Sustainability research FAB-IDI program
Measure SP-DS01-IN06: Pergolas with vegetation
Measure SP-DS01-IN07: Garden box
12. Measure SP-DS01-IN08: Proper use of sorting garbage containers.
13. Measure SP-DS01-IN10: Nebulised water assisted temperature controlled
Measure SP-DS02-IN03: Reuse- CO2 & Water Market. Exchange T-shirts "Change things by changing things"
j. Measure SP-DS02-IN04: Visit to the municipal composting plant + Promoting sustainable work in the school garden
k. Measure SP-DS02-IN05: Making the invisible visible: participatory air quality monitoring with PurpleAir sensors. Citizen science at school
Measure SP-DS02-IN06: Installation of PV solar panels instalation + learning and awareness activity on renewable energy
Measure SP-DS02-IN07: Planting trees in the school
Measure SP-DS01-IN09: Waste recycling
Measure SP-DS02-IN10: ECF4CLIM learning space
4. Measure PT-DS01-IN02: Field trips related to water
Measure PT-DS01-IN03: Implement solar panels at the school
8. Measure PT-DS01-IN06: Energy route: ADENE
Measure PT-DS01-IN07: Integrate the assessment of energy consumption into the disciplines
11. Measure PT-DS01-IN08: Implement more recycling bins inside the school according to the needs
11. Measure PT-DS01-IN09: Competition to promote a efficient waste separation
3. Measure PT-DS02-IN02: Learning how to drive a bicycle
5. Measure PT-DS02-IN03: Reactivate the school's biological garden
6. Measure PT-DS02-IN04: Raising awareness of the role of green species in air quality
Measure PT-DS02-IN07: Energy route: ADENE
Measure PT-DS02-IN08: Integrate the assessment of energy consumption into the disciplines
Measure PT-DS02-IN10: Competition to promote a efficient waste separation
Measure PT-DS03-IN01: "Climate Crisis and Fair Transition"

Measure PT-DS03-IN04: Installation of air quality sensors in classrooms
Measure PT-DS03-IN05: Solar panels
9. Measure PT-DS03-IN07: Communication and community involvement
Measure RM-DS01-IN01: (Solar hot Water) Installation of solar panel for water heating
Measure RM-DS01-IN02: (Tr Trainers) Training for trainers (sustainability dedicated course)
h. Measure RM-DS02-IN02: (Tr Trainers) Training for trainers (sustainability dedicated course)
Measure RM-DS02-IN05: (Active) Supporting the activities of groups approaching sustainability
Measure RM-DS03-IN01: (Water Sensors) Infrastructure improvement - water sensors at the sanitary facilities
4. Measure RM-DS03-IN03: Teacher training (courses) in the field of sustainability
Measure RM-DS03-IN06: (Extracurricular) Extending the extracurricular activities regarding sustainability (thematic visits, actions in nature, greening)
Measure RM-DS04-IN01: Programme "train the trainers" for sustainability
4. Measure RM-DS04-IN02: Development of educational materials for sustainability
Measure SP-DS03-IN03: In-door spaces reform
q. Measure SP-DS03-IN05: Promote the 'reuse' of objects
r. Measure SP-DS03-IN06: Improve the waste system management at Faculty level
Measure SP-DS03-IN07: Facilitate transversal learning spaces
s. Measure SP-DS03-IN08: Promote environmental volunteers on Campus
Measure SP-DS03-IN09: Make visible data on environmental impacts
t. Measure SP-DS03-IN10: Repository of good practices
u. Measure SP-DS03-IN11: Designing a more sustainable food system at the university
Measure SP-DS03-IN12: Don't waste food
v. Measure SP-DS03-IN13: Promote walking
g) Measure FN-DS01-IN02: A CLEAN ENVIRONMENT: Instruction and campaign
Measure FN-DS01-IN03: A CLEAN ENVIRONMENT: Reward for success
h) Measure FN-DS01-IN04: A CLEAN ENVIRONMENT: Cleaning day
i) Measure FN-DS01-IN05: Attitude: Educational study day for teachers
j) Measure FN-DS01-IN06: Attitude: Information for students
k) Measure FN-DS01-IN07: Attitude: Vegetarian cooking recipes contest
l) Measure FN-DS01-IN08: Attitude: Art supplies storage room rearranged and in order

f)
Measure FN-DS03-IN05: FROM SUSTAINABILITY COMPETENCES IN CURRICULA TO PRACTICE AND PEDAGOGY: Pilot course and prepairing material on sustainability competences for psychology students.
g)
Measure FN-DS03-IN06: FROM SUSTAINABILITY COMPETENCES IN CURRICULA TO PRACTICE AND PEDAGOGY: Preparing concrete teaching and study materials of each step of the Roadmap.
h)
Measure FN-DS03-IN07: FROM SUSTAINABILITY COMPETENCES IN CURRICULA TO PRACTICE AND PEDAGOGY: Pedagogical Escape Room "Save the Planet" for students and teachers about the Roadmap for Sustainability Competences.
Measure FN-DS02-IN01: RECYCLING: Advertisement
g)
Measure FN-DS02-IN02: RECYCLING: Collecting bottles -> transporting
h)
Measure FN-DS02-IN04: RECYCLING: Sorting points
i)
Measure FN-DS02-IN05: RECYCLING: Depository room
j)
Measure FN-DS02-IN07: FOOD: Selling leftover food
Measure FN-DS02-IN08: FOOD: Reminders about reducing waste in the canteen

Table 20.- List of measures related to Action's step.

As the tables show, most of the selected measures affect simultaneously several competence areas. The successful implementation of most educational measures requires adequate engagement and action competences.. As explained in D3.3, the central purpose of the Roadmap is to facilitate the participation process based on GreenComp and the European sustainability competence framework. The selected measures typically involve several individual and collective competences, and have links with more than one of the Roadmap steps.

7.2. Analysis of the selected measures by typology

Each demonstration site proposed between 6 and 14 measures, including behavioural, structural, and mixed measures. Their nature will not only depend on the needs of each educational centre but also on the local social context of the educational community in question.
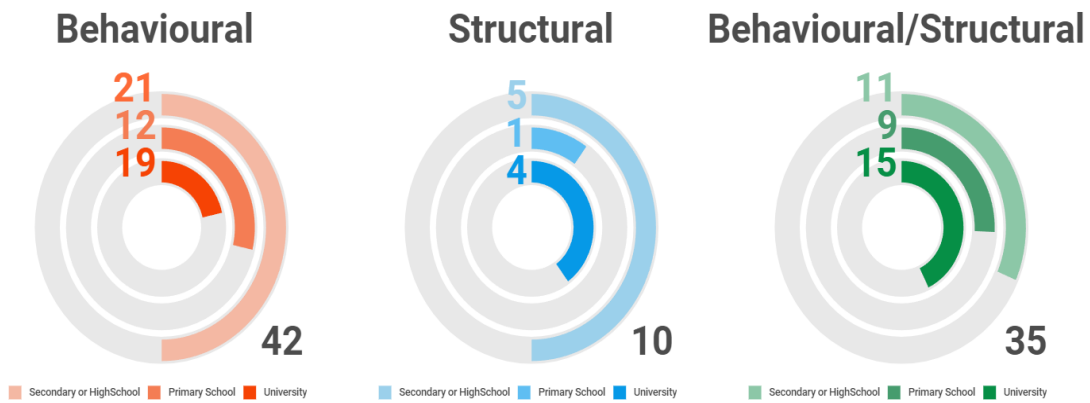
Behavioural

21
12
19

42

Structural

5
1
4

10

Behavioural/Structural

11
9
15

35

Secondary or HighSchool   Primary School   University

Secondary or HighSchool   Primary School   University

Secondary or HighSchool   Primary School   University

Figure 3.- Classification of the measures selected by typology.

Among this set of measures, structural changes are proposed not only to change the environmental conditions but also to promote behavioural changes, as can be seen in three of the measures proposed by the Pitesti University, which were aimed at improving the building infrastructure. The behavioural part of this kind of action lies in informing the students about the improvements, so as to foster reflection among them on the action's purpose and impact. The local context of the demonstration site was crucial: the educational institutions prioritised measures according to their specific pedagogical and infrastructural needs.

Type of measure in Demonstration Sites

Behavioural   Structural   Structural/Behavioural
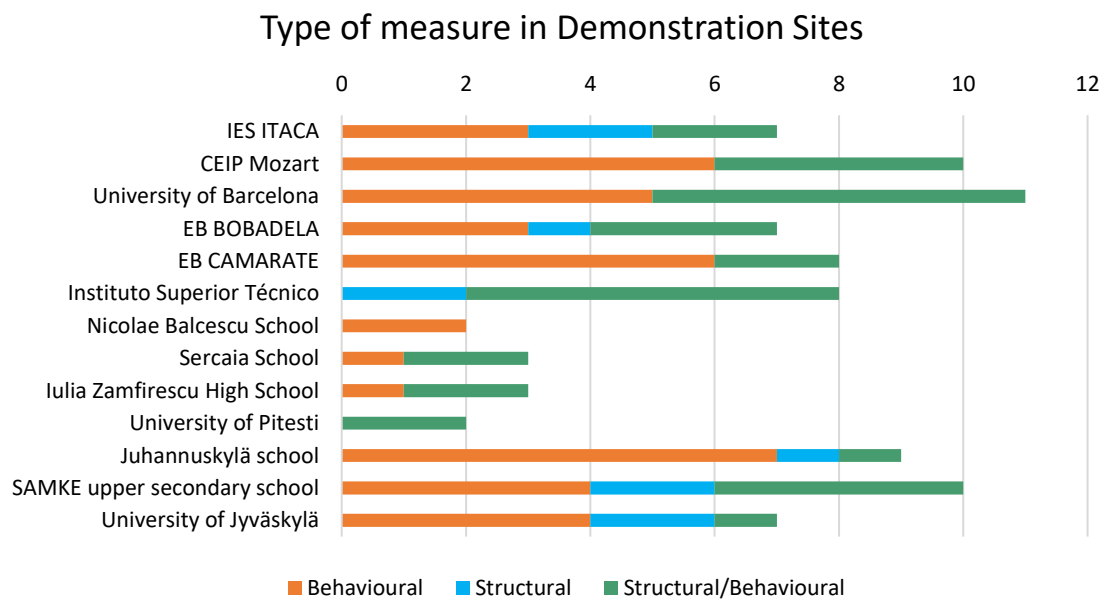
Graph 1.- Classification of measures' typology by type of educational level in demonstration sites.

Such site-specific aspects included the region's climate, building infrastructure, the consumption practices of the educational community, the students' conditions, the available space, and the distribution of the buildings.

7.3. Analysis of the selected measures by environmental sector and educational/curricular strategies

The proposed measures and implementation actions are linked to different environmental areas and/or educational/curricular strategies. Within the variety of the topics suggested during the SCT2 and SCC2 meetings at all demonstration sites involved, there are common points.
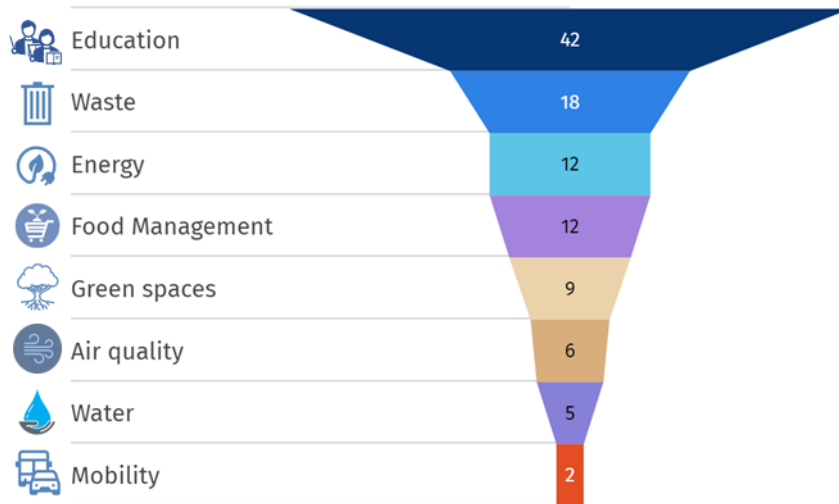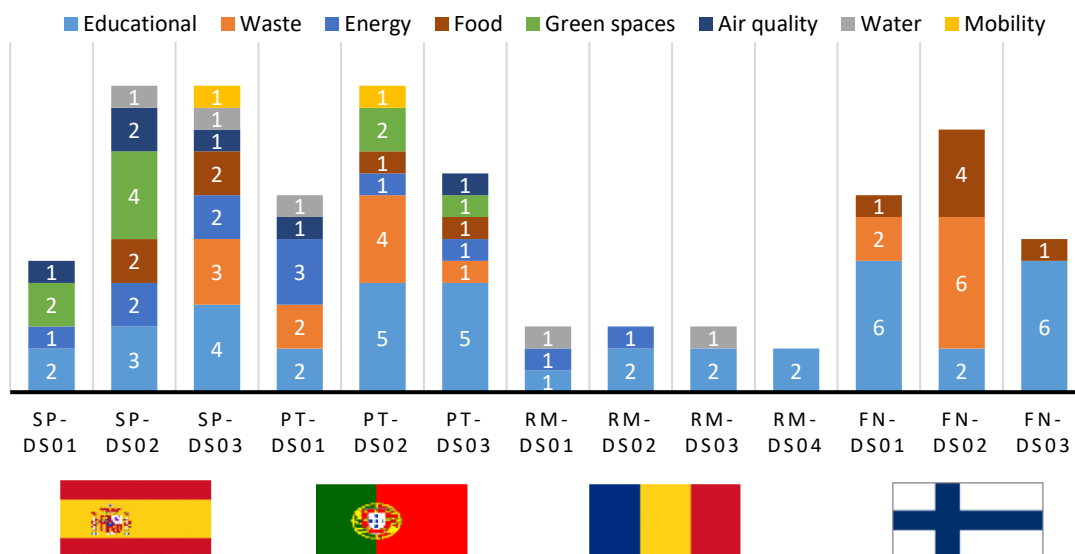

Figure 4.- Classification of measures selected by environmental sector and education.

The figure above illustrates the environmental areas involved in the proposed measures. The relation with the baseline assessment of the environmental performance, described previously in D4.3, is considered in the analysis of the measure. In this classification, it was considered that a measure may belong to more than one environmental area.

Graph 2.- Classification of measures selected by environmental sector and education in demonstration sites.

As in Figure 4, one measure can be classified in more than one environmental area or measures defined as educational. The proposed measures also include a clear pedagogical/curricular orientation linked to the acquisition of competences, such as the inclusion of new sustainability-related content in different subjects/courses, considering the need to explain to students the impact and reasoning behind the measure. Awareness-raising and increased student engagement appear in more than 80 % of the measures.

7.3.1 Analysis by environmental sector

Energy

A common topic raised in the proposed measures was the installation of LED lighting and devices measuring energy consumption, with the main purpose to reduce and monitor the building energy consumption. In most cases, significant potential was identified for reducing energy consumption via structural changes in the lighting. This kind of measure pretends to improve the performance as measured by the indicators related to energy consumption and CO_2 emissions (D4.3 scores S_{E1} and S_{E6}).

Regarding the performance in renewable energy production, among the measures related to energy, eight were focused on renewable energy. Installing photovoltaic technology or thermal solar panels was one of the suggested means of reducing the dependence on traditional fuels. The results that these measures are expected to produce include the reduction of annual CO_2 emissions, reduction of energy costs in the long-term, and hence improved performance as measured by scores S_{E3}, S_{E4} and S_{E5} defined in D4.3.

On the other hand, thermal solar panels will be installed in the Romanian schools, using thermal solar technology to manage the use of hot water in various building facilities such as toilets, canteens, and the water supply systems in general. The reduction of the demand for heating energy was the main motivation behind these proposed measures (which are expected to maintain the level of performance as measured by scores from S_{wr1} to S_{wr4}, and improve those of S_{E3} and S_{E6}).

Measure name
Measure SP-DS01-IN06: Pergolas with vegetation
Measure SP-DS02-IN06: Installation of PV solar panels instalation + learning and awareness activity on renewable energy
Measure SP-DS02-IN08: Installation of high quality insulating windows
Measure PT-DS01-IN03: Implement solar panels at the school
Measure PT-DS01-IN05: Implement double-glazed windows and thermal blinds
Measure PT-DS01-IN07: Integrate the assessment of energy consumption into the disciplines
Measure PT-DS02-IN08: Integrate the assessment of energy consumption into the disciplines
Measure PT-DS03-IN05: Solar panels
Measure RM-DS01-IN01: (Solar hot Water) Installation of solar panel for water heating
Measure RM-DS01-IN01: (Solar hot Water) Installation of solar panel for water heating
Measure SP-DS03-IN02: Installing energy-saving mechanisms

Measure name
Measure SP-DS03-IN09: Make visible data on environmental impacts

Table 21.- Measures related to the energy environmental sector.

Water

Of the 17 measures whose objective was to save water, eight included the installation of sensors in order to limit water consumption (thus expected to improve all D4.3 water scores S_{wr1}, S_{wr2}, S_{wr3}, and S_{wr4}). These measures will include need identification, whereby the ECF4CLIM members work with the demonstration site stakeholders to identify the points of high water consumption and will assess the potential for savings in water consumption, through educational and awareness-raising programmes. Awareness-raising campaigns are targeted at students, and encourage these to reduce their water consumption. For example, in countries like Portugal and Spain, water shortage can be a problem at the end of spring and the beginning of summer. Water shortage can in some situations limit the possibility to implement comfort measures, such as the nebulisers proposed in Measure SP-DS01-IN10: Nebulised water assisted temperature controlled. However, compared with the expected reduction in the students' water consumption thanks to the other measures, the increase in consumption because of the installation of nebulisers is likely to be limited.

Measure name
Measure SP-DS02-IN03: Reuse- CO2 & Water Market. Exchange T-shirts "Change things by changing things"
Measure PT-DS01-IN02: Field trips related to water
Measure RM-DS01-IN01: (Solar hot Water) Installation of solar panel for water heating
Measure RM-DS03-IN01: (Water Sensors) Infrastructure improvement - water sensors at the sanitary facilities
Measure SP-DS03-IN09: Make visible data on environmental impacts

Table 22.- Measures related to water environmental sector.

Waste management

Regarding the awareness-raising measures concerning waste separation, management, and recycling, all demonstration sites proposed measures such as training concerning separate collection of waste (working on S_{W2} and S_{W3} waste scores defined in D4.3). One of the most commonly suggested measures was the organisation of onsite training and awareness-raising sessions at waste management plants concerning the impact of waste production, the processes involved, and the benefits of recycling and reuse of waste. Such suggested awareness-raising activities typically included educational activities that directly involve students in efforts to promote recycling. These measures are mostly related to the engagement and connection steps of the ECF4CLIM Roadmap. Other suggested measures included the organisation of events such as competitions, visits, or keeping diaries on waste management practices (measures Measure SP-DS02-IN04: Visit to the municipal composting plant + Promoting sustainable work in the school garden, Measure PT-DS01-IN09: Competition to promote a efficient waste separation or Measure FN-DS01-IN04: A CLEAN ENVIRONMENT: Cleaning day).

Measure name
12.
Measure PT-DS01-IN08: Implement more recycling bins inside the school according to the needs
12.

Measure PT-DS01-IN09: Competition to promote a efficient waste separation
7. Measure PT-DS02-IN04: Raising awareness of the role of green species in air quality
Measure PT-DS02-IN09: Awareness actions on the correct selective separation of waste and the impact on the environment
Measure PT-DS02-IN10: Competition to promote a efficient waste separation
6. Measure PT-DS02-IN11: Field trips related to the production, treatment, and recycling of waste
Measure PT-DS03-IN10: "Técnico makes the difference" Project
w. Measure SP-DS03-IN05: Promote the 'reuse' of objects
x. Measure SP-DS03-IN06: Improve the waste system management at Faculty level
y. Measure SP-DS03-IN09: Make visible data on environmental impacts
Measure FN-DS01-IN01: Strategy for fostering collective will-formation for sustainability among personnel
m) Measure FN-DS01-IN04: A CLEAN ENVIRONMENT: Cleaning day
k) Measure FN-DS02-IN02: RECYCLING: Collecting bottles -> transporting
l) Measure FN-DS02-IN03: RECYCLING: Piggy bank -> savings for a trip
n) Measure FN-DS02-IN04: RECYCLING: Sorting points
o) Measure FN-DS02-IN05: RECYCLING: Depository room
p) Measure FN-DS02-IN06: FOOD: Measuring the amount of bio waste
q) Measure FN-DS02-IN08: FOOD: Reminders about reducing waste in the canteen

Table 23.- Measures related to the waste environmental sector.

Green spaces

The most common measures concerning green spaces envisage tree planting, usually following SCC meetings, which had identified outdoor areas potentially suitable for tree planting. Other proposed measures range from improving the performance of the school gardens, improving students' knowledge about gardening, and analysing the benefits that shade provided by trees can provide in terms of improved comfort. This category included 11 measures, most of which were associated with gardening and increasing the vegetation in unused outdoor spaces. Some measures were motivated by the specific climatic conditions in the region in question, most notably in Portugal and Spain, where the measures were designed to ensure that the indoor temperature remains within a reasonable comfort zone. Most measures were designed to increase the quantity of CO_2 captured (to improve performance measured by the D4.3 Green Spaces scores S_{GS1} and S_{GS2}) and provide needed shade during the hotter months of the year. These measures included also those aimed to reduce indoor temperatures by planting trees in strategically chosen locations.

In addition to concrete impacts in terms of improved comfort and performance (D4.3 Energy scores S_{E1} and D4.3 Green Spaces scores S_{GS1}, S_{GS2}), these measures also aim at improving the

understanding among various actors at the demonstration site concerning the benefits of shade from vegetation, such as reduced demand for cooling, which is responsible for most of the energy consumption at the schools in Spain and Portugal.

Measure name
Measure SP-DS01-IN06: Pergolas with vegetation
Measure SP-DS01-IN07: Garden box
Measure SP-DS02-IN01: Umbralejo Field Trip - Experiential environmental education
l. Measure SP-DS02-IN02: Linking the school garden with sustainable food styles
Measure SP-DS02-IN07: Planting trees in the school
Measure SP-DS02-IN09: Expand the school garden: The garden as "Pride of the school"
6. Measure PT-DS02-IN03: Reactivate the school's biological garden
8. Measure PT-DS02-IN04: Raising awareness of the role of green species in air quality
4. Measure PT-DS03-IN06: "Technical + Green" Project

Table 24.- Measures related to green spaces environmental sector.

Air quality

Many of the proposed measures seek to increase classroom comfort, most often via the installation of sensors and monitoring systems that help in the management of elements such as doors, windows, and air conditioning. Measures such as structural changes in classrooms or other school spaces often have the dual benefit of improving air quality and reducing energy consumption. Other measures related to air quality measurement have an awareness-raising and collective-competence purpose, such as participatory air quality monitoring, whereby students are expected to gain awareness, skills and knowledge about the importance of air quality in common spaces.

Measure name
14. Measure SP-DS01-IN10: Nebulised water assisted temperature controlled
m. Measure SP-DS02-IN05: Making the invisible visible: participatory air quality monitoring with PurpleAir sensors. Citizen science at school
n. Measure SP-DS02-IN08: Installation of high quality insulating windows
5. Measure PT-DS01-IN05: Implement double-glazed windows and thermal blinds
Measure PT-DS03-IN04: Installation of air quality sensors in classrooms
Measure SP-DS03-IN03: In-door spaces reform

Table 25.- Measures related to air quality environmental sector.

Food Management

Proposals in this category are designed to teach students about the implications of food consumption habits and food supply chain for health and sustainability. The general aim of these measures is educational, as students are invited to engage in specific activities such as those proposed in Measure FN-DS03-IN02: DISCUSSIONS AND COACHING ON SUSTAINABILITY AND CURRICULA DEVELOPMENT WITH TEACHERS AND STUDENTS: Sustainability breakfast: ecological sustainability and curriculum work. or developing programmes such as those

proposed in Measure PT-DS03-IN09: "Bio Técnico" Project and Measure SP-DS03-IN12: Don't waste food. Another group of measures within this category is related to the care and management of green spaces, notably those promoting gardening skills and knowledge.

Measure name
o. Measure SP-DS02-IN02: Linking the school garden with sustainable food styles
Measure SP-DS02-IN09: Expand the school garden: The garden as "Pride of the school"
7. Measure PT-DS02-IN03: Reactivate the school's biological garden
Measure PT-DS03-IN09: "Bio Técnico" Project
z. Measure SP-DS03-IN11: Designing a more sustainable food system at the university
Measure SP-DS03-IN12: Don't waste food
n) Measure FN-DS01-IN07: Attitude: Vegetarian cooking recipes contest
Measure FN-DS03-IN02: DISCUSSIONS AND COACHING ON SUSTAINABILITY AND CURRICULA DEVELOPMENT WITH TEACHERS AND STUDENTS: Sustainability breakfast: ecological sustainability and curriculum work.
r) Measure FN-DS02-IN06: FOOD: Measuring the amount of bio waste
s) Measure FN-DS02-IN07: FOOD: Selling leftover food
t) Measure FN-DS02-IN08: FOOD: Reminders about reducing waste in the canteen
Measure FN-DS02-IN09: FOOD: Making an address and an inquiry about the quality of plant-based food in schools

Table 26.- Measures related to food management environmental sector.

Mobility

The mobility-related measures included the analysis of the sustainability of the local transport networks, in order to help students make more sustainable choices, and to advocate for infrastructure improvements like construction of cycle pathways or bus stops that connect the school students' neighbourhoods with each other. Awareness-raising measures, such as those aimed at increasing the use of bicycles, were likewise among the suggested measures. Structural measures included for instance Measure PT-DS03-IN03: Remove cars from the Alameda campus, designed to increase the transport score S_{T1} (see D4.3). Finally, measures for encouraging the use of public transport and thereby improve performance on indicators such as S_{T3} and S_{T4}.

Measure name
4. Measure PT-DS02-IN02: Learning how to drive a bicycle
aa. Measure SP-DS03-IN13: Promote walking

Table 27.- Measures related to mobility environmental sector.

7.3.2 Other measures oriented to change the curricula, academic strategies, etc.

The measures in this category seek, in one way or another, to introduce new sustainability content in school and university curricula, or improve the existing content. These measures were suggested at all educational levels. The objectives are to promote changes in current educational systems or directly in the involved individuals by engaging them in extracurricular activities or by including specific sustainability contents in the curricula. Examples include the creation of

master's degrees and doctoral studies in the field of sustainability, the development of applied research on campus sustainability and the increase in the number of scientific publications Measure PT-DS03-IN02: Master and doctoral theses in the field of sustainability, Measure RM-DS01-IN02: (Tr Trainers) Training for trainers (sustainability dedicated course) or Measure FN-DS03-IN05: FROM SUSTAINABILITY COMPETENCES IN CURRICULA TO PRACTICE AND PEDAGOGY: Pilot course and prepairing material on sustainability competences for psychology students.. On the other hand, measures like Measure SP-DS02-IN01: Umbralejo Field Trip - Experiential environmental education, Measure PT-DS02-IN02: Learning how to drive a bicycle or Measure FN-DS01-IN05: Attitude: Educational study day for teachers are focused on changing people through participation in information and "awareness diaries" to encourage students' critical thinking.

Measure name
Measure SP-DS01-IN04: Environmental programs. Sustainability awareness. Dynamic awareness.
Measure SP-DS01-IN05: Sustainability research FAB-IDI program
Measure SP-DS02-IN01: Umbralejo Field Trip - Experiential environmental education
Measure SP-DS02-IN04: Visit to the municipal composting plant + Promoting sustainable work in the school garden
Measure SP-DS02-IN10: ECF4CLIM learning space
Measure PT-DS01-IN06: Energy route: ADENE
Measure PT-DS01-IN07: Integrate the assessment of energy consumption into the disciplines
Measure PT-DS02-IN02: Learning how to drive a bicycle
Measure PT-DS02-IN04: Raising awareness of the role of green species in air quality
Measure PT-DS02-IN07: Energy route: ADENE
Measure PT-DS02-IN08: Integrate the assessment of energy consumption into the disciplines
Measure PT-DS02-IN09: Awareness actions on the correct selective separation of waste and the impact on the environment
Measure PT-DS03-IN01: "Climate Crisis and Fair Transition"
Measure PT-DS03-IN02: Master and doctoral theses in the field of sustainability
Measure PT-DS03-IN06: "Technical + Green" Project
Measure PT-DS03-IN07: Communication and community involvement
Measure PT-DS03-IN10: "Técnico makes the difference" Project
Measure RM-DS01-IN02: (Tr Trainers) Training for trainers (sustainability dedicated course)
Measure RM-DS02-IN02: (Tr Trainers) Training for trainers (sustainability dedicated course)
Measure RM-DS02-IN05: (Active) Supporting the activities of groups approaching sustainability
Measure RM-DS03-IN03: Teacher training (courses) in the field of sustainability
Measure RM-DS03-IN06: (Extracurricular) Extending the extracurricular activities regarding sustainability (thematic visits, actions in nature, greening)
Measure RM-DS04-IN01: Programme "train the trainers" for sustainability
Measure RM-DS04-IN02: Development of educational materials for sustainability
Measure SP-DS03-IN07: Facilitate transversal learning spaces
Measure SP-DS03-IN08: Promote environmental volunteers on Campus
Measure SP-DS03-IN09: Make visible data on environmental impacts
Measure SP-DS03-IN10: Repository of good practices
Measure FN-DS01-IN02: A CLEAN ENVIRONMENT: Instruction and campaign
Measure FN-DS01-IN03: A CLEAN ENVIRONMENT: Reward for success
Measure FN-DS01-IN05: Attitude: Educational study day for teachers
Measure FN-DS01-IN06: Attitude: Information for students

Measure FN-DS01-IN08: Attitude: Art supplies storage room rearranged and in order
Measure FN-DS01-IN09: Strategy for fostering collective will-formation for sustainability among personnel
Measure FN-DS03-IN01: DISCUSSIONS AND COACHING ON SUSTAINABILITY AND CURRICULA DEVELOPMENT WITH TEACHERS AND STUDENTS: Seminar and a panel discussion on sustainability and curricula, dialogue between personnel and students.
Measure FN-DS03-IN03: DISCUSSIONS AND COACHING ON SUSTAINABILITY AND CURRICULA DEVELOPMENT WITH TEACHERS AND STUDENTS: Coaching students and teachers in promotion of sustainability competences and discussions.
Measure FN-DS03-IN04: DISCUSSIONS AND COACHING ON SUSTAINABILITY AND CURRICULA DEVELOPMENT WITH TEACHERS AND STUDENTS: Contacting curriculum development representatives.
Measure FN-DS03-IN05: FROM SUSTAINABILITY COMPETENCES IN CURRICULA TO PRACTICE AND PEDAGOGY: Pilot course and prepairing material on sustainability competences for psychology students.
Measure FN-DS03-IN06: FROM SUSTAINABILITY COMPETENCES IN CURRICULA TO PRACTICE AND PEDAGOGY: Preparing concrete teaching and study materials of each step of the Roadmap.
Measure FN-DS03-IN07: FROM SUSTAINABILITY COMPETENCES IN CURRICULA TO PRACTICE AND PEDAGOGY: Pedagogical Escape Room "Save the Planet" for students and teachers about the Roadmap for Sustainability Competences.
Measure FN-DS02-IN01: RECYCLING: Advertisement
Measure FN-DS02-IN10: Designing a strategy for sustainability education for the whole school

*Table 28.- measures oriented to change the curricula, academic strategies, etc.*

7.4. Expected impact of measures

Within our preliminary analytical framework and in this early implementation stage, the research team (in collaboration with the demonstration sites) sought to elaborate an approach for anticipating the expected impact of the selected measures. This preliminary approach will be redefined and further developed along WP5 through our iterative feedback process.

- Environmental performance (change in the conditions). This group consists of measures including the installation of new equipment, improvement of infrastructure, and measuring and monitoring of environmental performance. These measures can be implementated by a single individual or a small group, provided that the group or individual possesses sufficient resources and decision-making power on the measure in question. The concrete physical changes can be either with the knowledge and skills either already available or acquired through a learning process during the implementation. Examples of measures in this category include Measure SP-DS02-IN08: Installation of high quality insulating windows, Measure SP-DS01-IN06: Pergolas with vegetation, Measure RM-DS03-IN05: (Digital) Extending the school digitalisation, Measure RM-DS02-IN01: (Solar hot Water) Installation of solar panels for water heating or Measure SP-DS03-IN02: Installing energy-saving mechanisms.

- Individual competences (change in the people). These measures aim at promoting critical thinking among students and improving their knowledge through dissemination of information, keeping of "awareness diaries", or participation in events and activities like field trips and competitions. These activities are in and of themselves occasions for teaching and learning, whereby students seek solutions to diverse sustainability-related problems. These processes are expected to help students to acquire knowledge, skills, and attitudes that can in turn translate into desirable and lasting changes in students' behaviour. Measures in this category include Measure SP-DS03-IN08: Promote environmental volunteers on Campus, Measure PT-DS03-IN07: Communication and community involvement, Measure PT-DS01-IN02: Field trips related to water or Measure FN-DS03-IN02: DISCUSSIONS AND COACHING ON SUSTAINABILITY AND CURRICULA DEVELOPMENT WITH TEACHERS AND STUDENTS: Sustainability breakfast: ecological sustainability and curriculum work..

- Collective competences (change in the system). This group includes measures designed to integrate sustainability-related elements in regulations and curricula, creating master or doctoral sustainability programs, digitalization and software development. Ultimately, these measures are expected to help turn the norms and principles of sustainability into taken-for-granted quasi-automatic collective behavioural patterns within the organisations in question. Given the interrelatedness of collective and individual sustainability competences, most of the suggested measuresabove-descibed categories – which primarily target environmental performance or individual competences – also serve the development of collective competences. Measures in the category mainly targeted at collective competences include Measure FN-DS03-IN04: DISCUSSIONS AND COACHING ON SUSTAINABILITY AND CURRICULA DEVELOPMENT WITH TEACHERS AND STUDENTS: Contacting curriculum development representatives., Measure FN-DS02-IN10: Designing a strategy for sustainability education for the whole school, Measure SP-DS03-IN11: Designing a more sustainable food system at the

university and Measure RM-DS04-IN02: Development of educational materials for sustainability.

Based on this very preliminary categorization measures by their expected primary impact, the distribution of the measures by country was:

MEASURES BY THEIR EXPECTED IMPACT AND BY COUNTRY
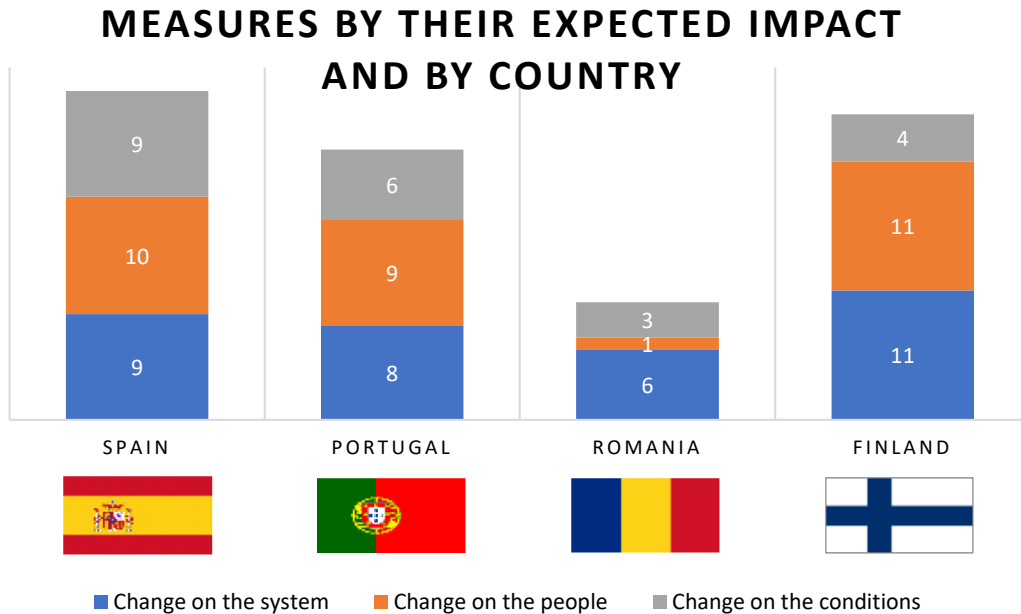
Graph 3.- Expected impact of the selected measures by country.

Next, we include the categorization of the expected impacts according to the area that the measure primarily targets.

MEASURES BY THEIR EXPECTED IMPACT AND BY PRIMARY TARGET SECTOR
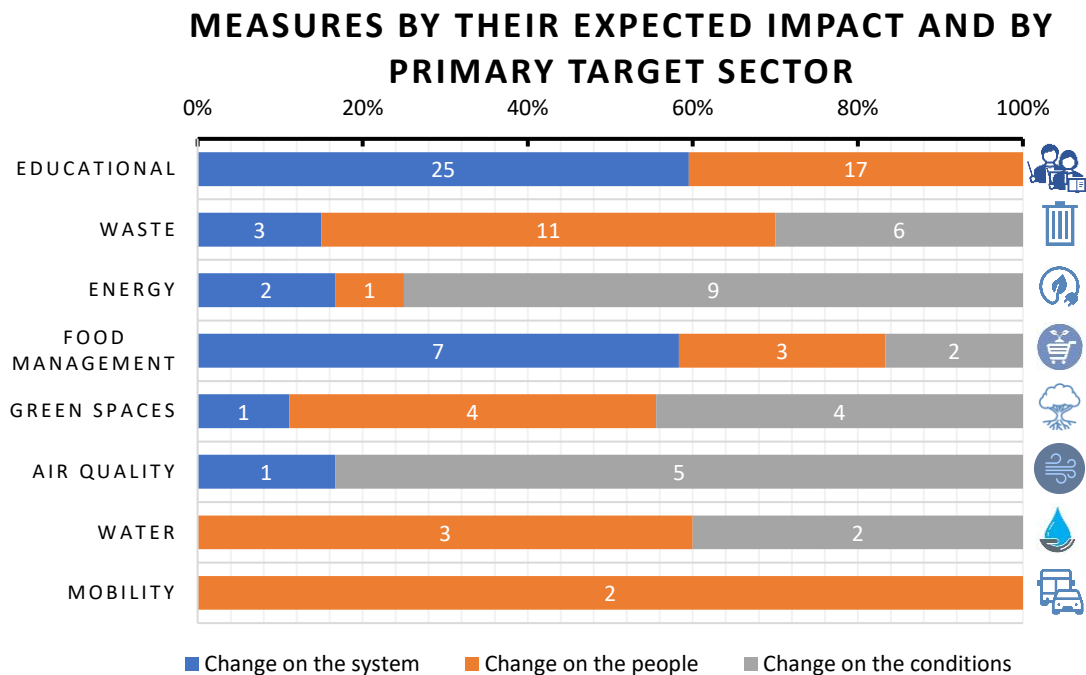
Graph 4.- Expected impact of the selected measures by environmental sector.

The classification according to the expected impact followed the same reasoning as shown in Figure 4, and in Graph 2, that is, any given measure can be classified under more than one sector. Meassures emphasizing educational issues focus in changing the sytem and the people. Measures emphasizing air quality and/or energy clearly focus on chanign the conditions; while mobility focus on changing people.
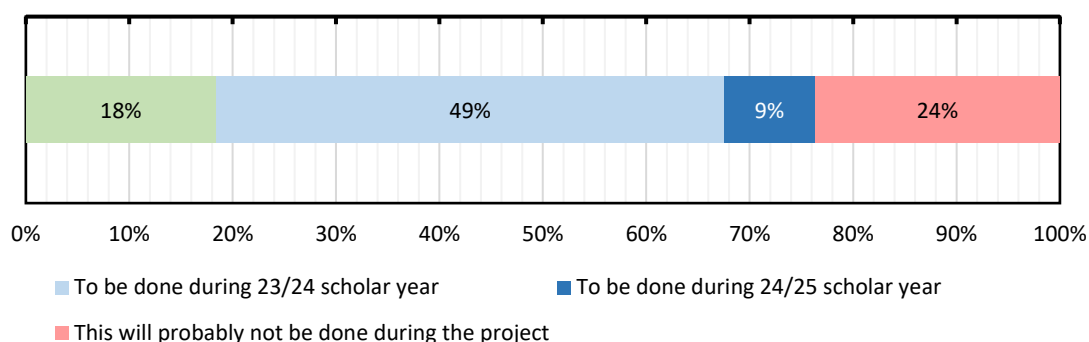
7.5. Next steps and planning.

The demonstration sites will implement the selected measures in close collaboration with the research teams. This co-implementation process is in itself expected to foster the acquisition of sustainability competences. The evidence that will be generated through the participatory and deliberative process will also support the evaluation of the EFC4CLIM Roadmap. The implementation of the measures will, therefore, be used as a tool for acquiring individual and collective competences as well as for assessing their progress.

The planning and monitoring of the execution of the measures will be reported in D5.2. For this purpose, the monitoring will help to define and analyse the starting point, the implementation procedures, and the impact on the demonstration site teams. An Excel tool will be made available for demonstration site teams to help with this process. A draft of the tool is included in **3: IMPLEMENTATIONS TEMPLATE DRAFT**.

When proposing and selecting the measures, the SCC teams also outlined a preliminary plan for the timing of execution of the measures. The decision was made by considering aspects like the resources and skills available, and other actions underway at the demonstration site in question. The demonstration sites also identified measures that will probably not be implemented during the project lifetime due to lack of time.

Overview of the timing of the measures

| 18% | 49% | 9% | 24% |

- To be done during 23/24 scholar year
- To be done during 24/25 scholar year
- This will probably not be done during the project

Graph 5.- Global overview of planned execution divided in scholar years.

According to the conclusions raised in the 2nd SCC meeting, most measures will be implemented, in close collaboration with school boards, during the school year 2023-24, as can be seen in Graph 5.

8. CONCLUSIONS

Through our hybrid participatory co-design process, 87 measures were selected for implementation at our demonstration sites. In addition, 27 more proposals suggested by the SCCs committees were considered difficult to implement, so they were discarded at this stage. The monitoring of the measures is designed to be part of the validation strategy of the ECF4CLIM methodology. Through our hybrid participatory process, the demonstration sites have analysed in depth each proposal originating from the Sustainability Competence Teams meetings (as described in D4.4). Also, the template developed in WP5 allowed the demonstration sites to reflect on the relationships between the selected measures and the steps in the initial ECF. The measures were identified through a dynamic participatory process whereby the demonstration sites were guided to analyse their current sustainability competences and environmental performance. Following this analysis, the demonstration sites were asked to propose behavioural and structural changes, and then decide which measures they considered the most suitable in each case. This way, the process itself allowed the demonstration sites to acquire sustainability competences.

The guidelines for information gathering and templates for the collection of information will help generate meaningful empirical evidence, while the analysis and monitoring can in and of itself improve the individual and collective sustainability competences.

As for the findings concerning the selected measures, the connections between the different dimensions of sustainability deserves to be highlighted. Most structural measures try to empower school energy savings by improving the existing infrastructures. These structural measures are expected to also promote behavioural changes as the individuals involved obtain information of their own consumption patters, and learn about their implications for sustainability. Moreover, the processes of planning, implementing, and evaluating infrastructure-improvement measures can help consolidate lasting collective practices and embed norms of collective behaviour in favour of sustainability.

As for the links with the Roadmap, out of the 87 measures that will be implemented during the project, 66 seek to ENGAGE the educational community, 63 create CONNECTIONS between disciplines, 46 ENVISION futures, and 65 are oriented to specific ACTIONS. Moreover, 13% of the measures which do not incur costs were suggested for implementation after the end of the project.

Based on the methodology adopted to describe the measures, a draft template has been created for the implementation process. This tool will identify, describe, and organise the different tasks required for the successful implementation of each measure. The descriptions of tasks will include aspects such as timing, cost, necessary resources, attribution of responsibilities, risks, and the essential preconditions for the proposed measure to reach its objectives. In doing so, the template will provide a baseline for on the one hand enhancing sustainability competences along the four Roadmap steps defined in D3.3, and on the other hand for the continuous and ex-post evaluation of the measures. In particular, the actors on the demonstration sites will be able to critically re-evaluate their initial assumptions concerning the essential "success factors" and, as needed, adapt these along the way as new understanding and knowledge about the measure accumulates.

9. REFERENCES

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10. ANNEX 1: TEMPLATE FORMAT

Name of measure	
Country	
School	
Type of measure	Behavioural

Description	
Objectives	

Measure state	Done during 22/23 scholar year	Execution timing	
Will there be any costs?	Yes		

Relation to RoadMap competence/s	Engagement: Why and how to promote sustainability? ☐	Connections: How to frame the problem? ☐	Vision: What are the possible futures in our context? ☐	Action: How to proceed? ☐
(Select those areas that fix more with the measure)	The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure				
Additional information				

11. ANNEX 2

Romania

c. Nicolae Balcescu School, Dragasani

1. Measure RM-DS01-IN01: (Solar hot Water) Installation of solar panel for water heating

Name of measure	(Solar hot Water) Installation of solar panels for water heating			
Country	Romania			
School	Nicolae Balcescu School, Dragasani			
Type of measure	Structural/Behavioural			
Description	The project will support installing solar heating system and integrate it in the water system of the canteen. Additionally, an educational programme to understand solar energy will be developed. During the installing process some small video will be produced to see how it is made/working. The educational materials will be created by co-design (ECF4CLIM team, teachers, and students). It will be used in the regular lessons to exemplify the real applications. Students will be invited to create materials to disseminate the experience (to future students, to other schools, to the local community, etc.)			
Objectives	•To promote the use of renewable energy and to reduce the emissions and the costs. •To share how the solar energy may be easily harvested at school and household levels. •To promote the energy shift from fossil fuel to green alternative and to improve the existing knowledge. •To stimulate the learning by communication of the results. •To create appropriate messages to spread the use of solar heat.			
Measure state	To be done during 23/24 scholar year	Execution timing		March 2024
Will there be any costs?	Yes			
Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	A significant reduction of the consume of gas and electricity together with better sustainability performances of the school. Spreading information about the solar heating in the local community, together with the achieved performances. Creating the competences to understand the solar energy, including how to use it.			
Additional information	Approximated costs of 10000€ 			

2. Measure RM-DS01-IN02: (Tr Trainers) Training for trainers (sustainability dedicated course)

Name of measure	(Tr Trainers) Training for trainers (sustainability dedicated course)			
Country	Romania			
School	Nicolae Balcescu School, Dragasani			
Type of measure	Behavioural			
Description	In the current educational framework of Romania for primary/secondary schools, considering the limited opportunities of an optional courses, a proposal for a transversal approach of sustainability involving some disciplines (Physics, Chemistry, Mathematics, Geography, Biology) will be developed and tested. A dedicated training course will be organised to help the teachers to cooperate for building the competences for sustainability by introducing and harmonizing different contributions into a more holistic view. The course will be elaborated by the school in cooperation			
Objectives	•To identify the envisaged set of competences for 7th grade level •To define the appropriated contributions of the disciplines (Physics, Chemistry, Mathematics, Geography, Biology) to be included in the course •To design and run the training course with the teachers •To develop the course, including the implementation			
Measure state	To be done during 24/25 scholar year	Execution timing		2 years
Will there be any costs?	Yes			
Relation to RoadMap competence/s (Select those areas that fix more with the measure)	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	The teachers will receive valuable information, including methodological elements, for the identification of the sustainability contents to be included in their disciplines. Illustrative examples for teaching sustainability will be developed. The teachers will be able to use the knowledge in the current education in the school, for different grades. The teachers will receive information on the methods and tools to improve the cooperation level. A support will be offered to the design of the course, implementation, and measurement of the impact.			
Additional information	Approximated costs of 3000€			

3. Measure RM-DS01-IN03: (Water Sensors) Water sensors at the sanitary facilities

Name of measure	**(Water Sensors) Water sensors at the sanitary facilities**
Country	Romania
School	Nicolae Balcescu School, Dragasani
Type of measure	Structural/Behavioural
Description	In all the sanitary rooms the old sinks will be replaced with modern ones having incorporated sensors. Before the installing a detailed measurement of the consumption will be recorded as reference level, in order to identify the impact. The students will be informed by large posters placed in the toilets about the usual water consumption in daily life and the importance of saving water. A dedicated material on the water and water saving in the condition of climate changes will be developed and recommended to be used for different lessons.
Objectives	•To modernize the toilets of the school by installing sinks with sensors to prevent water wasting •To increase the awareness on the importance of water saving •To understand the impacts of the implemented measure •To spread the information to the local community and other schools

Measure state	This will probably not be done during the project	**Execution timing**	6 months
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☐ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	A significant reduction of the consume of water with impact in the sustainability performances of the school. Awareness of students about the importance of saving water. Discussing the value of the water and way to reduce the wasting.
Additional information	Approximated costs of 4000€

4. Measure RM-DS01-IN04: (Lighting) Intelligent lighting

Name of measure	(Lighting) Intelligent lighting
Country	Romania
School	Nicolae Balcescu School, Dragasani
Type of measure	Structural/Behavioural

Description	Changing the entire lighting system of the school with modern, low consumption devices. The deeming function will be available at classroom level. Movement sensors will be installed and a centralised system will monitor the school in order to obtain the optimal environment for the students.
Objectives	• To create the conditions for energy saving and an optimal environment for learning in all spaces of the school. • To understand the capabilities of intelligent lighting, to increase the knowledge of the educational community on the potential of saving, to reinforce the awareness on the potential of efficient interventions • To communicate on the measures with local community and other schools.

Measure state	This will probably not be done during the project	**Execution timing**	2 years
Will there be any costs?	Yes		

Relation to RoadMap competence/s	Engagement: Why and how to promote sustainability? ☐	Connections: How to frame the problem? ☑	Vision: What are the possible futures in our context? ☑	Action: How to proceed? ☑
(Select those areas that fix more with the measure)	The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	A significant reduction of the consume of electricity together with better sustainability performances of the school. Spreading information about the efficiency of intelligent lighting in the local community, together with the achieved performances. Create the conditions for a better understanding and for practical use of the automation, energy efficient devices, collective measures.

Additional information	Approximated costs of 10000€

5. Measure RM-DS01-IN05: (Waste) Improvement of the selective waste management

Name of measure	(Waste) Improvement of the selective waste management
Country	Romania
School	Nicolae Balcescu School, Dragasani
Type of measure	Structural/Behavioural
Description	Small bins will be purchased and placed in the schools (for each classroom) to collect separately the main recyclable e.g. paper and plastic, directly at the level of classroom. Currently only large bins are available in the school yard. During SCT and SCC this distance between classroom and large bins was considered as a main cause to mix the wastes. The students will create a register to note the amount of each waste fraction transferred from the classroom to the large bins. The monthly discharge will be discussed in the lessons.
Objectives	•To transfer the sorting responsibility at the level of classrooms (a better identification of the good practices and dysfunctionalities) •To encourage a competition between classrooms on waste management performances •To collect data on the recycling potential and use them in the lessons •To increase the awareness on the values of waste management and circular economy •To stimulate the learning by communication of the results.

Measure state	This will probably not be done during the project	**Execution timing**	
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☐ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	A significant reduction of the mixing of wastes (voluntary and un-voluntary) will be produced by shifting the focus from school level to classroom level. A better understanding of the potential of recycling at the level of the classroom and the reduction of the final deposited waste. Spreading information about the performances of the new waste system at the level of local community, together with the achieved performances. Competences to understand and for practical use of the circular economy.

Additional information	Approximated costs of 6500€

6. Measure RM-DS01-IN06: (Energy building) Energy monitoring system in the building

Name of measure	(Energy building) Energy monitoring system in the building
Country	Romania
School	Nicolae Balcescu School, Dragasani
Type of measure	Structural/Behavioural
Description	A centralised monitoring system will be installed in order to control the energy consumption in all buildings of the school. Four components will be monitored and controlled: water, heating, cooling, lighting. A digital interface will ensure the communication between sensors (light, temperature, water, movement) and the actuators. The interface will be developed according with the peculiarity and needs of the school. The project should be coupled with some modernization of the school especially of the heating and water system to support the centralised monitoring. For the beginning, a specialised company will develop the feasibility study in order to plan correctly the resources and solutions.
Objectives	•To optimize the energy consumption of the school and to increase the environmental performances in condition of a appropriate comfort for the educational process •To reduce the carbon footprint of the school •To learn and teach about the potential of automation in saving energy and contribute to a better environment •To stimulate the learning by communication of the results.

Measure state	This will probably not be done during the project	Execution timing	
Will there be any costs?	Yes		

Relation to RoadMap competence/s	Engagement: Why and how to promote sustainability? ☑	Connections: How to frame the problem? ☑	Vision: What are the possible futures in our context? ☐	Action: How to proceed? ☐
(Select those areas that fix more with the measure)	The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	A significant reduction of the consume of electricity and water together with better sustainability performances of the school. Spreading information about the potential of automatic control to other schools, to the local community, together with the achieved performances. Creating competences to understand and for practical use of the energy savings.			
Additional information	Approximated costs of 80000€			

b. *Sercaia School, (rural area) Brasov*

2. Measure RM-DS02-IN01: (Solar hot Water) Installation of solar panels for water heating

Name of measure	(Solar hot Water) Installation of solar panels for water heating
Country	Romania
School	Sercaia School, (rural area) Brasov
Type of measure	Structural/Behavioural
Description	The project will support installing solar heating system on the roof of the school, and the integration it in the water system of the school. In order to increase the impact of the measures, an educational programme dedicated to the use of solar energy will be developed. During the installing process some small video will be produced to explain how it is installed and how it works. The educational materials will be created by co-design (ECF4CLIM team, teachers, and students). It will be ready to be used in the regular lessons or in a course dedicated to sustainability aspects. Students will be invited to create materials to disseminate the experience (to future students, to other schools, to the local community, etc.)
Objectives	•To increase the comfort of the school by introducing hot water. •To exemplify how the quality of life may increase without significant increase of carbon emissions. •To promote the use of renewable energy inside the community of the village. •To share how the solar energy may be easily harvested. •To promote the energy shift from fossil fuel to green alternative and to improve the existing knowledge. •To stimulate the learning by communication of the results.

Measure state	To be done during 23/24 scholar year	**Execution timing**	March 2024
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☐ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	A good example to increase the quality of life without increase the carbon emissions together with the improvement of the sustainability performances of the school. Spreading information about the solar heating in the local community. Creating the competences to understand the solar energy, including how to use it.

Additional information	Approximated costs of 10000€

2. Measure RM-DS02-IN02: (Tr Trainers) Training for trainers (sustainability dedicated course)

Name of measure	(Tr Trainers) Training for trainers (sustainability dedicated course)			
Country	Romania			
School	Sercaia School, (rural area) Brasov			
Type of measure	Behavioural			
Description	In the current educational framework of primary/secondary schools from Romania, it is possible to create an optional course dedicated to sustainability, including an inter- or trans-disciplinary approach. One of the barriers (identified during SCT and SCC meetings) consists of the lack of the methodological measures and associated training to develop and teach such a course. The situation is more difficult in the rural area due to the reduced number of schools and teachers at the level of a local community. A training course will be designed and implemented with the purpose of the development of a sustainability course. The course may be approached by a teacher from Geography, Biology, or Physics or in a multi-disciplinarity approach. The course will be elaborated by in cooperation by ECF4CLIM project, the teachers of the school and with the support of the County school inspectorate.			
Objectives	•To identify the appropriate set of competences for 6th grade level to be approached and how to integrate them in an holistic view •To design and run the training course with the teachers •To develop the course, including the implementation •To measure the effectiveness after one year of implementation			
Measure state	To be done during 24/25 scholar year	Execution timing		2 years
Will there be any costs?	Yes			
Relation to RoadMap competence/s (Select those areas that fix more with the measure)	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	The teachers will receive valuable information, including methodological elements, for the construction of a sustainability course. Illustrative examples for teaching sustainability will be developed. The teachers will be able to use the knowledge in the current education in the school, for different grades. The teachers will receive information on the methods and tools to improve the participation of the students.			
Additional information	Approximated costs of 3000€			

3. Measure RM-DS02-IN03: (LED Lighting) LED lighting in the school

Name of measure	(LED Lighting) LED lighting in the school
Country	Romania
School	Sercaia School, (rural area) Brasov
Type of measure	Structural/Behavioural

Description	Replacing all lighting devices of the school with a system based on LED lighting. The deeming function will be available at classroom level.
Objectives	•To create the conditions for energy saving and an optimal environment for education in all spaces of the school. •To understand the capabilities of LED lighting, to increase the knowledge of the educational community on the potential of saving, to reinforce the awareness on the potential of efficient interventions •To communicate on the measures with local community and other schools.

Measure state	This will probably not be done during the project	**Execution timing**	2 years
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	A significant reduction of the consume of electricity together with better sustainability performances of the school. The new lighting system will be based on durability, reliability and excellent functionality. Spreading information about the efficiency of LED lighting and deeming function in the local community, together with the achieved performances. Create the conditions for a better understanding and for practical use of the automation and energy efficient devices.

Additional information	Approximated costs of 4000€

4. Measure RM-DS02-IN04: (Sustainability course) Sustainability of the planet (course)

Name of measure	**(Sustainability course) Sustainability of the planet (course)**
Country	Romania
School	Sercaia School, (rural area) Brasov
Type of measure	Behavioural
Description	A dedicated course to understand the sustainability at planetary level will be designed to be implemented for 7th grade students. The course will be introduced based on the opportunities offered by the current educational framework for the optional courses. The course will explore how human society may be impacted by global changes, ecosystem degradation and resource limitations. The course will approach the ecosystems, climate changes, energy, agriculture, water, population, planet boundaries. The course will be elaborated by the school in cooperation with County school inspectorate and with support of ECF4CLIM project.
Objectives	• To define the objectives, structure, the set of competences and the evaluation • To develop the lessons and the materials in support of teaching and learning • To plan the implementation and implement the course for 7th grade students • To measure the impact after one year of implementation

Measure state	This will probably not be done during the project	**Execution timing**	
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	A complete course approaching the sustainability at the planetary level will be developed for the first time, as an optional course, for 7th grade students. The course may be used many times and also may be disseminated to other similar school at the level of the county. The involved teachers will receive valuable information, including methodological elements, for the implementation of the course and to identify possible improvements. A support will be offered to the design of the course, implementation, and measurement of the impact.
Additional information	Approximated costs of 3000€

5. Measure RM-DS02-IN05: (Active) Supporting the activities of groups approaching sustainability

Name of measure	(Active) Supporting the activities of groups approaching sustainability			
Country	Romania			
School	Sercaia School, (rural area) Brasov			
Type of measure	Structural/Behavioural			
Description	School initiatives and local community initiatives are usually supported by small groups consisting of active students and citizens, sometime having difficulties in attracting the necessary resources (funds, participants). Such groups may create the growing spots for sustainability in conditions of a real support from the schools, local authorities, or projects. The school will identify the initiatives, will evaluate the potential impact, will prioritize, and will offer support for implementation.			
Objectives	•To support the valuable initiatives of small groups from the school, or even from the local community •To create the capacity of debate and construction of the decision in condition of the limited resources constraint •To improve the cooperation between different groups, students, citizens •To promote the initiative and disseminate the results			
Measure state	To be done during 24/25 scholar year	Execution timing		September 2024 - June 2025
Will there be any costs?	Yes			
Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	A robust chance for growth of the valuable ideas to improve the sustainability of the school, and/or community will be developed. On-time support will be offered for the best identified ideas with great impact in the trust in collective actions. Improvement of the cooperation between members of the society. Increasing of the visibility and value of the school.			
Additional information	Approximated costs of 4000€ 			

6. Measure RM-DS02-IN06: (Water Sensors) Water sensors at the sanitary facilities

Name of measure	(Water Sensors) Water sensors at the sanitary facilities
Country	Romania
School	Sercaia School, (rural area) Brasov
Type of measure	Structural/Behavioural
Description	In all the sanitary rooms the old sinks will be replaced with modern ones having incorporated sensors. Before the installing a detailed measurement of the consumption will be recorded as reference level, in order to identify the impact. The students will be informed by large posters placed in the toilets about the usual water consumption in daily life and the importance of saving water. A dedicated material on the water and water saving in the condition of climate changes will be developed and recommended to be used for different lessons.
Objectives	•To modernize the toilets of the school by installing sinks with sensors to prevent water wasting •To increase the awareness on the importance of water saving •To understand the impacts of the implemented measure •To spread the information to the local community and other schools

Measure state	This will probably not be done during the project	**Execution timing**	6 months
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☐ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	A significant reduction of the consume of water with impact in the sustainability performances of the school. Awareness of students about the importance of saving water. Discussing the value of the water and way to reduce the wasting.			
Additional information	Approximated costs of 2000€			

c. Lulia Zamfiresch High School, Mioveni

5. Measure RM-DS03-IN01: (Water Sensors) Infrastructure improvement - water sensors at the sanitary facilities

Name of measure	(Water Sensors) Infrastructure improvement - water sensors at the sanitary facilities
Country	Romania
School	Iulia Zamfirescu High School, Mioveni
Type of measure	Structural/Behavioural
Description	In all the sanitary rooms a replacing classical water sinks with sensor-equipped ones is targeted offering some advantages combining efficiency, hygiene, and convenience. These sensor-equipped sinks utilize technology to detect the presence of hands or objects and automatically control the flow of water. A reference consumption for water will be measured before the intervention, in order to quantify the impact. An educational directly dedicated part will be added by communication and educational activities. Large posters will be placed in the toilets and will illustrate the usual water consumption in daily life and the importance of saving water. A dedicated material on the water and water saving in the condition of climate changes will be developed and recommended to be used for different lessons. The students will be involved in the communication of the intervention measure and its impacts targeting other schools form town and region.
Objectives	•To demonstrate the effectivity of water conservation by simple measures avoiding the excessive water wastage •To implement a better hygiene and cleanliness by reducing the risk of cross-contamination due to the required contact in case of classical device •To save time in the handwashing process by eliminating the need to turn the faucet on and off manually •To increase the accessibility for people with limited mobility by simplification of the faucet handles, making it easier for everyone to use the sink comfortably •To reduces energy consumption by automatic shut-off after a certain period of inactivity eliminating the need for continuous heating of the water •To contribute to the global effort of conserving water resources and mitigating the environmental impact of human activities •To increase the awareness by understanding the impacts of the implemented measure •To spread the information to the local community and other schools

Measure state	To be done during 23/24 scholar year	**Execution timing**	January 2024
Will there be any costs?	Yes		

Relation to RoadMap competence/s	Engagement: Why and how to promote sustainability? ☑	Connections: How to frame the problem? ☑	Vision: What are the possible futures in our context? ☑	Action: How to proceed? ☑
(Select those areas that fix more with the measure)	The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

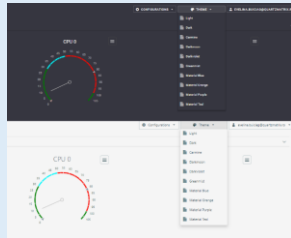| **Expected impact of the measure**	A significant reduction of the consume of water and energy with impact in the sustainability performances of the school. An increased hygiene and cleanliness of the sanitary rooms of the school will be obtained. Awareness of students about the importance of saving water. Discussing the value of the water and way to reduce the wasting.
Additional information	Approximated costs of 4500€

6. Measure RM-DS03-IN02: (Solar hot Water) Infrastructure improvement - installation of solar panels for water heating

Name of measure	(Solar hot Water) Infrastructure improvement - installation of solar panels for water heating
Country	Romania
School	Iulia Zamfirescu High School, Mioveni
Type of measure	Structural/Behavioural

Description	The project will support the installing of a solar heating system for the water used in the sanitary rooms in order to reduces the dependence on non-renewable energy sources (natural gas) contributing to a cleaner and more sustainable future. Additionally, an educational programme to understand solar energy will be developed. During the installing process some small video will be produced to see how it is made/working. The educational materials will be created by co-design (ECF4CLIM team, teachers, and students). A group debate (SCT and SCC) will produce some recommendations for the use of the educational material (discipline, lessons, other educational activities). The impact of the measure will be disseminated at the level of other schools in the town or region. The students will participate in the dissemination activities, especially by creating the materials.
Objectives	•To promote the use of renewable energy and to reduce the use of fossil-fuel •To produce cost savings by decreasing the gas bills •To improve the carbon footprint performance of the school •To create educational value by learning about renewable energy, solar technology, and the importance of sustainable practices an offering practical examples of how solar power can be utilized in daily life. •To offer a degree of energy independence for the school •To give a positive example for students, staff, and the community, encouraging others to adopt eco-friendly practices and support renewable energy initiatives. •To stimulate the learning by communication of the results. •To create appropriate messages to spread the use of solar heat.

Measure state	This will probably not be done during the project	**Execution timing**	
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑	Connections: How to frame the problem? ☑	Vision: What are the possible futures in our context? ☐	Action: How to proceed? ☐
	The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	A significant reduction of the consume of gas, at the level of school, is expected. The implementation will help a better carbon footprint performance of the school demonstrating the school's commitment to sustainability and environmental stewardship. Spreading information about the solar heating in the local community, together with the achieved performances. Creating the competences to understand the solar energy, including how to use it.
Additional information	Approximated costs of 10000€

4. Measure RM-DS03-IN03: Teacher training (courses) in the field of sustainability

Name of measure	**Teacher training (courses) in the field of sustainability**
Country	Romania
School	Iulia Zamfirescu High School, Mioveni
Type of measure	Behavioural
Description	The training course will increase teachers' understanding of environmental issues, the impact of human activities on the planet, and the importance of conservation and sustainable practices. This heightened awareness will enable teachers to integrate sustainability principles into their curriculum and daily practices, setting a positive example for their students. The training course will help the teachers to cooperate to understand better the envisaged competences for sustainability and how to build them (methods, tools, educational materials). The harmonization of the possible contributions of different disciplines into a view is
Objectives	•To identify the envisaged set of competences for 11th grade level •To define the appropriated contributions of the disciplines (Physics, Chemistry, Mathematics, Geography, Biology) to be included in the course •To integrate sustainability concepts into various subjects they teach, such as science, social studies, mathematics, and language arts. •To emphasize experiential learning methods, allowing teachers to participate in hands-on activities, field trips, and real-life projects related to sustainability. •To encourages teachers to take an interdisciplinary approach to education •To offer support to empower students to become responsible global citizens •To create knowledge and skills with a high potential to create a lasting impact

Measure state	To be done during 24/25 scholar year	**Execution timing**	October 2024
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	The teachers will receive valuable information, including methodological elements, for the identification of the sustainability contents to be included in their disciplines. Illustrative examples for teaching sustainability will be developed. The teachers will be able to use the knowledge in the current education in the school. The teachers will receive information on the methods and tools to improve the cooperation level and to empower the students to become responsible global citizens.

Additional information	Approximated costs of 3000€

4. Measure RM-DS03-IN04: (Energy building) Energy monitoring system in the building

Name of measure	**(Energy building) Energy monitoring system in the building**
Country	Romania
School	Iulia Zamfirescu High School, Mioveni
Type of measure	Structural/Behavioural
Description	The Energy Monitoring System (EMS) consists of a comprehensive platform designed to monitor and manage the energy consumption of the entire school building. It involves the integration of various sensors, meters, data loggers, and software applications to provide real-time insights into energy usage and efficiency. Four components will be monitored and controlled: water, heating, cooling, lighting. Energy meters are installed at critical points within the school building to collect data on consumption and transmit them to the centralized data acquisition system. This system gathers, stores, and processes the energy consumption data in real-time. It acts as a central hub for all the information received from different sources. The EMS provides a user-friendly and intuitive interface that allows school administrators, facility managers, and even students to access and visualize the energy data. The EMS allows for real-time monitoring of energy consumption, enabling instant analysis and identification of any unusual or excessive energy usage. The EMS can be programmed to generate automated alerts and notifications. Regular energy performance reports can be generated by the EMS to summarize the school's energy usage patterns, energy-saving achievements, and areas that need improvement. The EMS may be integrated with the school's building automation system, allowing for more advanced control over various systems like HVAC, lighting, and security. The project should be coupled with some modernization of the school especially of the heating and water system to support the centralised monitoring. For the beginning, a specialised company will develop the feasibility study in order to plan correctly the resources and solutions.
Objectives	•To optimize the energy consumption of the school and to increase the environmental performances in condition of appropriate comfort for the educational process •To promote energy conservation within the school building. •To identify faulty equipment or malfunctions that may lead to excessive energy consumption •To allow a real-time overall assessment of the performance of the school building's systems •To set realistic energy-saving goals and track progress towards achieving them •To learn and teach about the potential of automation in saving energy and contribute to a better environment •To stimulate the learning by communication of the results.
Measure state	This will probably not be done during the project	**Execution timing**	
Will there be any costs?	Yes

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☐ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	A significant reduction of the consume of electricity and water together with better sustainability performances of the school. Spreading information about the potential of automatic control to other schools, to the local community, together with the achieved performances. Creating competences to understand and for practical use of the energy savings.			
Additional information	Approximated costs of 80000€			

5. Measure RM-DS03-IN05: (Digital) Extending the school digitalisation

Name of measure	(Digital) Extending the school digitalization
Country	Romania
School	Iulia Zamfirescu High School, Mioveni
Type of measure	Structural/Behavioural

Description	The measure aims to consolidate the digitally integrated learning environment. Currently all the classrooms are equipped with digital boards. The school has a computer network for the informatics lessons. The measure will introduce a robust Learning Management System (LMS) that allows teachers to create and manage online courses, upload learning materials, and track student progress. The LMS will also enable students to access course content and submit assignments electronically. A repository of digital learning resources, such as e-books, interactive educational videos, and multimedia content, to enrich the curriculum and cater to various learning styles will be developed. The LMS will reinforce the on-line learning supporting virtual classrooms for distance learning and conduct webinars, allows teachers to create quizzes, tests, and examinations digitally. The LMS will support the paperless initiatives by encouraging digital note-taking, online submissions, contributing to a greener and more sustainable environment.
Objectives	•To assess the school's existing infrastructure, digital readiness, and requirements. In order to design a detailed project to extend digitalization •To upgrade the school's IT infrastructure to support the digitalization efforts (hardware, software, and network equipment) •To deploy the LMS customizing them to suit the school's specific needs •To involve parents and the local community in the project's success by organizing workshops and seminars on the benefits of digital education. •To develop a sustainability plan to ensure the long-term success of the digitalization efforts •To stimulate the dissemination of the good practices and results.

Measure state	This will probably not be done during the project	Execution timing	
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	The implemented measure will empower students with 21st-century skills, enhance educational outcomes, and create a dynamic and innovative learning environment that prepares students for the challenges of the digital age. The LMS will reduce the use of paper and will increase the communication and interactivity, involving also parents and members of the local community. The implementation will offer a good practice example for other schools.
Additional information	Approximated costs of 25000€

Name of measure	(Extracurricular) Extending the extracurricular activities regarding sustainability (thematic visits, actions in nature, greening)			
Country	Romania			
School	Iulia Zamfirescu High School, Mioveni			
Type of measure	Structural/Behavioural			
Description	A set of extracurricular activities that a school may organize to promote sustainability and environmental awareness will be selected. It consists of: (1) thematic nature visits (field trips to county level parks, nature reserves, or wildlife sanctuaries, providing students with hands-on experiences in natural environments and foster a deeper appreciation for nature and its conservation, (2) green energy tours (visits to renewable energy facilities like wind farms, solar power plants, or hydroelectric dams to educate students about alternative energy sources), (3) environmental clubs (establish student-led environmental clubs with focus on sustainability initiatives planning and executing various activities to make the school and its surroundings more sustainable), (4) eco-friendly art and craft workshops (encourage students to use recyclable materials in their art and craft projects fostering creativity while promoting eco-consciousness and waste reduction), (5) eco-friendly competitions (competitions related to sustainability, such as designing eco-friendly products, creating posters on environmental issues, or conducting research projects on climate change and its effects), (6) workshops on sustainability organised by students.			
Objectives	•To consolidate the competences obtained during the regular educational programme and enlarge the awareness on the practical value of the knowledge transferred by lessons •To support the valuable initiatives of small groups from the school, or even from the local community •To support the application of the knowledge and its transfer to dailylife •To improve the cooperation between different groups, students, citizens •To promote the initiative and disseminate the results			
Measure state	To be done during 24/25 scholar year	Execution timing	September 2024 - June 2025	
Will there be any costs?	Yes			
Relation to RoadMap competence/s	Engagement: Why and how to promote sustainability? ☑	Connections: How to frame the problem? ☑	Vision: What are the possible futures in our context? ☑	Action: How to proceed? ☑
(Select those areas that fix more with the measure)	The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	These activities go beyond traditional classroom learning and play a crucial role in shaping environmentally conscious individuals and fostering a sense of responsibility towards the planet. Thematic visits and workshops on sustainability issues expose students to real-world environmental challenges and solutions. They gain a better understanding of issues like climate change, biodiversity loss, and pollution, which helps in building environmental awareness. Actions in nature, such as field trips to natural reserves, allow students to connect with the natural world firsthand. This experiential learning fosters a deeper appreciation for nature and its beauty, promoting a sense of stewardship for the environment. Involving students in environmental clubs and organizations empowers them to take an active role in sustainability efforts. When students feel engaged and passionate about a cause, they are more likely to initiate positive changes and become environmental leaders. Engaging in extracurricular activities related to sustainability enhances students' overall development. They learn teamwork, problem-solving, critical thinking, and leadership skills while working on projects aimed at protecting the environment. The impact of these extracurricular activities can extend beyond the school years. Students who are exposed to sustainability initiatives early in life are more likely to carry these values into adulthood, leading to a generation of environmentally responsible citizens.			
Additional information	Approximated costs of 4000€			

d. University of Pitesti

5. Measure RM-DS04-IN01: Programme "train the trainers" for sustainability

Name of measure	Programme "train the trainers" for sustainability
Country	Romania
School	University of Pitesti
Type of measure	Structural/Behavioural
Description	The "Train the Trainers" program for sustainability is a comprehensive and interactive training initiative designed to equip educators and facilitators with the knowledge, skills, and resources needed to effectively teach and promote sustainability principles. Participants are introduced to the fundamental concepts such as environmental stewardship, social equity, and economic viability, fostering a holistic understanding. Trainers learn innovative and engaging teaching methodologies including interactive workshops, role-playing, case studies, and practical exercises. Participants are guided in developing comprehensive sustainability curricula tailored to the specific needs and contexts of their target audience. This includes identifying learning objectives, selecting appropriate content, and designing impactful learning materials. The program emphasizes the adoption of sustainable practices during the training itself, encouraging trainers to lead by example. Topics may include waste reduction, energy conservation, and ethical sourcing. Effective communication strategies are explored to help trainers effectively communicate the importance of sustainability to diverse audiences and inspire positive change. Participants are taught how to assess the impact of their training efforts on learners and the broader community. This enables continuous improvement and evidence-based decision-making.
Objectives	• To empower the trainers to disseminate sustainable practices and values throughout various educational communities and organizations • To introduce the appropriate methodologies, techniques, and tools for effective teaching of sustainability issues • To create a network of knowledgeable and passionate educators capable of driving positive change by teaching a deep understanding of sustainable practices

Measure state	To be done during 23/24 scholar year	**Execution timing**	may-24
Will there be any costs?	Yes		

Relation to RoadMap competence/s (Select those areas that fix more with the measure)	Engagement: Why and how to promote sustainability? ☑	Connections: How to frame the problem? ☑	Vision: What are the possible futures in our context? ☑	Action: How to proceed? ☑
	The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	A group of trainers will be formed able to approach complexity of the sustainability by using a modern methodology and practical tools to build the sustainability competences for the students at the level of university. The participants will learn how to foster the collaboration among various stakeholders, including government bodies, businesses, NGOs, and local communities, to achieve sustainable development goals. The group of trainers may be extended by spreading the teaching practices, by dissemination and expertise exchange.

Additional information	Approximated costs of 5000€

3. Measure RM-DS04-IN02: Development of educational materials for sustainability

Name of measure	Development of educational materials for sustainability			
Country	Romania			
School	University of Pitesti			
Type of measure	Structural/Behavioural			
Description	The first step consists of the identification of the specific areas of sustainability that require educational materials including the understanding of the target audience, their knowledge level, and the challenges they face in adopting sustainable practices. In the second step high-quality educational materials such as textbooks, lesson plans, multimedia presentations, videos, and interactive tools will be produced. The creation of the educational materials will integrate sustainability principles into various subjects, ranging from science and geography to economics and social studies, to promote a holistic understanding of sustainability's cross-cutting nature. A special attention will be paid to ensure the educational materials are accessible to diverse learners, including those with disabilities, and consider cultural diversity to foster inclusivity. A third step will consist of conducting workshops and training sessions for educators to effectively use the educational materials in their classrooms. This helps teachers understand the content thoroughly and deliver it in an engaging manner. A pilot testing will precede the effective implementation of the educational materials in real educational settings in order to gather feedback and refine the resources based on practical experiences and user input.			
Objectives	•To design comprehensive and engaging learning resources cantered around sustainability topics •To create content for a holistic view on sustainability and on different elements •To train the teachers for an effective use of the educational materials •To empower learners with the knowledge and skills needed to become environmentally conscious, socially responsible, and economically mindful global citizens, contributing to the long-term sustainability of our planet and society •To disseminate the results and the good practices			
Measure state	To be done during 23/24 scholar year	Execution timing		April - May 2024
Will there be any costs?	Yes			
Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	Creation of content and educational materials to teach sustainability will stimulate the educational process and will build expected competences for a behaviour oriented to protect nature, resources and to support the wellbeing of the planet. Increase awareness and understanding of sustainability principles, challenges, and opportunities among learners, educators, and the broader community. Encourage positive behavior change by promoting sustainable practices and responsible decision-making in everyday life and professional settings. Equip educators with comprehensive and up-to-date materials to effectively teach sustainability concepts, integrating them into various subjects and educational levels. Offer a multi-disciplinary approach to sustainability, showcasing its interconnectedness across environmental, social, and economic dimensions. Align educational materials with global sustainability frameworks like the United Nations' SDGs to contribute to broader sustainable development efforts. Engage learners through interactive and practical activities that encourage active participation and exploration of sustainability topics. Encourage continuous learning about sustainability beyond formal education settings, inspiring a lifelong commitment to sustainable practices.			
Additional information	Approximated costs of 4500€ 			

4. Measure RM-DS04-IN03: Set-up a lab dedicated to sustainability

Name of measure	**Set-up a lab dedicated to sustainability**
Country	Romania
School	University of Pitesti
Type of measure	Structural/Behavioural
Description	In a first step an analysis will be conducted to understand the specific needs of the university, including the challenges of the regional industry and business environment, and to define the lab's focus areas and priorities. A conceptual design of the planning of lab (includes physical infrastructure, laboratory equipment, data analysis tools, and access to relevant databases) will be achieved, together with the identification of the necessary funding and resources to establish a well-equipped and state-of-the-art lab. Assembling a multidisciplinary team of experts and researchers with diverse backgrounds in environmental science, engineering, social sciences, economics, and other relevant fields. Produce the technical design of the lab by collaboration of the experts. Create the lab including the acquisition of equipment, materials, etc. Develop educational programs and training sessions for students, professionals, and the community to enhance their understanding of sustainability principles and practices.
Objectives	•To set up a lab dedicated to sustainability, a specialized facility aimed at conducting research, innovation, and practical projects focused on sustainability-related issues •To create an infrastructure to serve as a hub for research, innovation, education, and practical implementation •To raise awareness about sustainability issues by providing educational programs and resources to students, professionals, and the community, fostering a culture of sustainability •To encourage collaboration among experts from various fields to take a multidisciplinary approach in tackling complex sustainability problems •To build the capacity of individuals and organizations by offering training programs, workshops, and internships, fostering a skilled workforce focused on sustainability. •To disseminate the good practices and the results of the implementation
Measure state	This will probably not be done during the project · Execution timing
Will there be any costs?	Yes

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

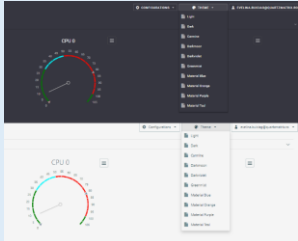|	
Expected impact of the measure	The lab will stimulate the research and innovation in the sustainability field gathering interdisciplinary resources. The focusing on the regional sustainability issues will integrate better the university efforts in the identification of the most valuable solutions for the existing challenges. The establishing of the lab will drive positive changes and progress towards a more sustainable future.
Additional information	Approximated costs of 75000€

5. Measure RM-DS04-IN04: Improvement of infrastructure – installing smart sensors to the water in toilets

Name of measure	Improvement of infrastructure – installing smart sensors to the water in toilets			
Country	Romania			
School	University of Pitesti			
Type of measure	Structural/Behavioural			
Description	In all the sanitary rooms a replacing of classical water sinks with sensor-equipped ones able to detect the presence of hands or objects and automatically control the flow of water. A reference consumption for water will be measured before the intervention, in order to quantify the impact. An educational directly dedicated part will be added by communication and educational activities. Large posters will be placed in the toilets and will illustrate the usual water consumption in daily life and the importance of saving water. A dedicated material on the water and water saving in the condition of climate changes will be developed and uploaded on the university web site. The students will be involved in the communication of the intervention measure and its impacts targeting other schools form town and region.			
Objectives	•To avoid the excessive water wastage and contribute to the global effort of conserving water resources •To reduces energy consumption by automatic shut-off after a certain period of inactivity eliminating the need for continuous heating of the water •To save time in the handwashing process by eliminating the need to turn the faucet on and off manually •To implement a better hygiene and cleanliness by reducing the risk of cross-contamination due to the required contact in case of classical device			
Measure state	This will probably not be done during the project		Execution timing	6 months
Will there be any costs?	Yes			

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	A significant reduction of the consume of water and energy with impact in the sustainability performances of the university. An increased hygiene and cleanliness of the sanitary rooms will be obtained. Awareness of students about the importance of saving water. Discussing the value of the water and way to reduce the wasting.			
Additional information	Approximated costs of 2800€ 			

6. Measure RM-DS04-IN05: Improvement of infrastructure – installing smart lightening

Name of measure	Improvement of infrastructure – installing smart lightening			
Country	Romania			
School	University of Pitesti			
Type of measure	Structural/Behavioural			
Description	Changing the entire lighting system in the main building of Faculty of Sciences with modern, low consumption devices. The deeming function will be available at classroom level. Movement sensors will be installed and a centralised system will monitor the school in order to obtain the optimal environment for the students.			
Objectives	•To create the conditions for electricity saving in condition of keeping the comfort for the educational process •To understand the capabilities of intelligent lighting, to increase the knowledge of the educational community on the potential of saving, to reinforce the awareness on the potential of efficient interventions •To communicate on the measures with other stakeholders.			
Measure state	This will probably not be done during the project	Execution timing		2 years
Will there be any costs?	Yes			
Relation to RoadMap competence/s (Select those areas that fix more with the measure)	Engagement: Why and how to promote sustainability? ☐ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	A significant reduction of the consume of electricity together with better sustainability performances of the university. Spreading information about the efficiency of intelligent lighting in the local community, together with the achieved performances. Create the conditions for a better understanding and for practical use of the automation, energy efficient devices, collective measures.			
Additional information	Approximated costs of 8000€			

15. Measure RM-DS04-IN06: Improvement of infrastructure – installing system for energy monitoring in the buildings

Name of measure	Improvement of infrastructure – installing system for energy monitoring in the buildings
Country	Romania
School	University of Pitesti
Type of measure	Structural/Behavioural
Description	An Energy Monitoring System (EMS) is proposed to be introduced to monitor the energy consumption in the main building of Faculty of Sciences. The building is heated by using the municipal system, the cooling is achieved at individual room level. A system of sensors will be installed at the level of the rooms and connected to a digital platform designed to monitor and manage the energy consumption offering real-time insights into energy usage and efficiency. Four components will be monitored and controlled: water, heating, cooling, lighting. The EMS offers a user-friendly and intuitive interface allowing administrators, facility managers, and even students to access and visualize the energy data. The EMS will have the option to generate automated alerts and notifications. Regular energy performance reports will be generated to summarize the building energy usage patterns, energy-saving achievements, and areas that need improvement. The project should be coupled with some modernization of the building especially of the heating and water system to support the centralised monitoring. For the beginning, a specialised company will develop the feasibility study in order to plan correctly the resources and solutions.
Objectives	•To optimize the energy consumption of the building and to increase the environmental performances •To promote energy conservation within the building. •To allow a real-time overall assessment of the energy performances •To learn and teach about the potential of automation in saving energy and contribute to a better environment •To stimulate the learning by communication of the results.

Measure state	This will probably not be done during the project	**Execution timing**	
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☐ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	A significant reduction of the consume of electricity, water, and heat, together with better sustainability performances of the main building. Spreading information about the potential of automatic control to other faculties, to the local community, together with the achieved performances. Creating competences to understand and for practical use of the energy savings.

Additional information	Approximated costs of 65000€

Spain

a. School: IES Itaca

1. Measure SP-DS01-IN01: Measuring the impact of shading projected by trees

Name of measure	**Measuring the impact of shading projected by trees**
Country	Spain
School	IES ITACA
Type of measure	Behavioural
Description	Measuring the impact of the shade cast by trees on a school facade can be an important aspect, especially in locations with a warm climate. To prioritize sustainability and energy efficiency, understanding the effect that surrounding vegetation has on the building's energy demand is an important aspect of responsible resource management. The shade provided by trees can influence the comfort and well-being of occupants and can reduce the need for cooling, saving economic resources and reducing the school's carbon footprint.
Objectives	• To understand the influence of good shade management on reducing school cooling demand. • Quantify the potential energy savings by minimising the need for cooling. • Identify the most effective trees in generating shade and their strategic location. • Establish guidelines for tree maintenance and pruning based on their impact on shade. • Create a regular reporting system for sustainable shade management on campus.

Measure state	This will probably not be done during the project	**Execution timing**	12 weeks
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdiciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	Reduce the energy consumption, by accurately assessing how tree shade affects the indoor temperature, it is expected that the measure will enable a more efficient use of the air conditioning systems, resulting in significant savings in operating costs and a decrease in greenhouse gas emissions. On the other hand, the students of the school will be made aware of the benefits of taking good care of the flora, especially in hot climates that have a high demand for cooling.
Additional information	

2. Measure SP-DS01-IN02: Internal regulations for equipment repair

Name of measure	**Internal regulations for equipment repair**
Country	Spain
School	IES ITACA
Type of measure	Behavioural
Description	The development of an internal regulation that establishes a priority way of repairing equipment against the new acquisition wants to encourage the responsible use of resources, evaluating in each case the energetic repercussions. The regulation also pretends to analyse the energetic efficiency of current equipment, focusing on identifying those that need to be replaced by more efficient equipment.
Objectives	•Establish a prioritisation system for equipment repair based on its importance and remaining useful life. •Reduce operational costs and carbon footprint by encouraging repair over the purchase of new equipment. •Improve asset management by extending the useful life of equipment through appropriate and timely repairs. Establishing procedures for equipment maintenance and repair. •Promote awareness and responsibility among staff and students regarding the care and maintenance of equipment.

Measure state	This will probably not be done during the project	**Execution timing**	10 weeks
Will there be any costs?	No		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	The implementation of internal regulations for the repair of equipment wants to optimize resources and promote sustainable practices in the school. By prioritizing repair over the purchase of new equipment, it is expected to reduce the financial and environmental costs associated with the purchase and disposal of obsolete equipment. This will also contribute to a reduction in e-waste generation and a reduced demand on natural resources for the manufacture of new devices.

Additional information	

Name of measure	Photovoltaics		
Country	Spain		
School	IES ITACA		
Type of measure	Behavioural		
Description	Training for the follow-up and monitoring of photovoltaic solar installation installed in the institute and its impact on electricity expenditure.		
Objectives	•Train staff and students in the tracking and monitoring of the solar PV installation at the institute. •Establish an effective monitoring system to assess the performance of the solar installation and its impact on electricity expenditure. •Identify opportunities for energy efficiency improvements from the data collected. •Promote awareness of solar energy and its contribution to sustainability among the educational community. •Reduce the electricity costs of the institute.		
Measure state	This will probably not be done during the project	Execution timing	8 weeks
Will there be any costs?	Yes		

Relation to RoadMap competence/s	Engagement: Why and how to promote sustainability? ☑	Connections: How to frame the problem? ☑	Vision: What are the possible futures in our context? ☐	Action: How to proceed? ☑
(Select those areas that fix more with the measure)	The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	The training for the tracking and monitoring of solar PV installation aims to empower the educational community to understand and make the most of the potential of solar energy. By establishing an effective monitoring system, it is expected that the school will be able to assess the performance of the installation and take proactive measures to optimize its efficiency. This will not only reduce electricity costs but also reduce reliance on non-renewable energy sources and reduce the school's carbon footprint.

Additional information	School roof:

4. Measure SP-DS01-IN04: Environmental programs. Sustainability awareness. Dynamic awareness.

Name of measure	**Environmental programs. Sustainability awareness. Dynamic awareness**
Country	Spain
School	IES ITACA
Type of measure	Behavioural
Description	Participation of students in environmental education programs (at the local or regional level), which have programs prepared for dissemination to school groups.
Objectives	•Encourage the active participation of students in environmental education programmes at local or regional level. •Raise students' awareness of the importance of sustainability and environmental conservation. •Facilitate access to specific educational programmes designed for school groups. •Promote sustainable awareness and action among students through participation in dynamic activities. •Measure and evaluate the impact of these programmes on students' sustainable awareness and behaviour.

Measure state	To be done during 23/24 scholar year	**Execution timing**	1 week
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☐ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	To create a more aware and committed generation for sustainability. These programs will provide students with valuable information on environmental issues and give them the opportunity to actively participate in conservation and sustainability initiatives. It is hoped that this measure will motivate students to adopt more sustainable practices in their daily lives and contribute to the protection of the environment. It can have a positive impact on the local or regional community by promoting conservation and sustainability projects.
Additional information	PRUEPA program: https://www.miteco.gob.es/es/ceneam/programas-de-educacion-ambiental/pueblos-educativos.html

5. Measure SP-DS01-IN05: Sustainability research FAB-IDI program

Name of measure	Sustainability research FAB-IDI program			
Country	Spain			
School	IES ITACA			
Type of measure	Structural/Behavioural			
Description	Through a new educational program called FAB-IDI "Design of a network of educational centers with a research itinerary," schools can generate dozens of different lines of research per school year, conceived, designed, and presented by the students themselves. Different institutions, such as the University of Seville and the CSIC will be the teaching references for these educational centres. Within this program, the Young People with Researchers project will be integrated, where the development of research lines will be promoted. Among the projects developed through this educational program, those that work on sustainability issues are encouraged.			
Objectives	•Facilitate schools in the implementation of the FAB-IDI educational programme "Designing a network of schools with a research itinerary". •Empower students to conceive, design and present their own lines of research, encouraging active participation in research projects. •Establish educational collaborations with academic institutions to provide guidance and resources for schools. •Integrate the "Young People with Researchers" project within the programme, promoting the development of lines of research. •Encourage research projects related to sustainability and environmental issues within the framework of the educational programme.			
Measure state	To be done during 23/24 scholar year	**Execution timing**		2 Years
Will there be any costs?	Yes			

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☐ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	•To introduce students to research methodology, stimulating students' interest in science and sustainability •Encourage interest in the development of lines of research related to sustainability. •Development of specific sustainable proposals in the school. •The promotion of sustainability-related research projects within the educational program will contribute to the generation of knowledge and practical solutions to current and future environmental challenges. This will not only benefit the school community but can also positively impact society at large by addressing key sustainability issues.			
Additional information	Young With Researchers Program: https://jovenesconinvestigadores.wordpress.com/			

6. Measure SP-DS01-IN06: Pergolas with vegetation

Name of measure	**Pergolas with vegetation**
Country	Spain
School	IES ITACA
Type of measure	Structural
Description	Introducing pergolas adorned with vegetation is a multifaceted measure that encompasses shading systems, bioclimatic study, and support for various activities. The careful integration of shading systems within the pergolas can provide a shaded space in the courtyard and can contribute to reducing indoor temperatures, depending on the pergolas' location. Simultaneously, the bioclimatic study associated with these structures explores the relationship between the location and energy efficiency of these elements. Beyond their climatic advantages, these pergolas can offer versatile spaces for the development of different activities, enhancing the overall functionality of the school grounds.
Objectives	• Improve the comfort by providing shade in the school playground and reducing temperatures in the areas near the pergolas. • Promote energy efficiency and sustainability in the design of educational spaces, through the bioclimatic study of the location and configuration of the pergolas. • To offer versatile spaces that allow for a variety of activities, promoting the active participation of students and staff in outdoor activities. • Integrate nature into the school environment through the vegetation on the pergolas, which contributes to the biodiversity and aesthetics of the campus.

Measure state	To be done during 24/25 scholar year	**Execution timing**	1 year
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☐ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	• Vegetated pergolas will create more comfortable and pleasant spaces for students and staff, which can improve the quality of life in the school environment. • The previous bioclimatic study wants to design pergolas in a way that maximizes energy efficiency. • Pergolas will provide versatile spaces that can be used for a wide range of activities. • The presence of vegetation on the pergolas will contribute to the biodiversity of the campus and enhance the aesthetics of the surroundings. • Foster environmental education and connection with nature among students.

Additional information	

7. Measure SP-DS01-IN07: Garden box

Name of measure	Garden box
Country	Spain
School	IES ITACA
Type of measure	Behavioural
Description	Development of a garden to grow vegetables taking advantage of free common areas in the school. Support for training activities in the care and development of green spaces.
Objectives	•Establish a vegetable garden in common areas of the school. •Provide hands-on learning opportunities for students in the care and development of green spaces. •Promote education on sustainable agriculture and connection to nature among students. •Improve the aesthetics of the school environment and contribute to local biodiversity by creating a green space.

Measure state	To be done during 23/24 scholar year	Execution timing	12 weeks
Will there be any costs?	Yes		

Relation to RoadMap competence/s	Engagement: Why and how to promote sustainability? ☐	Connections: How to frame the problem? ☑	Vision: What are the possible futures in our context? ☑	Action: How to proceed? ☑
(Select those areas that fix more with the measure)	The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	Promote sustainability, environmental education, and green space development. This project has the potential to strengthen students' connection to nature. The creation of a vegetable garden can also be an opportunity to engage students in extracurricular activities related to gardening and sustainable agriculture. In addition, this project can serve as a tangible example of how sustainable practices can be implemented in the school environment, inspiring students to take these skills and values into their lives outside of school.

Additional information	

8. Measure SP-DS01-IN08: Proper use of sorting garbage containers.

Name of measure	**Proper use of sorting garbage containers**
Country	Spain
School	IES ITACA
Type of measure	Structural/Behavioural
Description	Awareness of selective garbage collection, especially in the schoolyard, by promoting the proper use of waste bins and waste separation. This measure not only contributes to the reduction of waste sent to landfills but also can educate students about environmental responsibility and the positive impact they can have through simple everyday actions.
Objectives	•Raise awareness among students about the importance of selective waste collection. •Promote the proper use of litter bins in the schoolyard. •Reduce the amount of non-recyclable waste sent to landfill. •Educate students on the proper separation of different types of waste and their impact on the environment.

Measure state	Done during 22/23 scholar year	*Execution timing*	3 weeks
Will there be any costs?	No		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	Reduce the amount of waste sent to landfills, reduce environmental pollution, and promote more sustainable waste management practices. It is hoped that this measure will encourage responsible habits among students and contribute to the preservation of the natural environment.

Additional information	

9. Measure SP-DS01-IN09: Waste recycling

Name of measure	**Waste recycling**
Country	Spain
School	IES ITACA
Type of measure	Behavioural
Description	Awareness and training program in local recycling points.
Objectives	•Facilitate educational visits to local clean points for students to experience first-hand the waste recycling process. •Raise awareness among students and the school community about the importance of recycling, based on practical and tangible experiences. •Provide training and guidance on how to properly use local recycling points, highlighting the importance of proper sorting of materials. •Encourage the active participation of students and staff in recycling visits and the recycling process.

Measure state	To be done during 23/24 scholar year	**Execution timing**	1 week
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☐ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	The implementation of this program can have a positive impact on the local community by promoting more responsible recycling practices. Students will have the opportunity to witness and gain a practical understanding of the waste recycling process due to the recycling point visits. This enriching experience will give them a comprehensive insight into how recyclable materials are separated and processed, which will strengthen their understanding and appreciation of the importance of recycling. To promote sustainable practices in the students' daily lives and in society at large.			
Additional information				

10. Measure SP-DS01-IN10: Nebulised water assisted temperature controlled

Name of measure	**Nebulised water assisted temperature controlled**
Country	Spain
School	IES ITACA
Type of measure	Structural
Description	Installed nebulizers in the schoolyard to decrease the temperature in warm months.
Objectives	•Reduce the temperature in the school playground during the warmer months to create a more comfortable and safer environment for students and staff. •Improve the well-being and comfort of the school community by providing relief from the heat. •Contribute to the reduction of energy consumption by using foggers to cool the environment instead of air conditioning systems. •Raise students' awareness of sustainable solutions to climate change and adaptation to rising temperatures.

Measure state	To be done during 24/25 scholar year	**Execution timing**	
Will there be any costs?	Yes		

Relation to RoadMap competence/s **(Select those areas that fix more with the measure)**	Engagement: Why and how to promote sustainability? ☐ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	The installation of misters in the schoolyard during the warm months is primarily intended to improve the quality of life for students and staff by providing a cooler and more comfortable environment. By effectively reducing the temperature, this measure is expected to contribute to comfort and heat relief, which in turn can have a positive impact on student performance and concentration. In addition, by using misters instead of air conditioning systems, a more sustainable approach to temperature control is promoted, resulting in lower energy consumption and a smaller carbon footprint. This measure also provides an opportunity to educate students on practical solutions to mitigate the impact of climate change at the local level.			
Additional information				

p. School: CEIP Mozart

1. Measure SP-DS02-IN01: Umbralejo Field Trip - Experiential environmental education

Name of measure	Umbralejo Field Trip - Experiential environmental education
Country	Spain
School	CEIP Mozart, Alcalá de Henares, Madrid
Type of measure	Behavioural

Description	The measure consisted of a two-day stay in a abandoned town (Umbralejo) in the 1980s which has been converted into an environmental education centre, included into the "Educational Towns Programme" of the Spanish Ministry for the Ecological Transition and the Demographic Challenge. The centre is located in the "Natural Park of Sierra Norte de Guadalajara". Children and teachers from the CEIP Mozart primary school and from another school located in a village around Umbralejo (Cogolludo) have participated in the activities, conducted by the environmental educators of the centre (practical workshops on orchard-nursery, livestock, agriculture, medicinal plants, ethnography, traditional architecture, landscape interpretation, etc.).
Objectives	To enhance knowledge about traditional ways of life and sustainability To integrate sustainability into education and training by means of practical and experiential activities To promote sustainable lifestyles among the school community To get to know the natural and cultural values of the Umbralejo area (Abandoned rural little town) To live together with children from other places (Cogolludo – little rural village in other province)

Measure state	Done during 22/23 scholar year	**Execution timing**	June 2023
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	The experience stands for its pedagogical component. Experiencing nature and learning about it (how it works, how relevant it is and how to respect and take care of it) is one of the main expected impacts. Other important expected impact relates to the discovery of other ways of life, from other times and spaces; more natural and ecological. In addition, the immersion in nature should help to identify, and understand, concrete actions to reduce our impact on the environment. Having fun with colleagues and new friends (from other school) is also envisioned as a potential positive impact of the Umbralejo experience.
Additional information	Umbralejo Field Trip aims to generates practical and experiential learning. Umbralejo is oriented towards action: recycle, reuse, save and care. It aims to promote practical learning, learning based on experience and on reflection (experiential learning). From this point of view, it could be postulated that we are facing a experience with significant transformative capacity, at least in the short term. To rigorously assess the impact of Umbralejo experience, it would be necessary to analyse the stability of these changes in the medium and long. https://www.miteco.gob.es/es/ceneam/programas-de-educacion-ambiental/pueblos-educativos.html

2. Measure SP-DS02-IN02: Linking the school garden with sustainable food styles

Name of measure	Linking the school garden with sustainable food styles
Country	Spain
School	CEIP Mozart, Alcalá de Henares, Madrid
Type of measure	Behavioural

Description	Workshop for students in Primary Education (4º, 5º y 6º) to promote undertanding on food styles and how they are connected to the school garden. Storyteller togeher with experiential techniques aim to enhance learning on the implications of the different models of food production. The workshop for 4th grade students is entitled "Traveling Fruits" and the one for 5th and 6th grade children is called "Two chickens and a destination". The workshops will be carried out by specialists from the Garua cooperative, dedicated to promoting eco-social changes with an specific sustainable and healthy eating program called "feeding change".
Objectives	To link the activities in the school garden with a more sustainable food style, both at school and at home To understand how a healthy and sustainable diet improves the planet. To increase motivation to adopt healthy and sustainable eating. To learn about some resources in the area (Alcalá and Madrid) that could facilitate a healthier and more sustainable diet.

Measure state	Done during 22/23 scholar year	**Execution timing**	May/June 2023
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	More sustainable diet options at the school canteen. Increased awareness on how the different vegetables grown in the school garden can contribute to more sustainable food styles.

Additional information	http://www.garuacoop.es/ https://alimentarelcambio.es/

3. Measure SP-DS02-IN03: Reuse- CO2 & Water Market. Exchange T-shirts "Change things by changing things"

Name of measure	Reuse- CO2 & Water Market. Exchange T-shirts "Change things by changing things"
Country	Spain
School	CEIP Mozart, Alcalá de Henares, Madrid
Type of measure	Behavioural
Description	Organization of a local market within the shool community to exchange T-shirts in good condition, by engaging children, parents, teachers, administration and maintenance staff. The CO2 and water savings associated to wearing a used T-shirt are calculated by means of a weight and carbon and water footprint calculator (according to weight, material, origin...) You receive a CO2 and water voucher that reflects the savings compared to buying a new T-shirt and you sign a commitment agreement not to buy a new T-shirt. At the end of the activity the total savings of how much we have saved is computed Possibility of repeating the activity the following year.
Objectives	To sensitize the educational community about the responsibility we have as consumers and about our possibilities to transform the current consumption model. To reflect on the negative consequences (C and water footprint) that the over-consumption has generated and on the need to "decrease" our needs. To involve the student in active awareness and responsible practices. To promote respectful attitudes towards the environment. To reduce, recover, reuse or recycle those things that are still worthwhile and can have a second life. To enable self-management of resources at the local level through non-profit exchange. To dignify the use of second-hand objects.

Measure state	Done during 22/23 scholar year	**Execution timing**	May 2023
Will there be any costs?	No		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☐ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	Reduced impact of clothing use in the educational community. Increased awareness on the importance of re-use of clothing to reduce CO$_2$ emissions and water consumption for the fight against climate change and environmental protection. Improved understanding of the concept of circular economy Long term impacts through the replication of this activity in successive years in the school as an awareness-raising tool.

Additional information	

4. Measure SP-DS02-IN04: Visit to the municipal composting plant + Promoting sustainable work in the school garden

Name of measure	**Visit to the municipal composting plant + Promoting sustainable work in the school garden**
Country	Spain
School	CEIP Mozart, Alcalá de Henares, Madrid
Type of measure	Behavioural
Description	Brown bins for the selective collection of organic waste have recently been installed in some streets of Alcalá de Henares. The visit to the composting plant will help to understand why it is necessary to separate organic matter from the rest of household waste, and will encourage the correct separation of waste at source, which facilitates the production of high quality organic compost to be used as organic fertiliser. We will learn that the re-circulation of waste is an essential part of the circular economy. The recycling process that takes place in this composting plant will be explained. Children will be made aware that they are the best allies of recycling and how they can be vehicles for passing on this information to their family and friends in order to protect the environment.
Objectives	To enhance awareness of the waste issue To get familiar with the concept of circular economy in organic waste To understand the composting process To compost for organic fertiliser production To use of organic fertilisers in the school garden

Measure state	To be done during 23/24 scholar year	**Execution timing**	September 23 - June 24
Will there be any costs?	No		

Relation to RoadMap competence/s	Engagement: Why and how to promote sustainability? ☑	Connections: How to frame the problem? ☑	Vision: What are the possible futures in our context? ☐	Action: How to proceed? ☑
(Select those areas that fix more with the measure)	The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	Increased awareness on the importance of recycling organic matter. Use of the compost produced from the organic waste collected at the school canteen in the school garden. Improved fertility and organic matter content of the garden soil The soil's edaphic properties will be improved.
Additional information	

5. Measure SP-DS02-IN05: Making the invisible visible: participatory air quality monitoring with PurpleAir sensors. Citizen science at school

Name of measure	Making the invisible visible: participatory air quality monitoring with PurpleAir sensors. Citizen science at school
Country	Spain
School	CEIP Mozart, Alcalá de Henares, Madrid
Type of measure	Behavioural

Description	This citizen science experience consists of installing air quality measurement sensors in different areas of the school, as well as in the homes of families interested in this collaboration. At the end of the experience, an air quality map from a variety of places wihtin the city of Alcalá de Henares is obtained, incluiding areas in from the school and from the homes of the students, teachers, and staffof the school wantinh to collaborate in the experience. Information will be obtained on environmental pollutants and their emission sources. Results obtained can be discussed and sustainable mobility actions can be proposed to reduce polution in the city.
Objectives	Raising awareness about air quality and its impacts on health through the possibilities offered by citizen monitoring, technological devices and the scientific method. Reflecting on the negative local and global consequences of everyday social practices related to urban transport or energy consumption. Stablishing research connections: multi-site activities with schools in South America Bringing citizen science closer to our educational community

Measure state	To be done during 23/24 scholar year	**Execution timing**	September 23 - June 24
Will there be any costs?	No		

Relation to RoadMap competence/s	Engagement: Why and how to promote sustainability? ☑	Connections: How to frame the problem? ☑	Vision: What are the possible futures in our context? ☐	Action: How to proceed? ☑
(Select those areas that fix more with the measure)	The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	Evidence on air polution levels at school and selected homes Community participation in the installation of the PM2.5, humidity and temperature monitoring station in the school. Citizen science experience: monitoring of air quality for a few weeks by students and other actors in the educational community (visualisation of data on mobile phones, digital reflection diaries, classroom exercises, etc.). Collective reflection: day for families Impacts beyond our educational community: webinar with educational communities in other countries carrying out similar citizen science exercises

Additional information	PurpleAir sensors

6. Measure SP-DS02-IN06: Installation of PV solar panels instalation + learning and awareness activity on renewable energy

Name of measure	**Installation of PV solar panels instalation + learning and awareness activity on renewable energy**
Country	Spain
School	CEIP Mozart, Alcalá de Henares, Madrid
Type of measure	Structural/Behavioural
Description	Installation of photovoltaic solar panels for the auto-production of renewable electricity to cover part of the school's electricity demand. The generation of solar electricity should allow direct savings in the electricity bill, less dependence on changes in electricity prices and lower consumption of fossil energy, which will contribute to reducing polluting emissions into the atmosphere and adapting to and mitigating climate change. The pedagogical activities will be defined by ECF4CLIM team, teachers, students and administrative and maintenance personnel. The first idea is for students to act as journalists by making an audio file (podcast), or a video, program, report, documentary or fiction (stories, fables...). This action must be agreed upon with the teachers to garantee that it suitably fits within their educational programm.
Objectives	Install environmental values in the educational community and guide them towards a sustainable model that is increasingly necessary in today's society. Promote energy saving and learn about the energy transition Reduce CO2 emissions into the atmosphere in energy consumption Learn about renewable energy and develop children's basic skills, especially in technology and science. Disseminate the results obtained by the school among the students Raise awareness in society of the importance of moving towards carbon neutral societies

Measure state	To be done during 23/24 scholar year	**Execution timing**	September 23 - June 24
Will there be any costs?	Yes		

Relation to RoadMap competence/s	Engagement: Why and how to promote sustainability? ☑	Connections: How to frame the problem? ☑	Vision: What are the possible futures in our context? ☑	Action: How to proceed? ☑
(Select those areas that fix more with the measure)	The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	Reduced electric bill Reduced emissions associated with climate change Greener school Contribute to the energy transition, moving from fossil energies to renewables Increased awareness on the need to use renewables
Additional information	

7. Measure SP-DS02-IN07: Planting trees in the school

Name of measure	**Planting trees in the school**
Country	Spain
School	CEIP Mozart, Alcalá de Henares, Madrid
Type of measure	Structural/Behavioural

Description	The measure consists of planting trees around the perimeter of the school to provide shade and carbon storage. The Association for the Recovery of the Native Forest (ARBA) will provide advice on the species of trees suitable for planting. The students, teachers and school staff will collaborate in the planting, learning, and awareness activities. Activities will include removing weeds, watering, preparing seedbeds, transplanting, treating seeds and so on. The school and their families will additionally collaborate in other ARBA "restoration campaigns" in degraded natural environments with the aim of recovering native vegetation
Objectives	Raising children's awareness about the importance of caring for and recovering the natural environment Learning to plant trees, shrubs and herbaceous plants both in the perimeter of the school and in the school garden Understanding how vegetation can help climate change adaptation (it lowers the temperature of surfaces and the environment thanks to the evapotranspiration and the shade it provides, and reduces the use of air conditioning) Learning about the importance of trees in carbon sequestration, which helps in the fight against climate change Learning the ideal species to plant at school (depending on climate, soil type, water availability, etc.) and how to care for them

Measure state	To be done during 23/24 scholar year	**Execution timing**	September 23 - June 24
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	Increased number of trees in the school Increased the quantity and the quality of shadows in common spaces Increased the student's comfort Increased the carbon sequestration at school Enhanced awareness of the importance of taking care of green spaces

Additional information	https://arba-s.org/

8. Measure SP-DS02-IN08: Installation of high quality insulating windows

Name of measure	**Installation of high quality insulating windows**
Country	Spain
School	CEIP Mozart, Alcalá de Henares, Madrid
Type of measure	Structural/Behavioural
Description	Installation of high quality insulating windows. The number of windows to install will be decided according to the available budget
Objectives	Increase the energy efficiency of the school Reduce energy consumption Reduce heating bill Reduce CO2 emissions Raise awareness in the educational community about the importance of reducing heat losses from the building

Measure state	To be done during 23/24 scholar year	Execution timing	September 23 - June 24
Will there be any costs?	Yes		

Relation to RoadMap competence/s	Engagement: Why and how to promote sustainability? ☑	Connections: How to frame the problem? ☑	Vision: What are the possible futures in our context? ☐	Action: How to proceed? ☐
(Select those areas that fix more with the measure)	The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	Reduce energy consumption Reduce heating bill Reduce CO2 emissions Increased awareness			
Additional information				

9. Measure SP-DS02-IN09: Expand the school garden: The garden as "Pride of the school"

Name of measure	Expand the school garden: The garden as "Pride of the school"			
Country	Spain			
School	CEIP Mozart, Alcalá de Henares, Madrid			
Type of measure	Structural/Behavioural			
Description	The garden is a very popular activity at school. The measure will improve the school garden and its use as a pedagogical tool. All the children collaborate in the gardening activities This measure intends to be a long-lasting one. Organic fertilizer (compost) from a composting plant near the school will substitute the mineral one. A shading area will be installed using a metallic structure, on which a grapevine will grow. Seeds of new species (tomatoes, cucumber, zucchini, pumpkins, peppers, onions, celery, etc.) will be planted A drip irrigation system will be set up to save water in the school Biodiversity will be improved by installing six houses for insects A wooden fence to protect fruit trees will be installed,			
Objectives	Appreciate local food and its lower impact on climate change and pollution (less transportation, less inputs) Know the advantages of organic products free of pesticides Learn to produce sustainable plant foods from seed production to harvest (the whole cycle) Enjoy collaborating in food production. Enjoy sharing the garden activity with classmates. Learn from each other.			
Measure state	To be done during 23/24 scholar year		Execution timing	September 23 - June 24
Will there be any costs?	Yes			

Relation to RoadMap competence/s	Engagement: Why and how to promote sustainability? ☑	Connections: How to frame the problem? ☑	Vision: What are the possible futures in our context? ☐	Action: How to proceed? ☑
(Select those areas that fix more with the measure)	The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	Organic food production at school Participation of all school children in the food production cycle (from nursery to harvest) Participation in a seminar on the importance of the school garden for the educational community Increased awareness onthe rational use of water in a Mediterranean country like Spain, with water deficit and recurrent and prolonged droughts, which will be aggravated as a consequence of climate change
Additional information	

10. Measure SP-DS02-IN10: ECF4CLIM learning space

Name of measure	**ECF4CLIM learning space**
Country	Spain
School	CEIP Mozart, Alcalá de Henares, Madrid
Type of measure	Behavioural

Description	Activities will be carry out at school, with games adapted for each educational cycle, promoting learning in values related to sustainability and climate change, in a playful and fun way. These various educational resources in the learning space will include digital learning content and a section with links to related educational resources. Mini-games will be available to users for different student groups and will include quizzes, decision trees, drag and drop, true or false questions, and flash cards. This is particularly important when working with younger audiences, accustomed to using and obtaining information through new media, where visuals and compelling and interesting stories play a prominent role.
Objectives	Learn playing. Acquire knowledge for better environmental behavior at school and in everyday life Develop skills to maintain sustainable behavior changes over time Disseminate the games among friends and family to expand the impact and to promote sustainability awareness

Measure state	To be done during 23/24 scholar year	**Execution timing**	September 23 - June 24
Will there be any costs?	No		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	Improved sustainability awareness in a fun way through age-appropriate games Enhanced students' ability to act against climate change and towards sustainability through ECF4CLIM project games guided by teachers Acquisition of new skills to contribute towards a more sustainable future

Additional information	The games will be available on the digital platform of the ECF4CLIM project

bb. Universitat Autònoma de Barcelona

1. Measure SP-DS03-IN01: Improving thermal insulation

Name of measure	**Improving thermal insulation**
Country	SPAIN
School	Universitat Autònoma de Barcelona
Type of measure	Structural
Description	Improving thermal insulation (windows, roofs, screens, etc.) (especially due to heat), changing shutters and windows to improve insulation, and installing screens or plant covers on the roofs and walls (study feasibility)
Objectives	Achieve greater thermal comfort, with a lower interior temperature in summer and less temperature loss in winter. Promote energy saving and learn about the energy transition.

Measure state	This will probably not be done during the project	**Execution timing**	5 years
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☐ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	Improve the thermal confort. Increase awareness on the need to save energy.
Additional information	This measure is already planned by the University, it will be implemented in the future, although it will be deployed through a long-term timetable, probably beyond the ECF4CLIM project periode.

2. Measure SP-DS03-IN02: Installing energy-saving mechanisms

Name of measure	**Installing energy-saving mechanisms**
Country	SPAIN
School	Universitat Autònoma de Barcelona
Type of measure	Structural/Behavioural

Description	Install more energy-saving mechanisms (sensors, valves, thermostats, replace incandescent lights with LEDs, etc.)
Objectives	Make electricity, gas and water consumption visible. Disseminate this information among students, teachers and staff, with the aim of influencing their behaviors and promoting sustainability. Reduce electricity, gas and water consumption.

Measure state	To be done during 23/24 scholar year	**Execution timing**	September 2023 - June 2024
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	Reduction of electricity, gas and water consumption. Increasing of saving behaviours related to the electricity, gas and water consumption. Increasing awareness of the consequences of one's own behaviors (at the Faculty).			
Additional information	Measure partially done, although more efforts and resources should be devoted to it during the course 2023-2024 (it corresponds to an already designed infrastructural university plan).			

3. Measure SP-DS03-IN03: In-door spaces reform

Name of measure	**In-door spaces reform**
Country	Spain
School	Universitat Autònoma de Barcelona
Type of measure	Structural/Behavioural
Description	The inner spaces and courtyards are perceived both by students and teachers as wasted spaces. The measure wants to reform them to make them friendlier, more useful, open and integrated into the life of the centre. Not only for improving thermal comfort, but also to make them more welcoming (improve socialization and disseminate sustainability issues and data).
Objectives	Reform the interior spaces now lost, to enhance their use by students (leisure and study) and by teachers (teaching and meetings). Facilitate the organization of activities related to sustainability (debates, teaching, etc.) in these recovered spaces.

Measure state	To be done during 23/24 scholar year	**Execution timing**	January 2024 - September 2025
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	Interior spaces conditioned to be used as spaces for reflection and debate on sustainability. Activities (seminars, conferences, debates, etc.) carried out in these spaces.
Additional information	The current Campus strategic plan contemplates already this type of spaces, but they are not build yet in the Faculty. We must negotiate with the Rectorate its construction during the duration of the ECF4CLIM project. It is very likely that the high cost of this measure will delay it until later.

4. Measure SP-DS03-IN04: Outdoor spaces arrangement

Name of measure	**Outdoor spaces arrangement**
Country	SPAIN
School	Universitat Autònoma de Barcelona
Type of measure	Structural/Behavioural

Description	Enhance the green spaces around the Faculty, which are now forgotten. Promote outdoor teaching spaces and more spaces for leisure and activities.
Objectives	Detect outdoor spaces, close to the Faculty, that can be used for teaching activities, meetings, leisure, etc. Make a reform plan that allows them to be used for those objectives. Organize a plan of activities (classes, conferences, meetings, debates, etc.) around it. Here the possibility of interdisciplinary activities opens up, open to students and teachers from other areas of the campus.

Measure state	This will probably not be done during the project	**Execution timing**	
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	A series of outdoor spaces will be recovered and adapted, in a sustainable manner, for carrying out university activities. There will be teaching activities, meetings, debates, etc. There will be a semiannual schedule of these activities. Awareness of environmental and sustainability problems will be promoted.
Additional information	This will probably not be done during the project (the campus strategic plan contemplates this, but not done yet). It is very likely that the high cost of this measure will delay it until after our project ends.

5. Measure SP-DS03-IN05: Promote the 'reuse' of objects

Name of measure	**Promote the 'reuse' of objects**
Country	SPAIN
School	UAB
Type of measure	Behavioural
Description	Organize materials exchange services within the campus, such as fairs, barter markets, etc., also in collaboration with the surrounding towns.
Objectives	To sensitize the educational community about the responsibility we have as consumers To reflect on the negative consequences (C and water footprint) that the over-consumption has generated and on the need to "decrease" our needs. To involve the student in active awareness and responsible practices, and promote respectful attitudes towards the environment. To reduce, recover, reuse or recycle those things that are still worthwhile and can have a second life. To enable self-management of resources at the local level through non-profit exchange.

Measure state	To be done during 23/24 scholar year	Execution timing	January - June 2024
Will there be any costs?	No		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	Save raw materials and reduce CO2 emissions. Increase awareness on the importance of re-use of clothing to reduce CO2 emissions and water consumption for the fight against climate change and environmental protection. Improve the understanding of the concept of circular economy Long term impacts through the replication of this activity in successive years.			
Additional information	This will probably not be done during the project (the Campus strategic plan contemplates something related to this, but not done yet). Although we are going to try to promote it from the ECF4CLIM project, it is possible that it will be carried out after the project has finished.			

6. Measure SP-DS03-IN06: Improve the waste system management at Faculty level

Name of measure	Improve the waste system management at Faculty level		
Country	SPAIN		
School	UAB		
Type of measure	Structural/Behavioural		
Description	Install more compartmentalized recycling bins around and ban bins with mixed waste, improve litter signage, and increase awareness on waste decisions and management.		
Objectives	Reduce the amount of waste generated. Increase awareness regarding the generation and recycling of waste. Replace the types of bins and containers that are in the Faculty with others that allow waste to be sorted.		
Measure state	To be done during 23/24 scholar year	**Execution timing**	January - June 2024
Will there be any costs?	Yes		

Relation to RoadMap competence/s	Engagement: Why and how to promote sustainability? ☑	Connections: How to frame the problem? ☐	Vision: What are the possible futures in our context? ☑	Action: How to proceed? ☑
(Select those areas that fix more with the measure)	The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	Make visible the volume (and types) of waste generated at the Faculty level. Be able to compare said data with the university as a whole. Be able to compare said data over time. Reduce the volume of waste generated. Influence the behavior of students and teachers through increased awareness.
Additional information	This will probably not be done during the project (the Campus strategic plan contemplates something related to this, but not done yet). Although we are going to try to promote it from the ECF4CLIM project, it is possible that it will be carried out after the project has finished.

7. Measure SP-DS03-IN07: Facilitate transversal learning spaces

Name of measure	Facilitate transversal learning spaces			
Country	SPAIN			
School	UAB			
Type of measure	Behavioural			
Description	Foster more transversal and less rigid teaching spaces, which allow projects to be carried out between different subjects, living-labs, etc., and which allow to deal with issues of sustainability, energy/climate transition, food system impacts, etc.			
Objectives	Allocate a space and time for periodic meetings between students and teachers from different disciplines (from within the Faculty and also from outside) Promote the learning of content, theories and practices related to sustainability. Facilitate the environmental debate, sustainability and climate change as part of the Faculty's academic debates.			
Measure state	To be done during 23/24 scholar year	**Execution timing**		October 2023 - June 2024
Will there be any costs?	Yes			
Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	Students and teachers from different grades/academic disciplines will have participated in debates on sustainability, environmental crisis and climate change.			
Additional information	This is one of the pre-selected measures that will be carried out during this course. An effort will be made to do so in collaboration with groups of students and/or teachers dedicated to these topics. Also with existing groups outside the university.			

8. Measure SP-DS03-IN08: Promote environmental volunteers on Campus

Name of measure	**Promote environmental volunteers on Campus**
Country	SPAIN
School	UAB
Type of measure	Behavioural
Description	On the Campus there is a group of environmental volunteers coordinated by the Autonomous Solidarity Foundation (FAS), but they are only science students (mainly biology and veterinary medicine). On the other hand, this group does not have social science students. This measure would try to get students of sociology and political science interested in this type of volunteering.
Objectives	Motivate students to involve themselves and mobilize in environmental, global, social justice causes, etc. Promote environmental volunteering on campus.

Measure state	To be done during 23/24 scholar year	**Execution timing**	October 2023 - june 2024
Will there be any costs?	No		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☐ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	The number of environmental volunteers from the social sciences will increase. These volunteers will design and participate in actions related to the environmental improvement and sustainability of the Campus.			
Additional information	This is one of the pre-selected measures that will be carried out during this course. An existing volunteer group will be used, to which we will try to incorporate students from our Faculty. This will entail a redesign of the tasks they perform (currently only in the hands of geologists, biologists and environmental scientists).			

9. Measure SP-DS03-IN09: Make visible data on environmental impacts

Name of measure	Make visible data on environmental impacts
Country	SPAIN
School	UAB
Type of measure	Structural/Behavioural
Description	Improve available environmental data (on waste, energy, water consumption, etc.). If we don't know what the starting situation is, we won't know how to contribute to it.
Objectives	Install mechanisms to control waste generated in the Faculty. Organization of a data collection system on energy consumption, temperature, air quality, etc. Organize mechanisms for reflection on said data by students and teachers.

Measure state	To be done during 23/24 scholar year	**Execution timing**	January - June 2023
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	Increase awareness of one's own impact on the environment. Reduce energy consumption. Reduce waste volumes.

Additional information	Pre-selected measure. Main action to be done (strategically combined with other actions such as 3, 8, 11)

10. Measure SP-DS03-IN10: Repository of good practices

Name of measure	**Repository of good practices**
Country	SPAIN
School	UAB
Type of measure	Behavioural

Description	Make the improvement actions that are taken more visible. Report, not only on the things that are done, but also on what could be done (recommendations, good practices, etc.).
Objectives	Make a repository of good sustainability practices that are already being done at the university, and observe what is being done at other universities. Discuss it with students and with teachers.

Measure state	To be done during 23/24 scholar year	**Execution timing**	January - June 2024
Will there be any costs?	No		

Relation to RoadMap competence/s	Engagement: Why and how to promote sustainability? ☑	Connections: How to frame the problem? ☑	Vision: What are the possible futures in our context? ☑	Action: How to proceed? ☑
(Select those areas that fix more with the measure)	The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	Improve sustainability performance of the Faculty. Increase sustainability awareness of students, teachers and staff. Promote communication campaings about what could be done (expanding the social imaginaries).

Additional information	This is one of the pre-selected measures that will be initiated during this course. (Connected with measure 7 - Facilitate transversal learning spaces)

11. Measure SP-DS03-IN11: Designing a more sustainable food system at the university

Name of measure	Designing a more sustainable food system at the university			
Country	SPAIN			
School	UAB			
Type of measure	Structural/Behavioural			
Description	Rethink the food offer in campus restaurants and cafes, to offer more healthy, sustainable and socially fair options. There should be a food plan for the campus, which includes all the options (menus, cafeterias, vending and lunch boxes), with health, environmental and social criteria (food sovereignty).			
Objectives	Design a new university food plan (a draft), based on sustainability criteria. Define the criteria for a more sustainable food supply in ecological, economic and social terms, thinking about criteria of food sovereignty and agroecology. Present this plan to the different actors involved in the Campus.			
Measure state	To be done during 24/25 scholar year	**Execution timing**	September 2024 - September 2025	
Will there be any costs?	Yes			
Relation to RoadMap competence/s	Engagement: Why and how to promote sustainability? ☑	Connections: How to frame the problem? ☑	Vision: What are the possible futures in our context? ☑	Action: How to proceed? ☑
(Select those areas that fix more with the measure)	The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	Changes to menu offerings. Improvement of student diets. Greater availability of organic and local foods.			
Additional information	This will probably not be done during the project. The campus' 'Healthy and Sustainable' Strategic Plan includes some of these proposals, but is not expected to go live for another year. It will be based on results from outside this project.			

12. Measure SP-DS03-IN12: Don't waste food

Name of measure	**Don't waste food**
Country	SPAIN
School	UAB
Type of measure	Structural/Behavioural

Description	There is a (perhaps unfounded) perception that a lot of food is 'wasted'. Supply and demand are not well adjusted. Have a plan for minimize food waste.
Objectives	Develop a mechanism and indicators to identify if food is wasted. Make this potential waste visible. Make a plan to reduce food waste.

Measure state	Done during 22/23 scholar year	**Execution timing**	
Will there be any costs?	Yes		

Relation to RoadMap competence/s	Engagement: Why and how to promote sustainability? ☑	Connections: How to frame the problem? ☐	Vision: What are the possible futures in our context? ☐	Action: How to proceed? ☑
(Select those areas that fix more with the measure)	The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	Reduce food waste. Raise awareness of the impact of food on sustainability. Modify students' dietary patterns.
Additional information	This will probably not be done during the project. The campus' 'Healthy and Sustainable' Strategic Plan includes some of these proposals, but is not expected to go live for another year. It will be based on results from outside this project.

13. Measure SP-DS03-IN13: Promote walking

Name of measure	**Promote walking**
Country	SPAIN
School	UAB
Type of measure	Behavioural
Description	Improve awareness of the size of the campus and how easy it is to walk (the distances are not that far), nor is the campus so big that so many internal buses are needed.
Objectives	Make distances visible on campus. Encourage people to walk. Reduce the use of public and private transportation. Make energy savings and the reduction of CO2 emissions visible.

Measure state	To be done during 23/24 scholar year	**Execution timing**	January - June 2024
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	An information campaign will be carried out on the spatial dimensions of the campus. More people will walk around campus. Fewer cars and buses will be used for internal travel.
Additional information	Pre-selected measure. campus' 'Healthy and Sustainable' Strategic Plan includes some of these proposals, but the application period is uncertain and may not coincide with our project.

14. Measure SP-DS03-IN14: Promote shared/common working and teaching spaces

Name of measure	Promote shared/common working and teaching spaces			
Country	SPAIN			
School	UAB			
Type of measure	Behavioural			
Description	Make more efficient use of spaces by managing timetables to make better use of air-conditioned classrooms. Tend to more common and better conditioned spaces (and tend to co-working for teachers). Although the building is old and poorly conditioned, its efficiency could be improved by better organizing work and class schedules. Likewise, there could be a tendency towards shared spaces and avoiding spaces for individual use (such as individual teachers' offices).			
Objectives	Concentrate human use of the building in certain spaces, especially in winter and summer, when air conditioning mechanisms must be implemented.			
Measure state	This will probably not be done during the project	Execution timing		
Will there be any costs?	Yes			
Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☐ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	Reduce energy expenditure. Make more efficient use of space and time. Modify the time organization (of classes). Modify the space occupied by teachers (tending towards collective offices).			
Additional information	This will probably not be done during the project. It may be a good idea, but it requires a lot of negotiation and a lot of time to be implemented, since many people have to be convinced beforehand.			

Finland

o) School: Juhannuskylä koulu

1. Measure FN-DS01-IN01: Strategy for fostering collective will-formation for sustainability among personnel

Name of measure	**A CLEAN ENVIRONMENT: Increase the number of rubbish and recycling bins**
Country	Finland
School	Juhannuskylä school (primary and lower secondary)
Type of measure	Structural
Description	A CLEAN ENVIRONMENT: STEP1. Increase the number of rubbish and recycling bins What is done? Exploring rubbish bins: number, recycling Who will do it? Teacher team, cleaners How to engage all? See PM Nº(2) Resources: Time for teachers to organize, School's budget Evaluation: Evaluational "quality walks"
Objectives	Goals for 2023-2024: Classrooms, school and school surroundings stay clean

Measure state	To be done during 23/24 scholar year	Execution timing	August 2023
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☐ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☐ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	Change: there is no rubbish in the school corridors or the school surroundings. A tidy environment creates a comfortable atmosphere for learning, recycling bins make recycling possible and rubbish away from floors. Improving of infrastructure is improving of the system and change of conditions. Connection between better facilities and tidiness can be monitored.			
Additional information				

2. Measure FN-DS01-IN02: A CLEAN ENVIRONMENT: Instruction and campaign

Name of measure	**A CLEAN ENVIRONMENT: Instruction and campaign**
Country	Finland
School	Juhannuskylä school (primary and lower secondary)
Type of measure	Behavioural
Description	A CLEAN ENVIRONMENT: STEP 2. Instruction and campaign What? Campaign, e.g. posters, info breaks Who? Student team How to engage all? See PM Nº(3) When? September-October 2023 Resources: Time for teachers to organize, Students' time Evaluation: Evaluational "quality walks"
Objectives	Goals for 2023-2024: Classrooms, school and school surroundings stay clean

Measure state	To be done during 23/24 scholar year	**Execution timing**	September-October 2023
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☐ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	Change: there is no rubbish in the school corridors or the school surroundings. Instruction and campaign helps students to pay attention to recycling and gives knowledge about the correct recycling and impacts of recycling. Students learn the process and connections of recycling, and gain individual competence – knowledge, skills, and attitudes –which can engage students to recycle. It is about the change of people.			
Additional information				

Name of measure	A CLEAN ENVIRONMENT: Reward for success			
Country	Finland			
School	Juhannuskylä school (primary and lower secondary)			
Type of measure	Behavioural			
Description	A CLEAN ENVIRONMENT:STEP 3. Reward for success What? reward Who? Sustainability team How to engage all? Reward for participating When? At the end of campaign Resources: Time for teachers to organize, Sponsors Evaluation: The school stays clean= norm			
Objectives	Goals for 2023-2024: Classrooms, school and school surroundings stay clean			
Measure state	To be done during 23/24 scholar year	Execution timing	23/24 scholar year	
Will there be any costs?	Yes			

| Relation to RoadMap competence/s

(Select those areas that fix more with the measure) | Engagement: Why and how to promote sustainability? ☐

The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices. | Connections: How to frame the problem? ☐

The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information. | Vision: What are the possible futures in our context? ☐

The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge. | Action: How to proceed? ☑

The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures. |

Expected impact of the measure	Change: there is no rubbish in the school corridors or the school surroundings. Giving reward for success in recycling motivates students. This was a proposition from students. Rewarding is one way of engaging people, but the change is a temporal external change of conditions. It might help students to pay attention to recycling and might help them to remember it even after rewards, so it might also change people.

Additional information	

4. Measure FN-DS01-IN04: A CLEAN ENVIRONMENT: Cleaning day

Name of measure	**A CLEAN ENVIRONMENT: Cleaning day**
Country	Finland
School	Juhannuskylä school (primary and lower secondary)
Type of measure	Behavioural

Description	A CLEAN ENVIRONMENT: STEP 4. Cleaning day What? Cleaning day outside When? Spring 2024 Resources: Time for teachers to organize, Gloves from school and home, sponsors
Objectives	Goals for 2023-2024: Classrooms, school and school surroundings stay clean

Measure state	To be done during 23/24 scholar year	Execution timing	23/24 scholar year
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☐ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	Change: there is no rubbish in the school corridors or the school surroundings. One day that focus on the common environment and rubbish around, help students to realize the meaning of tidiness. The day is also a time and place for collective action: students and teachers together change the conditions in which they are working every day. It is also an attempt to change the common organisational culture (change of system). Learning (Change of people) is also predicted.			
Additional information				

5. Measure FN-DS01-IN05: Attitude: Educational study day for teachers

Name of measure	Attitude: Educational study day for teachers		
Country	Finland		
School	Juhannuskylä school (primary and lower secondary)		
Type of measure	Behavioural		
Description	Attitude:STEP 1: Educational study day for teachers Who? principles How to engage all? obligatory Resources: Time for teachers to organize, Collaboration with other schools in the area Evaluation: questionnaire		
Objectives	A change of mindset/attitude, both in students and in staff		
Measure state	To be done during 23/24 scholar year	**Execution timing**	School semester 2023-2024
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☐ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	The little things we do everyday + all events and projects. Sustainability becomes integrated and visible in studies. Training of teachers helps them to engage in promoting sustainability when they gain competence in environmental issues. Attitudes of teachers might get more positive. Expected impact is learning (change of people), but also change of conditions for students – teachers include sustainability more in their teaching.
Additional information	

6. Measure FN-DS01-IN06: Attitude: Information for students

Name of measure	Attitude: Information for students
Country	Finland
School	Juhannuskylä school (primary and lower secondary)
Type of measure	Behavioural

Description	Attitude: STEP 2: Information for students (e.g. morning assemblies, infobreaks) Who? Sustainability team, school social workers How to engage all? During a school day (morning assemblies, breaks, etc.) Resources: Time
Objectives	A change of mindset/attitude, both in students and in staff

Measure state	To be done during 23/24 scholar year	**Execution timing**	School semester 2023-2024
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☐ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	The little things we do everyday + all events and projects. Sustainability becomes integrated and visible in studies. Information campaign for students tries to engage them in sustainability and change their attitudes towards sustainability and brings out the connections between food and environment. The goal is that attitudes of students change (change of people).			
Additional information				

7. Measure FN-DS01-IN07: Attitude: Vegetarian cooking recipes contest

Name of measure	Attitude: Vegetarian cooking recipes contest		
Country	Finland		
School	Juhannuskylä school (primary and lower secondary)		
Type of measure	Behavioural		
Description	Attitude: STEP 3: Vegetarian cooking recipes contest (May Sept 23) --> recipes to be used in school and at home What? Vegetarian recipes to use (employees, students) Who? Wellness team, teachers, media team How to engage all? Voluntary, challenge Resources: Time, ingredients Evaluation: Instagram or other social media posts		
Objectives	A change of mindset/attitude, both in students and in staff		
Measure state	Done during 22/23 scholar year	Execution timing	School semester 2023-2024
Will there be any costs?	Yes		

Relation to RoadMap competence/s (Select those areas that fix more with the measure)	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☐ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	The little things we do everyday + all events and projects. Sustainability becomes integrated and visible in studies. Cooking recipes contest brings out the connections between food and environment and benefits of vegetarian food for environment. When people know how to make good tasting vegetarian food, it is easier for them to choose vegetarian options (change of people) and engage in eating sustainable food. In the long run, the whole culture of eating could change (change of the system).		
Additional information			

8. Measure FN-DS01-IN08: Attitude: Art supplies storage room rearranged and in order

Name of measure	Attitude: Art supplies storage room rearranged and in order		
Country	Finland		
School	Juhannuskylä school (primary and lower secondary)		
Type of measure	Structural/Behavioural		
Description	Attitude:STEP 4: Art supplies storage room rearranged and in order Who? Named teachers When? Spring-autumn 2023 Resources: Time for teachers to organize, Making use of what is in storage Evaluation: Final art work		
Objectives	A change of mindset/attitude, both in students and in staff		
Measure state	Done during 22/23 scholar year	Execution timing	Spring-autumn 2023
Will there be any costs?	Yes		

Relation to RoadMap competence/s (Select those areas that fix more with the measure)	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☐ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	The little things we do everyday + all events and projects. Sustainability becomes integrated and visible in studies. The traditional culture has been that every teacher orders their own art supplies from the school secretary. The connections between materials and environment have not been thought. Storage room has been full of unused materials. Rearranging the room is the start of new culture (change of system): look first what is already available before buying something new. So also the process and the teachers action and attitudes will change (change of people), and engagement in promoting sustainability increase.
Additional information	

9. Measure FN-DS01-IN09: Strategy for fostering collective will-formation for sustainability among personnel

Name of measure	Strategy for fostering collective will-formation for sustainability among personnel
Country	Finland
School	Juhannuskylä comprehensive school
Type of measure	Behavioural

Description	Researchers will facilitate strategy development process based on the Roadmap for adminstration and teachers.
Objectives	1. Collective willformation 2. Strategic development of sustainability education 3. Engaging teachers, families and students in sustainability

Measure state	To be done during 23/24 scholar year	**Execution timing**	September 2023
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☐ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☐ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☐ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	Strategy for collective will formation. The measure promotes a collective understanding of the meaning of sustainability and engages a broad public for sustainability. Positive attitudes increase and understanding of sustainability education improves among the staff. To go forward with sustainability, school should have a vision where they are aiming to. Making together a strategy helps teachers to engage in promoting sustainability and plan collective action for sustainability. Through the strategy, the system can change, and the change of system changes also people.
Additional information	

u) School: SAMKE upper secondary school

1. Measure FN-DS02-IN01: RECYCLING: Advertisement

Name of measure	**RECYCLING: Advertisement**
Country	Finland
School	SAMKE upper secondary school
Type of measure	Behavioural
Description	What? Advertisement Who? Student group How to engage all? Screen and video Resources: Time Evaluation: Q&A
Objectives	Recycling bins for cans, plastic and metal

Measure state	To be done during 23/24 scholar year	**Execution timing**	Fall 2023
Will there be any costs?	Yes		

Relation to RoadMap competence/s	Engagement: Why and how to promote sustainability? ☑	Connections: How to frame the problem? ☐	Vision: What are the possible futures in our context? ☐	Action: How to proceed? ☑
(Select those areas that fix more with the measure)	The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	Instruction and campaign helps students to pay attention to recycling and gives knowledge about the correct recycling and impacts of recycling. Students learn the process and connections of recycling, and gain individual competence – knowledge, skills, and attitudes –which can engage students to recycle (personal choices of action). It is about the change of people.

Additional information	

2. Measure FN-DS02-IN02: RECYCLING: Collecting bottles -> transporting

Name of measure	**RECYCLING: Collecting bottles -> transporting**
Country	Finland
School	SAMKE upper secondary school
Type of measure	Structural/Behavioural
Description	What? Collecting bottles -> transporting Who? Student group and school assistant How to engage all? Posters and screen Where? In every class Resources: Time for organizing, Paper bag Evaluation: Amount of bottles
Objectives	Recycling bins for cans, plastic and metal

Measure state	To be done during 23/24 scholar year	Execution timing	23/24 scholar year
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☐ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☐ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	Bottles have been dropped around the school corridors. There has not been any system for collecting them. Students will organize the new collecting system (change of the system) – this is a collective action of one student group. All the students get better possibilities to recycle (change of conditions) which makes individual acts of recycling easier for students (action).			
Additional information				

3. Measure FN-DS02-IN03: RECYCLING: Piggy bank -> savings for a trip

Name of measure	RECYCLING: Piggy bank -> savings for a trip		
Country	Finland		
School	SAMKE upper secondary school		
Type of measure	Structural/Behavioural		
Description	What? Piggy bank Who? Student group How to engage all? Engouragement messaging Where? In the school Resources: Time for organizing, Bottles collected Evaluation: sum of money and amount of students engaged		
Objectives	Recycling bins for cans, plastic and metal		
Measure state	To be done during 23/24 scholar year	Execution timing	23/24 scholar year
Will there be any costs?	Yes		

Relation to RoadMap competence/s (Select those areas that fix more with the measure)	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☐ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☐ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	Money engages students in organizing the bottle collecting system: in Finland, you get money when you return bottles to shops. Collective effort creates possibilities of collective action: resources for field trips. The conditions change – resources make things possible.		
Additional information			

4. Measure FN-DS02-IN04: RECYCLING: Sorting points

Name of measure	**RECYCLING: Sorting points**
Country	Finland
School	SAMKE upper secondary school
Type of measure	Structural
Description	What? Sorting points Who? School administration How to engage all? Posters, info Where? On every floor Resources: Time to organize, Money for bins and emptying Evaluation: measuring carbage
Objectives	Recycling bins for cans, plastic and metal

Measure state	To be done during 23/24 scholar year	**Execution timing**	23/24 scholar year
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☐	Connections: How to frame the problem? ☐	Vision: What are the possible futures in our context? ☐	Action: How to proceed? ☑
	The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	There have not been sorting/ recycling points for different kinds of waste in the corridors of schools for students to use. The new sorting points (change of the system) give students better possibilities to recycle (change of conditions) which makes individual acts of recycling easier for students (action).

Additional information	

5. Measure FN-DS02-IN05: RECYCLING: Depository room

Name of measure	RECYCLING: Depository room		
Country	Finland		
School	SAMKE upper secondary school		
Type of measure	Structural		
Description	What? Depository room Who? Administration How to engage all? Educating Resources: Time for organizing, space & will Evaluation: Q&A		
Objectives	Recycling bins for cans, plastic and metal		
Measure state	To be done during 23/24 scholar year	Execution timing	Spring 2023
Will there be any costs?	Yes		

Relation to RoadMap competence/s	Engagement: Why and how to promote sustainability? ☐	Connections: How to frame the problem? ☐	Vision: What are the possible futures in our context? ☐	Action: How to proceed? ☑
(Select those areas that fix more with the measure)	The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	There have not been a place where for example recycled bottles can be collected from recycling bins in corridors before students take them to shops. A new depository room is necessary to make the new collection system and action possible (change of the system and conditions)
Additional information	

6. Measure FN-DS02-IN06: FOOD: Measuring the amount of bio waste

Name of measure	**FOOD: Measuring the amount of bio waste**
Country	Finland
School	SAMKE upper secondary school
Type of measure	Structural/Behavioural
Description	What? Measuring the amount of bio waste Who? Canteen staff & school assistant How to engage all? Collaboration Resources: Time for organizing, kitchen scale Evaluation: Amount of biowaste, kg
Objectives	Less biowaste and better vegetarian food

Measure state	To be done during 23/24 scholar year	**Execution timing**	Every day autumn 2023->
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☐ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☐ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	Knowing about the amount of bio waste in canteen can engage students and teachers not to take too much food. This new measuring activity is a new collective action and change of system.			
Additional information				

7. Measure FN-DS02-IN07: FOOD: Selling leftover food

Name of measure	FOOD: Selling leftover food		
Country	Finland		
School	SAMKE upper secondary school		
Type of measure	Structural/Behavioural		
Description	What? Selling leftover food Who? Canteen administration How to engage all? Affordable prize Resources: Time for organizing, all leftover foods Evaluation: scale: before and after (kg)		
Objectives	Less biowaste and better vegetarian food		
Measure state	To be done during 23/24 scholar year	Execution timing	By end of 2023 every day
Will there be any costs?	Yes		

Relation to RoadMap competence/s (Select those areas that fix more with the measure)	Engagement: Why and how to promote sustainability? ☐	Connections: How to frame the problem? ☐	Vision: What are the possible futures in our context? ☑	Action: How to proceed? ☑
	The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	After lunch time food that has not been sold/taken from the food line, has traditionally been thrown to bio waste, although this food is still good to eat. Selling of leftover food to home (students and teachers) is environmentally friendly but requires the change of the systems. The change is not easy, because it is connected to legislation and resources of food service provider. If it will be a success, the environmental impact of food will be decreased.			
Additional information				

8. Measure FN-DS02-IN08: FOOD: Reminders about reducing waste in the canteen

Name of measure	**FOOD: Reminders about reducing waste in the canteen**
Country	Finland
School	SAMKE upper secondary school
Type of measure	Behavioural
Description	What? Reminders about reducing waste in the canteen Who? Student group antd teachers How to engage all? Info screen and notes Where? Posters changed in the canteens every few months Resources: Time for organizing, info screen, posters Evaluation: No specific measuring
Objectives	Less biowaste and better vegetarian food

Measure state	To be done during 23/24 scholar year	Execution timing	
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☐ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	Seeing connections between individual acts and environmental impact can help people to change their individual action (change of people).			
Additional information				

9. Measure FN-DS02-IN09: FOOD: Making an address and an inquiry about the quality of plant-based food in schools

Name of measure	**FOOD: Making an address and an inquiry about the quality of plant-based food in schools**
Country	Finland
School	SAMKE upper secondary school
Type of measure	Behavioural
Description	What? Making an address and an inquiry about the quality of plant-based food in schools Who? Student group and teachers How to engage all? Advertizing and collaboration When? Few times a year Resources: Time for organizing, student group recess time Evaluation: Number of signatures
Objectives	Less biowaste and better vegetarian food

Measure state	Done during 22/23 scholar year	**Execution timing**	23/24 scholar year
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☐ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	FOOD: The change in the food service of schools in Tampere municipality (all school have a same food service provider in Tampere) have made food quality much worse than before. Bad quality of food means more leftover food and bio waste. SAMKE upper secondary school will make an address for the municipality and service provider and ask all the schools/ students/ teachers to sign it, so this is direct action that tries to have impact on policies. The goal is to change the system.
Additional information	

10. Measure FN-DS02-IN10: Designing a strategy for sustainability education for the whole school

Name of measure	**Designing a strategy for sustainability education for the whole school**
Country	Finland
School	SAMKE Upper secondary school
Type of measure	Behavioural
Description	Designing a strategy for the school based on the Roadmap.
Objectives	1. Finding space, time and resources for sustainability education and engaging students in the tight schedule of the school. 2. Learning from previous and new experiences of engaging students in sustainability action. 3. Established sustainability education strategy.
Measure state	Done during 22/23 scholar year Execution timing
Will there be any costs?	Yes

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☐ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☐ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☐ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	Sustainability strategy for coming years, engaged teacher and well-designed systematic approach, increased sustainability competences of both students and teachers and teachers' pedagogical competences. To go forward with sustainability, school should have a vision where they are aiming to. Making together a strategy helps teachers to engage in promoting sustainability and plan collective action for sustainability. Through the strategy, the system can change, and the change of system changes also people.			
Additional information				

d) University of Jyväskylä

1. Measure FN-DS03-IN01: DISCUSSIONS AND COACHING ON SUSTAINABILITY AND CURRICULA DEVELOPMENT WITH TEACHERS AND STUDENTS: Seminar and a panel discussion on sustainability and curricula, dialogue between personnel and students.

Name of measure	DISCUSSIONS AND COACHING ON SUSTAINABILITY AND CURRICULA DEVELOPMENT WITH TEACHERS AND STUDENTS: Seminar and a panel discussion on sustainability and curricula, dialogue between personnel and students.		
Country	Finland		
School	University of Jyväskylä		
Type of measure	Structural/Behavioural		
Description	What? Seminar and a panel discussion on sustainability and curricula, dialogue between personnel and students. Who? Collaboration with Student Union Sustainability forum and sustainability officers, 60 participants How to engage all? Open seminar and panel for students and representatives from all the faculties When? January 2023, extra event Resources: Service: coffee and cake, space rent. Evaluation: Evaluation query, open and closed questions		
Objectives	Improving students' and teachers' sustainability competences		
Measure state	Done during 22/23 scholar year	Execution timing	January 2023
Will there be any costs?	Yes		
Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☐ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	Change: Sustainability becomes visible, connected and prioritised. Creating a time and place for common transdisciplinary discussions, for engaging students and teachers in developing connections to sustainability in the new curriculum (change of system).		
Additional information			

2. Measure FN-DS03-IN02: DISCUSSIONS AND COACHING ON SUSTAINABILITY AND CURRICULA DEVELOPMENT WITH TEACHERS AND STUDENTS: Sustainability breakfast: ecological sustainability and curriculum work.

Name of measure	DISCUSSIONS AND COACHING ON SUSTAINABILITY AND CURRICULA DEVELOPMENT WITH TEACHERS AND STUDENTS: Sustainability breakfast: ecological sustainability and curriculum work
Country	Finland
School	University of Jyväskylä
Type of measure	Structural
Description	What? Sustainability breakfast: ecological sustainability and curriculum work Who? With teachers responsible of sustainability pedagogy How to engage all? All the faculty of Education and psychology invated, also students When? May 2023, We were invated to take part in the practice/routine of sustainability breakfasts at the faculty of education and psychology Resources: Breakfast, space Evaluation: 20 persons participated
Objectives	Improving students' and teachers' sustainability competences

Measure state	Done during 22/23 scholar year	**Execution timing**	May 2023
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☐ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	Change: Sustainability becomes visible, connected and prioritised. Offering possibilities for the Faculty of Education and Psychology to ponder sustainability in curriculum. The goal is to engage students and teachers in developing connections to sustainability in the new curriculum (change of system).
Additional information	The advertisement of the event: The sixth Sustainability Breakfast is organised in cooperation with the Finnish Institute for Educational Research. As usual, the event will start at 8-9am with a joint breakfast at Restaurant Uno (free for registrants; registration link below) and continue from 9-11am with a joint working session on the Ruusupuisto Lobby. This time the theme of the event is ecological sustainability. Welcome to discuss and reflect together how to integrate ecological sustainability and planetary wellbeing in curricula development and teaching at the University of Jyväskylä! Where is the space for promoting ecological sustainability? Students criticise sustainability is not taken seriously at the University of Jyväskylä and there is a lack of transdisciplinary courses on sustainability. How could university studies support students facing current serious and complex sustainability challenges and strengthen relevant competences in green transition in working life? This breakfast will be organised together with ECF4CLIM-research project, by the Finnish Institute for Educational Research. As introduction, Anna and Niina will present European Sustainability Competence Framework, GreenComp, that is a part of European Green Deal and provides guidelines for future education and national curricula development. Additionally, they will introduce students' and personnels' perspectives, needs and challenges how to promote ecological sustainability in current curriculum development. As a tool for scrutinising curriculum and developing teaching, we will provide a Roadmap for sustainability education. This roadmap is based on GreenComp, crowdsourcing and aims to facilitate concrete promotion of ecological sustainability in education. After the presentation, the event will continue with a joint reflection on curricula in concrete terms. So, take a concrete issue of curriculum or study unit/course description, that you like to reflect together, with you! The collective understanding, that will emerge during the breakfast, will be used for promoting sustainability competences at JYU and related research.

3. Measure FN-DS03-IN03: DISCUSSIONS AND COACHING ON SUSTAINABILITY AND CURRICULA DEVELOPMENT WITH TEACHERS AND STUDENTS: Coaching students and teachers in promotion of sustainability competences and discussions.

Name of measure	**DISCUSSIONS AND COACHING ON SUSTAINABILITY AND CURRICULA DEVELOPMENT WITH TEACHERS AND STUDENTS: Coaching students and teachers in promotion of sustainability competences and discussions**
Country	Finland
School	University of Jyväskylä
Type of measure	Behavioural
Description	What? Coaching students and teachers in promotion of sustainability competences and discussions Who? With student representative of Educational policy of Student Union How to engage all? Educational policy student representatives of different subjects When? April 2023, Educational policy student representatives meeting Resources: Preparing materials Evaluation: 15 persons participated
Objectives	Improving students' and teachers' sustainability competences

Measure state	Done during 22/23 scholar year	**Execution timing**	April 2023
Will there be any costs?	Yes		

Relation to RoadMap competence/s	Engagement: Why and how to promote sustainability? ☑	Connections: How to frame the problem? ☑	Vision: What are the possible futures in our context? ☑	Action: How to proceed? ☐
(Select those areas that fix more with the measure)	The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	Change: Sustainability becomes visible, connected and prioritised. Who? With student representative of Educational policy of Student Union DISCUSSIONS AND COACHING: Offering possibilities for the educational policy student representatives of different subjects/ disciplines to ponder sustainability in curriculum. The goal is to engage students and teachers in developing connections to sustainability in the new curriculum (change of system). Also the competences of students can increase (Change of people).
Additional information	

4. Measure FN-DS03-IN04: DISCUSSIONS AND COACHING ON SUSTAINABILITY AND CURRICULA DEVELOPMENT WITH TEACHERS AND STUDENTS: Contacting curriculum development representatives.

Name of measure	DISCUSSIONS AND COACHING ON SUSTAINABILITY AND CURRICULA DEVELOPMENT WITH TEACHERS AND STUDENTS: Contacting curriculum development representatives
Country	Finland
School	University of Jyväskylä
Type of measure	Structural

Description	What? Contacting curriculum development representatives Who? ECF4CLIM team and sustainability officer How to engage all? Through contacting relevant stakeholders When? Year 2023 Resources: Preparing questionnaire on needs and providing needed materials Evaluation: Asking for feedback
Objectives	Improving students' and teachers' sustainability competences

Measure state	Done during 22/23 scholar year	**Execution timing**	Year 2023
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☐ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☐ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	Change: Sustainability becomes visible, connected and prioritised. The goal is to engage curriculum development representatives in developing connections to sustainability in the new curriculum (change of system). Also the competences of personnel can increase (Change of people).			
Additional information	https://www.jyu.fi/en/current/archive/2023/02/curriculum-development-is-coming-but-what-about-sustainability-students-criticise-sustainability-is-not-taken-seriously			

5. Measure FN-DS03-IN05: FROM SUSTAINABILITY COMPETENCES IN CURRICULA TO PRACTICE AND PEDAGOGY: Pilot course and prepairing material on sustainability competences for psychology students.

Name of measure	FROM SUSTAINABILITY COMPETENCES IN CURRICULA TO PRACTICE AND PEDAGOGY: Pilot course and prepairing material on sustainability competences for psychology students			
Country	Finland			
School	University of Jyväskylä			
Type of measure	Behavioural			
Description	What? Pilot course on sustainability competences for psychology students Who? ECF4CLIM researchers with psychology university teachers How to engage all? Provide help for teachers When? Autumn 2023, as part of the psychology studies and their preparation Resources: Preparing materials Evaluation: Feedback questionnaires and documenting			
Objectives	Improving students' and teachers' sustainability competences			
Measure state	Done during 22/23 scholar year	Execution timing		Autumn 2023
Will there be any costs?	Yes			
Relation to RoadMap competence/s (Select those areas that fix more with the measure)	Engagement: Why and how to promote sustainability? ☐ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☐ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	Change: Sustainability becomes visible, connected and prioritised, study programs will include sustainability competences. Offering help in the planning of course and preparing material can help the faculty of psychology to include environmental sustainability in their curriculum (change of system). The goal is that through the course, the individual competences of psychology students will increase (change of people) on all the dimensions of our sustainability roadmap (engagement, connections, visions, action).			
Additional information				

6. Measure FN-DS03-IN06: FROM SUSTAINABILITY COMPETENCES IN CURRICULA TO PRACTICE AND PEDAGOGY: Preparing concrete teaching and study materials of each step of the Roadmap.

Name of measure	FROM SUSTAINABILITY COMPETENCES IN CURRICULA TO PRACTICE AND PEDAGOGY: Preparing concrete teaching and study materials of each step of the Roadmap
Country	Finland
School	University of Jyväskylä
Type of measure	Behavioural
Description	What? Preparing concrete teaching and study materials of each step of the Roadmap Who? Together with teaching personnel of Psychology and education How to engage all? Concrete and helpful tools for the personnel openly access and our contacts present them to the whole personnel of the faculty When? Autumn 2023 Resources: Preparing materials Evaluation: Pilot course where the materials will be tested
Objectives	Improving students' and teachers' sustainability competences

Measure state	Done during 22/23 scholar year	**Execution timing**	Autumn 2023
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☐ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☐ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	Change: Sustainability becomes visible, connected and prioritised. Preparing concrete teaching and study materials can help faculties to include environmental sustainability in their curriculum (change of system). The goal is that through the studies, the individual competences of students will increase (change of people) on all the dimensions of our sustainability roadmap (engagement, connections, visions, action).
Additional information	

7. Measure FN-DS03-IN07: FROM SUSTAINABILITY COMPETENCES IN CURRICULA TO PRACTICE AND PEDAGOGY: Pedagogical Escape Room "Save the Planet" for students and teachers about the Roadmap for Sustainability Competences.

Name of measure	FROM SUSTAINABILITY COMPETENCES IN CURRICULA TO PRACTICE AND PEDAGOGY: Pedagogical Escape Room "Save the Planet" for students and teachers about the Roadmap for Sustainability Competences			
Country	Finland			
School	University of Jyväskylä			
Type of measure	Behavioural			
Description	What? Pedagogical Escape Room "Save the Planet" for students and teachers about the Roadmap for Sustainability Competences Who? ECF4CLIM researchers with students How to engage all? Advertizing through student social media When? September 2023, University opening ceremonies Resources: ECF4CLIM Researchers, active students from student's union, venue of student's union, facilities/ space (rent) Evaluation: Questionnaire in the end of the journey			
Objectives	Improving students' and teachers' sustainability competences			
Measure state	Done during 22/23 scholar year		Execution timing	September 2023
Will there be any costs?	Yes			
Relation to RoadMap competence/s (Select those areas that fix more with the measure)	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	Change: Sustainability becomes visible, connected and prioritised. Escape room game "Save the Planet" for students and teachers is one pedagogical tool that brings ideas of the Roadmap for Sustainability Competences to university. The game gives to the participants the general view of all the areas of activity that are connected to sustainability and its dimensions (engagement, connections, visions, action), and participannts can learn something new from the processes of university (change of people).			
Additional information				

Portugal

a) School: EB BOBADELA

5. Measure PT-DS01-IN01: Install faucets with sensors or flow reducers

Name of measure	**Install faucets with sensors or flow reducers**
Country	Portugal
School	EB BOBADELA
Type of measure	Structural
Description	Install faucets with sensors or flow reducers in the school's bathrooms and drinking fountains.
Objectives	● End the waste of water in school taps ● Improve the carbon footprint of the school

Measure state	This will probably not be done during the project	**Execution timing**	
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	● Reduction of the amount of water used in the school ● Reduction of paid monthly invoice
Additional information	Due to the high associated costs and because it is not the main measure to be financed by the EC4CLIM project, it is not expected that it will be possible to complete it by 2025.

3. Measure PT-DS01-IN02: Field trips related to water

Name of measure	**Field trips related to water**
Country	Portugal
School	EB BOBADELA
Type of measure	Behavioural

Description	Carry out field trips to the water museum and wastewater treatment plants in order to raise the awareness of the school community.
Objectives	● Allow students to have an "in-the-field" view of how water is treated and the consequences of poor water management. ● Raise awareness in the school community. ● Promote sustainable practises.

Measure state	To be done during 24/25 scholar year	**Execution timing**	Jan 24 - June 25
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	Increase the community awareness
Additional information	

4. Measure PT-DS01-IN03: Implement solar panels at the school

Name of measure	**Implement solar panels at the school**
Country	Portugal
School	EB BOBADELA
Type of measure	Structural/Behavioural
Description	The project will support the installation of solar panels. The school will involve the school community in this measure through awareness raising actions. After a year, students will be invited to work on the savings achieved with the installation of solar panels and to publicise their work.
Objectives	● Promote the use of renewable energy and reduce emissions and costs. ● Encourage the use of renewable energies in schools. ● Improve existing knowledge. ● Stimulate learning by communicating the results.

Measure state	To be done during 23/24 scholar year	**Execution timing**	October 23 - June 24
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	● A significant reduction in electricity consumption combined with better sustainability performance at the school. ● Disseminate information about renewable energy in the local community.
Additional information	

6. Measure PT-DS01-IN04: Implement efficient lighting systems (LED)

Name of measure	Implement efficient lighting systems (LED)			
Country	Portugal			
School	EB BOBADELA			
Type of measure	Structural			
Description	Replace school light bulbs with LED			
Objectives	● Decrease school energy costs. ● Improving the school's carbon footprint.			
Measure state	This will probably not be done during the project	Execution timing		
Will there be any costs?	Yes			
Relation to RoadMap competence/s (Select those areas that fix more with the measure)	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	● Reduction of the electricity bill payable. ● Improvement of the school's index in terms of carbon footprint.			
Additional information	Due to the high costs and the fact that this is not one of the most popular measures, it should not be carried out during the execution of the project.			

9. Measure PT-DS01-IN05: Implement double-glazed windows and thermal blinds

Name of measure	Implement double-glazed windows and thermal blinds			
Country	PORTUGAL			
School	EB BOBADELA			
Type of measure	Structural			
Description	The school is installing double glazing and thermal blinds in all classrooms and offices in the school in order to control thermal changes and reduce noise inside the classrooms.			
Objectives	● Improve the thermal regulation of the school rooms and offices ● Improve visibility ● Reduce noise			
Measure state	Done during 22/23 scholar year	Execution timing		Jan 23 - Jan 24
Will there be any costs?	No			
Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☐ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☐ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	● Improving the energy efficiency of the school ● Reduction of energy costs			
Additional information	The costs were borne by the school.			

7. Measure PT-DS01-IN06: Energy route: ADENE

Name of measure	**Energy route: ADENE**
Country	Portugal
School	EB BOBADELA
Type of measure	Behavioural

Description	The "Energy Route" from ADENE includes face-to-face and/or distance information and training sessions, bringing knowledge to people, instigating the desire to know more about the world of energy, and making people understand the role of citizens in building a more sustainable world.
Objectives	● Involving society, investing in education, information, awareness, and training, and contributing to increasing individual and collective action, through changes in behaviour and lifestyle. ● Disseminate the importance of decarbonisation issues among consumers and companies. ● Deepen knowledge in terms of mitigating climate change, disseminating good practises, and promoting low-carbon behaviour in society. ● Promote training for the energy and water efficiency sectors. ● Combating energy poverty.

Measure state	To be done during 23/24 scholar year	Execution timing	Sept 23- June 24
Will there be any costs?	No		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	● Increase the knowledge of the school community. ● Encourage the community to be agents of change. ● Promote energy efficiency and sustainability.

Additional information	https://rotadaenergia.adene.pt/

13. Measure PT-DS01-IN07: Integrate the assessment of energy consumption into the disciplines

Name of measure	Integrate the assessment of energy consumption into the disciplines			
Country	Portugal			
School	EB BOBADELA			
Type of measure	Behavioural			
Description	Integrate energy consumption assessment into math and science subjects. Make students aware of their school's consumption data and use this data to gain knowledge and skills in the various teaching areas.			
Objectives	● Allow students to be aware of the consumption of their school. ● Encourage the introduction of themes related to sustainability in the various areas of knowledge. ● Raising awareness of behaviour change.			
Measure state	Done during 22/23 scholar year	Execution timing		Sept 22 - June 2024
Will there be any costs?	No			

Relation to RoadMap competence/s (Select those areas that fix more with the measure)	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	● Students are sensitised to sustainability issues. ● Increase in the number of teachers addressing sustainability issues in their classes			
Additional information				

13. Measure PT-DS01-IN08: Implement more recycling bins inside the school according to the needs

Name of measure	Implement more recycling bins inside the school according to the needs			
Country	Portugal			
School	EB BOBADELA			
Type of measure	Structural/Behavioural			
Description	The project will help the school increase the number of containers for recyclable waste in its spaces. Either through contacts with institutions such as ValorSul or Ponto Verde, which provide these containers free of charge, or through the creation of art competitions between students to create containers for classrooms.			
Objectives	● Increase in the number of available containers for waste separation. ● Awareness in the school community for the separation of garbage. ● Decrease the production of waste produced. ● Increase the separation of recyclable waste.			
Measure state	To be done during 23/24 scholar year	Execution timing	October 23 - June 24	
Will there be any costs?	No			
Relation to RoadMap competence/s (Select those areas that fix more with the measure)	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	● Increase the number of recycling bins at school. ● Reduce the amount of waste produced at school. ● Increase the separation of recyclable waste.			
Additional information				

9. Measure PT-DS01-IN09: Competition to promote a efficient waste separation

Name of measure	**Competition to promote a efficient waste separation**
Country	Portugal
School	EB BOBADELA
Type of measure	Structural/Behavioural
Description	Creation of a competition or reward programme that will be played between classes or school buildings with the aim of promoting efficient waste separation. For a week, all classes of the same school year compete with each other, with the aim of being the class that manages to recycle the most. For this, new containers will be provided to the school to carry out the challenge.
Objectives	● Promote the correct separation of waste. ● Get more recycling equipment at school. ● Teach the community about recycling and its importance. ● Debunking myths about recycling. ● Decrease the amount of waste produced at school.

Measure state	To be done during 23/24 scholar year	**Execution timing**	Sept 23 - June 24
Will there be any costs?	No		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	● Increase the number of recycling bins at school. ● Reduce the amount of waste produced at school. ● Increase the separation of recyclable waste.			
Additional information				

b) *School: EB BOBADELA*

5. Measure PT-DS02-IN01: Improve the bus and bike lanes network

Name of measure	**Improve the bus and bike lanes network**
Country	Portugal
School	EB Camarate
Type of measure	Structural
Description	This measure hopes to convince the responsible authorities to significantly improve the bus network that serves the school and the cycle paths that surround it. The current situation does not serve the needs of the school community and discourages the use of public transport.
Objectives	● Increase the bus routes that provide access to the school. ● Adapt the timetables of the buses that give access to the school to the needs of the school community. ● Build bike paths that give access to the school. ● Improve the transport infrastructure surrounding the school.
Measure state	This will probably not be done during the project / Execution timing
Will there be any costs?	Yes

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	● Increase in the number of students, teachers and staff commuting to school by public transport or bicycle. ● Drastic reduction of cars around the school in the morning and at the end of the day to drop off and pick up people.
Additional information	Due to its complexity, the associated costs, and the fact that it is not in the hands of the school community, it is not expected to be achieved during the project period.

Name of measure	**Learning how to drive a bicycle**
Country	Portugal
School	EB CAMARATE
Type of measure	Behavioural

Description	This is a project applied nationally and supported by the municipality of Loures. This aims to give free bicycle lessons to school students so that everyone knows how to ride a bicycle.
Objectives	● Increase the number of bicycle users. ● Promote green transportation. ● Promoting healthy living. ● Promote the practise of sport.

Measure state	Done during 22/23 scholar year	**Execution timing**	Jan 22- June 2024
Will there be any costs?	No		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	● Make students aware of healthy habits. ● Promoting the use of bicycles and ensuring that everyone has the opportunity to learn to ride.
Additional information	

Name of measure	Reactivate the school's biological garden			
Country	Portugal			
School	EB CAMARATE			
Type of measure	Structural/Behavioural			
Description	Reactivate the school's biological garden, making it a space for promoting sustainability, learning, and contributing to the community. The garden, in addition to providing biological products and sheltering animals, will have space for classes and training sessions.			
Objectives	● Produce organic farming. ● Promote sustainability. ● Use the garden as a learning tool. ● Promote the participation of the school community in the maintenance of the garden. ● Create a space for outdoor classes and sessions.			
Measure state	To be done during 23/24 scholar year	**Execution timing**		Sept 23 - Jan 25
Will there be any costs?	Yes			

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	● Production of agricultural products. ● Increase awareness in the school community about green spaces. ● Increase training sessions on sustainability. ● Increase the involvement of the entire school community in school activities.			
Additional information	This was the most voted measure by the school community and the measure that will receive most of the value assigned to each school by the ECF4CLIM project.			

7. Measure PT-DS02-IN04: Raising awareness of the role of green species in air quality

Name of measure	**Raising awareness of the role of green species in air quality**
Country	Portugal
School	EB CAMARATE
Type of measure	Behavioural
Description	After the creation of the biological garden, the school intends to invite experts and NGOs to give awareness sessions about green spaces, how to maintain and protect them, their contribution to air quality and sustainability. These actions will be directed at the entire school community.
Objectives	● Increase knowledge about the environment and sensitise the school community. ● Promoting sustainability at school encouraging the participation of the entire community to maintain green spaces and open minds to changing behaviours.

Measure state	To be done during 24/25 scholar year	**Execution timing**	Sept 24 - June 25
Will there be any costs?	No		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	● Greater knowledge on the part of the school community ● Higher community participation in school sustainability activities

Additional information	

8. Measure PT-DS02-IN05: Promote awareness of behavioural habits to reduce water consumption

Name of measure	Promote awareness of behavioral habits to reduce water consumption
Country	Portugal
School	EB CAMARATE
Type of measure	Behavioural

Description	Promote school community awareness about behavioural habits that can contribute to reducing water consumption at home and at school. To this end, clarification sessions and study visits will be held.
Objectives	● Changing the behavior of the school community ● Decrease water costs

Measure state	This will probably not be done during the project	Execution timing	
Will there be any costs?	No		

Relation to RoadMap competence/s (Select those areas that fix more with the measure)	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	● Decrease in monthly water bill ● Increased knowledge of the school community on the subject			
Additional information	Although it is an important topic and one that the school believes should be part of the list of measures, this topic has already been addressed in the recent past. For this reason, in the second SCC, those present considered that this measure should be applied again in about 3/4 years and that priority should now be given to other issues.			

9. Measure PT-DS02-IN06: Implement efficient lighting systems (LED)

Name of measure	Implement efficient lighting systems (LED)			
Country	Portugal			
School	EB CAMARATE			
Type of measure	Structural			
Description	Replace school light bulbs with LED			
Objectives	● Decrease school energy costs. ● Improving the school's carbon footprint.			
Measure state	This will probably not be done during the project		Execution timing	
Will there be any costs?	Yes			
Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	● Reduction of the electricity bill payable ● Improvement of the school's index in terms of carbon footprint			
Additional information	Due to the high costs, and this is not one of the most voted measures, it should not be carried out during the execution of the project			

10. Measure PT-DS02-IN07: Energy route: ADENE

Name of measure	Energy route: ADENE			
Country	Portugal			
School	EB CAMARATE			
Type of measure	Behavioural			
Description	The "Energy Route" from ADENE includes face-to-face and/or distance information and training sessions, bringing knowledge to people, instigating the desire to know more about the world of energy and making people understand the role of citizens in building a more sustainable world.			
Objectives	● Involving society, investing in education, information, awareness, and training, contributes to increasing individual and collective action through changes in behaviour and lifestyle. ● Disseminate the importance of decarbonisation issues among consumers and companies. ● Deepen knowledge in terms of mitigating climate change, disseminating good practises, and promoting low-carbon behaviour in society. ● Promote training for the energy and water efficiency sectors. ● Combating energy poverty.			
Measure state	To be done during 23/24 scholar year	Execution timing		Sept 23- June 24
Will there be any costs?	No			

Relation to RoadMap competence/s (Select those areas that fix more with the measure)	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	● Increase the knowledge of the school community, ● Encourage the community to be agents of change, ● Promote energy efficiency and sustainability			
Additional information				

11. Measure PT-DS02-IN08: Integrate the assessment of energy consumption into the disciplines

Name of measure	**Integrate the assessment of energy consumption into the disciplines**
Country	Portugal
School	EB CAMARATE
Type of measure	Behavioural
Description	Integrate energy consumption assessment into math and science subjects. Make students aware of their school's consumption data and use this data to gain knowledge and skills in the various teaching areas.
Objectives	● Allow students to be aware of the consumption of their school. ● Encourage the introduction of themes related to sustainability in the various areas of knowledge. ● Raising awareness of behaviour change.

Measure state	Done during 22/23 scholar year	**Execution timing**	Sept 22 - Ongoing
Will there be any costs?	No		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	● Students are sensitised to sustainability issues. ● Increase the number of teachers addressing sustainability issues in their classes.			
Additional information				

12. Measure PT-DS02-IN09: Awareness actions on the correct selective separation of waste and the impact on the environment

Name of measure	Awareness actions on the correct selective separation of waste and the impact on the environment
Country	Portugal
School	EB CAMARATE
Type of measure	Behavioural
Description	Promote awareness-raising actions within the school community about the correct selective separation of waste and the impact of waste on the environment.
Objectives	● Increase the knowledge of the school community about recycling. ● Achieve a reduction in waste produced at school. ● Increase the amount of recycled waste. ● Guarantee the correct separation of waste by the community.

Measure state	To be done during 23/24 scholar year	**Execution timing**	Jan 24 - June 24
Will there be any costs?	No		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	● Reduce the amount of waste produced at school. ● Increase the separation of recyclable waste.
Additional information	

13. Measure PT-DS02-IN10: Competition to promote a efficient waste separation

Name of measure	**Competition to promote a efficient waste separation**
Country	Portugal
School	EB CAMARATE
Type of measure	Structural/Behavioural
Description	Creation of a competition or reward programme that will be played between classes or school buildings with the aim of promoting efficient waste separation. For a week, all classes of the same school year compete with each other, with the aim of being the class that manages to recycle the most. For this, new containers will be provided to the school to carry out the challenge.
Objectives	● Promote the correct separation of waste. ● Get more recycling equipment at school. ● Teach the community about recycling and its importance. ● Debunking myths about recycling. ● Decrease the amount of waste produced at school.

Measure state	To be done during 23/24 scholar year	**Execution timing**	Sept 23 - June 24
Will there be any costs?	No		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	● Increase the number of recycling bins at school. ● Reduce the amount of waste produced at school. ● Increase the separation of recyclable waste.			
Additional information				

11. Measure PT-DS02-IN11: Field trips related to the production, treatment, and recycling of waste

Name of measure	**Field trips related to the production, treatment and recycling of waste**
Country	Portugal
School	EB CAMARATE
Type of measure	Behavioural
Description	As a prize for the challenge proposed in "PM Nº10", the winning class will visit a waste treatment plant and have awareness sessions outside the school. The project is responsible for paying for the students' travel.
Objectives	● Allow students to have an "in-the-field" view of how water is treated and the consequences of poor water management. ● Raise awareness in the school community. ● Promote sustainable practises.

Measure state	To be done during 24/25 scholar year	**Execution timing**	Jan 24 - June 25
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☐ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	● Increased community awareness			
Additional information				

c) *Instituto Superior Técnico*

1. Measure PT-DS03-IN01: "Climate Crisis and Fair Transition"

Name of measure	"Climate Crisis and Fair Transition"			
Country	Portugal			
School	Instituto Superior Técnico			
Type of measure	Structural/Behavioural			
Description	Creation of a curricular unit on the climate crisis and fair transition. This curricular unit was proposed by students to the university board and was accepted and implemented in the academic year 2022-2023. It is a curricular unit aimed at first-year students and open to all undergraduate degrees at Instituto Superior Técnico.			
Objectives	● Provide a consolidated information base that supports a critical view of climate science for an engineer's decision-making processes. ● Provide a cross-sectional perspective on the impact of the climate crisis on society, encompassing all sectors that can play a role in change. ● Critically analyse the exchange and examples of a just societal transition at the national and global level. ● Provide decision-making resources to students in the face of individual, professional, and collective action at a social and political level.			
Measure state	Done during 22/23 scholar year		Execution timing	Anually
Will there be any costs?	No			
Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	● Increased awareness of IST students and their critical view of climate science. ● Higher quantity of students prepared to play an active role in change and integrate this knowledge in the various areas of study.			
Additional information	The costs will be borne by Instituto Superior Técnico			

3. Measure PT-DS03-IN02: Master and doctoral theses in the field of sustainability

Name of measure	Master and doctoral theses in the field of sustainability			
Country	Portugal			
School	Instituto Superior Técnico			
Type of measure	Structural/Behavioural			
Description	Promotion of master's and doctoral theses in the area of sustainability. University professors and researchers are committed to addressing these issues with students and encouraging research and the development of theses within their scope, not only applied to the university but also in a more holistic view.			
Objectives	● Promoting research about sustainability applied to the campus. ● Increase the number of theses and publications that address the theme of sustainability. ● Include sustainability issues in the university's various teaching areas.			
Measure state	To be done during 23/24 scholar year	Execution timing		2022 - 2025
Will there be any costs?	No			
Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☐ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☐ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	● Increase the number of theses referring to the topic of sustainability.			
Additional information				

5. Measure PT-DS03-IN03: Remove cars from the Alameda campus

Name of measure	**Remove cars from the Alameda campus**
Country	Portugal
School	Instituto Superior Técnico
Type of measure	Structural/Behavioural

Description	Instituto Superior Técnico intends to remove all car parking spaces from its campus, encouraging its community to use public transport to travel to the university.
Objectives	● Removal of cars from inside the campus. ● Decrease campus air pollution from cars. ● Use of dedicated parking spaces for other purposes. ● Encourage the use of public transport or other more environmentally friendly alternatives. ● Making the campus more sustainable.
Measure state	This will probably not be done during the project / Execution timing
Will there be any costs?	No

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	● Significant decrease in the use of cars as a means of transport by the academic community ● Increased campus air quality index ● Improving the campus' carbon footprint ● Increased quality of life and well-being on campus
Additional information	This measure is complex and requires great coordination with other entities and measures that are not under the control of the university. It is not possible to cut the community's access to the use of cars as a means of transport without providing them with viable alternatives, such as a good public transport network that serves the purposes of the IST community. For this reason, it is not expected that it will be possible to apply during the course of the ECF4CLIM project. The costs will be borne by the Instituto Superior Técnico.

6. Measure PT-DS03-IN04: Installation of air quality sensors in classrooms

Name of measure	Installation of air quality sensors in classrooms		
Country	Portugal		
School	Instituto Superior Técnico		
Type of measure	Structural		
Description	Between 2021 and 2023, air quality sensors were installed in classrooms in the civil pavilion on the campus of Instituto Superior Técnico. These sensors, installed as part of a research project, will provide live air quality data, allowing for further improvement actions and good practises.		
Objectives	● Get the air quality status of campus classrooms. ● Get real-time information that allows you to make decisions. ● Having data that allows a deeper analysis of the air quality in classrooms and the definition of improvement measures		
Measure state	Done during 22/23 scholar year	Execution timing	2021-2023
Will there be any costs?	No		

Relation to RoadMap competence/s	Engagement: Why and how to promote sustainability? ☐	Connections: How to frame the problem? ☐	Vision: What are the possible futures in our context? ☐	Action: How to proceed? ☑
(Select those areas that fix more with the measure)	The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	● Improved air quality in classrooms ● Greater concentration and well-being of students and teachers

Additional information	

7. Measure PT-DS03-IN05: Solar panels

Name of measure	**Solar panels**
Country	Portugal
School	Instituto Superior Técnico
Type of measure	Structural

Description	The first renewable energy production plant at Instituto Superior Técnico was installed, a solar photovoltaic plant on the roof of the Civil Building on Campus Alameda. It is made up of 361 panels of 450 Wp (watt-peak), consisting of two Production Units for Self-Consumption (UPAC), with a total of 162 kWp (kilowatt-peak) installed. It is expected to be capable of producing up to 0.3 GWh (gigawatts) of energy annually. The work is part of the Action Plan for the School's Energy Efficiency and includes several investments in the rehabilitation of the infrastructure of the Alameda campus. The project, which is currently being implemented, extends to the entire Alameda do Técnico campus and provides for the installation of photovoltaic panels on all other roofs of buildings available for this purpose. In June 2023, the number of panels on the campus will be 2250 in total, and the total installed power on the campus will be 650 kWp, capable of producing 1100 MWh (megawatt hours) per year, which represents 9 percent of the annual energy consumption of the campus.
Objectives	● Implementation of solar panels on all roofs of campus buildings. ● Rehabilitation of roofs with improved thermal insulation. ● Production of clean energy that allows suppression of a considerable part of the university's energy needs.

Measure state	Done during 22/23 scholar year	**Execution timing**	2022-2023
Will there be any costs?	No		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how ☐ to promote sustainability? The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame ☐ the problem? The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the ☐ possible futures in our context? The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	Production of clean energy that suppresses the need of the university			
Additional information	The costs will be borne by Instituto Superior Técnico. The first phase of the project has already been implemented in the 2022 and 2023 school year. The next ones are still being studied.			

10. Measure PT-DS03-IN06: "Technical + Green" Project

Name of measure	"Technical + Green" Project
Country	Portugal
School	Instituto Superior Técnico
Type of measure	Structural/Behavioural

Description	The "Técnico + Verde" project, (in English: "Technical + Green" Project), is an integrated plan of initiatives for the outdoor space of Campus Alameda to make the campus a sustainable and biodiverse space. This project focuses on several initiatives, including: a) Promote a Biodiversity and Permaculture Garden (Hortus IST). b) Promote green meadow zones. c) Construction of a green wall. d) Installation of green roofs. e) Promote the APIST Pedagogical Garden. f) Build comfortable and communicative gardens on campus. g) Increase furniture in green spaces to promote contact with nature
Objectives	● Increase campus biodiversity. ● Make the campus a sustainable space. ● Build green spaces for use by the academic community. ● Make the community aware of sustainability and the importance of green spaces. ● Promoting contact with nature.

Measure state	Done during 22/23 scholar year	**Execution timing**	2022 - ongoing
Will there be any costs?	No		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☐ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☐ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	● Increase campus biodiversity. ● Improving the campus' carbon footprint. ● Increased green spaces within the campus. ● Increased awareness of the academic community.
Additional information	The costs are borne by Instituto Superior Técnico

Name of measure	Communication and community involvement			
Country	Portugal			
School	Instituto Superior Técnico			
Type of measure	Structural/Behavioural			
Description	This measure aims to work on the communication of activities in the area of sustainability at IST. This is divided into three parts: I. Use existing tools to communicate sustainability: the university's website, newsletter, or social media. II. Create a space for reflection and information sharing. This part involves: a) Create an event with architecture students to design the space. b) Promote a contest of ideas. c) Hold an exhibition to present the ideas to the community. d) Consolidate the best ideas, involving professors and students of architecture, materials and construction. e) Build the space. III. Participate in dissemination actions. a) European Researcher's Night. b) Technician's Day. c) Técnico Green Week. d) Integration week for new students. It is point II that will receive most of the investment in the ECF4CLIM project.			
Objectives	● Improve communication of IST's sustainability actions ● Bring the community closer to the "Sustainable Technician" group and its initiatives ● Create a space for reflection and information sharing. ● Participate in dissemination actions.			
Measure state	Done during 22/23 scholar year	Execution timing		2022 - 2024
Will there be any costs?	Yes			
Relation to RoadMap competence/s (Select those areas that fix more with the measure)	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.
Expected impact of the measure	● Greater community involvement in actions related to campus sustainability ● Increased community awareness			
Additional information	This measure will receive most of the investment in the ECF4CLIM project.			

8. Measure PT-DS03-IN08: IST's activities and strategic plan

Name of measure	IST's activities and strategic plan
Country	Portugal
School	Instituto Superior Técnico
Type of measure	Structural/Behavioural
Description	This measure aims to include sustainability issues in IST's activities and strategic plan. This measure arose from an agreement between students and the university management board and aims to include sustainability in the activities and strategic plan in order to ensure that it is part of the future and will always be taken into account in future decisions from IST.
Objectives	● Include sustainability in the university's strategic and activity plans. ● Making sustainability official as a fundamental part of the organisation's future. ● Contribute to a more sustainable university.

Measure state	This will probably not be done during the project	**Execution timing**	
Will there be any costs?	No		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	Ensure that all university actions, measures, activities, and directives include the principles of sustainability, contributing to a better future.
Additional information	This measure has already been agreed upon; however, it will only be applied after the creation of IST's new strategic plan.

9. Measure PT-DS03-IN09: "Bio Técnico" Project

Name of measure	**"Bio Técnico" Project**
Country	Portugal
School	Instituto Superior Técnico
Type of measure	Structural/Behavioural
Description	Bio Técnico is a project developed in collaboration with the aim of bringing a proposal for organic and sustainable food within the scope of the ongoing expansion of supply at IST.
Objectives	Promoting organic and sustainable food and improving their offer.

Measure state	Done during 22/23 scholar year	**Execution timing**	2022-2023
Will there be any costs?	Yes		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☑ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☑ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	Increase in the amount of organic and organic food available to the academic community
Additional information	The costs will be borne by Instituto Superior Técnico

10. Measure PT-DS03-IN10: "Técnico makes the difference" Project

Name of measure	"Técnico makes the difference" Project
Country	Portugal
School	Instituto Superior Técnico
Type of measure	Structural/Behavioural

Description	The project "Técnico makes a difference" (TDF) aims to implement a new procedure for managing solid urban waste for the phased introduction of separation and selective collection of solid urban waste on IST campuses, through an innovative model. This project had several phases: a) Accounting for waste produced b) Purchase and install containers. c) Provide training to the academic community. d) Optimise waste collection with the waste management company.
Objectives	● Moving from a current situation at IST where there is no systematic procedure for waste separation to a waste separation and selective collection model to drastically reduce the impact of this environmental issue on the institution ● Decrease the economic impact of IST's solid urban waste management procedure to generate investment capacity in separation and collection equipment. ● Implement the separation of biowaste, as foreseen by Directive (EU) 2018/851 of May 2018, with obligation from January 1, 2024, as an important contribution to the future National Strategy of Circular Bioeconomy and also for compliance with the Roadmap for Carbon Neutrality 2050 and the National Energy and Climate Plan.

Measure state	Done during 22/23 scholar year	**Execution timing**	2022 - 2025
Will there be any costs?	No		

Relation to RoadMap competence/s *(Select those areas that fix more with the measure)*	Engagement: Why and how to promote sustainability? ☑ The measure promotes a collective understanding of the meaning of sustainability and engages a broad public by facilitating an inclusive dialogue on sustainability. It promotes equity and critical awareness of how we are promoting sustainability and nature through our practices.	Connections: How to frame the problem? ☑ The measure finds connections between the daily life of the school or other educational organizations, other actors, learning content, disciplines, and the state of the environment. It finds the root causes: systemic, structural, human, and cultural issues that underlie unsustainable activity and culture. It frames the problems and the scope. Seeks how to better understand the complexity of sustainability issues and assesses available information.	Vision: What are the possible futures in our context? ☐ The measure envisions and reflects on possible futures and short-term scenarios related to possible trajectories, in the organizational context. It reflects on what kind of phases need to occur in our context for visions of the preferred future to become reality. It fosters emotional, cognitive, and behavioral adaptability, providing knowledge, promoting skills for coping with uncertainty, and encouraging actions for the transition toward sustainability. It fosters transdisciplinary knowledge.	Action: How to proceed? ☐ The measure develops competencies (knowledge, skills, and attitudes), how to make actions effective and meaningful, and how to evaluate outcomes related to context, values, and visions of more sustainable futures.

Expected impact of the measure	● Decrease in the amount of waste produced ● Increased separation of recyclable waste ● Decrease in the economic impact of the solid urban waste management procedure. ● Compliance with the National Circular Bioeconomy Strategy, the 2050 Carbon Neutrality Roadmap and the National Energy and Climate Plan.
Additional information	The costs will be borne by Instituto Superior Técnico

12. ANNEX 3: IMPLEMENTATIONS TEMPLATE DRAFT

Intervention participatory approach (co-planning, co-implementation and co-monitoring)

Intervention general data

	ENVIRONMENTAL PERFORMANCE: CHANGE OF THE CONDITIONS NEW EQUIPMENT, INFRASTRUCTURE, ACCOUNTING and MONITORING	INDIVIDUAL COMPETENCE: CHANGE OF THE PEOPLE FIELD TRIPS, EVENTS and THEME WEEKS, INFORMATION and AWARENESS, LEARNING POSSIBILITIES, COMPETITION and REWARDS	COLLECTIVE COMPETENCE: CHANGE OF THE SYSTEM CURRICULA, PEDAGOGY. CULTURE, STEERING DOCUMENTS, COOPERATION, RESEARCH
Intervention ID			
Title			
Brief description			
ECF4CLIM Roadmap link			
Engagement: Why and how to promote sustainability?	How to engage students in learning from new facilities? ☐ How to find the best ways to promote nature? ☐	How to involve all the students and teachers in learning? ☐ What is the most important knowledge? ☐	How to find the place and time for engaging people? ☐ How to embed sustainability values in curriculum and school culture? ☐
Connections: How to frame the problem?	How to use measurements to learn about connections between consumption and environmental impact? ☐ What is the most crucial thing to change at school? ☐	How the every day acts are connected to big picture of sustainability? ☐ How to turn the external motivation into internal motivation? ☐	What are the most important partnerships? ☐ What kind of structures are constraints on change? ☐
Vision: What are the possible futures in our context?	What is the educational goal of the procurement? ☐ How students can use this experience in their future? ☐	How to envision and create the preferred future together? ☐ How to deal with uncertainty? ☐	How to plan research based and creative strategies? ☐ How to envision steps for long term objectives? ☐
Action: How to proceed?	How other schools can learn from this measure? ☐ How to increase the students' competence to make same kind of measures in their lives? ☐	How to activate learners? ☐ How to promote learning to have impact on policies? ☐	How the school can change the whole society? ☐ How to connect the strategies to the concret everyday life? ☐

Intervention co-planning and co-implementation

Tasks

Task ID	1
Task title	
Description	
Responsible	
Time unit	days
Start	
Finish	
External expert assistance	
ECF4CLIM expert assistance	
Resources needed	Necessary resources (staff, equipment and consumables, subcontracting, …)
Task co-implementation participatory approach	Description of the participation of the school actors in the task execution (students, teachers, head, other staff)

(5 identicals tables for including the description of the tasks)

Milestones

Milestone 1	
Milestone 2	
Milestone 3	
Milestone 4	

Outputs

Output 1	
Output 2	

Cost (Equipment /consumables / others)

Task 1	
Task 2	
Task 3	
Task 4	
Task 5	0 €
Task 6	
Intervention estimated cost (€)	0 €

Intervention implementation co-monitoring

Implementation monitoring method	Proposed method for monitoring implementation and actors involved
Responsible	