



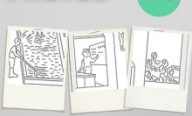
Eco² Schools as New European Bauhaus Labs



New European Bauhaus
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Deliverable 3.2 – NEB-LAB Eco² Schools Roadmap 2nd edition



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WP/Task	Work Package 3 / Task 3.7
Title	NEB-LAB Eco ² Schools Roadmap 2 nd Edition
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Abstract	<p>This document serves as an independent guidance provided by the “Chamber of Quality” in the framework of work package 3 / Task 3.1 Formation of the Chamber of Quality - Demand response forecasting, Task 3.2 Integrated and Holistic Vision, Task 3.3 Innovation partnerships, Educational Buildings Renovation Market and Skale Up Mechanisms, Task 3.4 Governance and Processes, Task 3.5 Net Zero Infrastructure and technologies, Task 3.7 NEB-LAB Roadmap for Advanced Energy Design for Educational Buildings.</p> <p>The Roadmap provides guidance, enlightens and supports NEB-LAB Eco² Schools process with decentralized involvement of 5 first volunteer pilot sites with local communities, in different climatic-cultural cross border regions with complementary educational buildings typologies. This cooperative experimentation by learning-action at 3 generations, is documented with 3 editions of the Roadmap that consolidates the forward looking process for implementation by follower schools step by step.</p> <p>This second edition of the Roadmap documents the beginning of NEB-LAB implementation process</p>
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Executive summary

NEB-LAB is, as experiential introduction for change comprehensive to all, providing a Roadmap to net zero renovation and smart use of energy positive educational buildings, taking in account climate change resilient adaptation and restoration of the relation with nature. This will help lead the way to a fundamental shift:

- from buildings as consumers of energy to buildings, with few concerns of the occupants-users-operators-owners,
- to efficient buildings self-producers of their own energy, with involvement of the educative community and neighborhood.

As it is demonstrated through this project, setting measurable goals is a main key to success. Setting measurable goals is the first commitment the educational stakeholders will make toward completing a successful net zero and smart use energy positive building (schools, university, science center...) while maintaining a reasonable budget, self-repaying in mid-long term sustainable use. NEB- LAB project is also demonstrating that a deeply rooted green transformation of educational institutions cannot be achieved by only implementing zero-energy solutions, but rather a multi focus approach is required covering various factors (social, cultural, economic, and climatic). The project is organised with a holistic methodology interlinking different levels of a systemic change 'learning by doing action' towards educational institutions. The open cooperative living lab, activated during the project will be maintained, shared and further enriched with involving follower projects, with the status of a European cooperative society (for non-profit in common structure, secured space for Testing-Learning-Consolidating-Upscaling initiatives in 5 climate-cultural regions in the EU, within the New European Bauhaus and Education for Climate Coalition, with shared governance/expertise/knowledge/resources/tools/co-investments). This provides support to design and implement climate action plans for the renovation wave of Educational Buildings with scalable impact in the communities/neighborhoods they serve.

The process is documented in the NEB-LAB Roadmap, a living document that evolves during the project implementation. It includes detailed guidelines and tools for educational buildings owners. It also describes the process they need to follow towards the green transformation of their organization. This goes beyond the building itself and covers the attitudes and the behavior of the users of the building as well as the social impact of the interventions to the local communities.

The second version of the Roadmap is organized in the following chapters:

The Introduction provides an updated presentation of the key support mechanism of the project, the Chamber of Quality. Based on professional guidance and support, the projects' Chamber of Quality is presenting different ways (related to building design, building envelop, building services systems, equipment, renewable energy) to increase the efficiency of the five pilot sites. The chapter presents the support that is provided by the Chamber of Quality during the implementation phase of the NEB-LAB Eco² Schools process.

Chapter 2 describes the co-design process that forms the main strategy of the Chamber of Quality in the transformation journey of the educational buildings. It provides information on the co-experimentation implementation process in NEB-LAB. Furthermore, it describes in detail the continuous collaboration between the 5 pilot sites and the Chamber of Quality with the implementation reporting template that was developed for this purpose.

Chapter 3 focuses on the description of the first implementation of the NEB-LAB Eco² Schools process. NEB-LAB is considering schools as "learning organizations" and "core social centers" that can react more quickly to changing external environments, embrace innovations in internal organization, and ultimately improve student outcomes. The first actions of implementation of each of the 5 pilot sites are described. This chapter also includes information on references and connections with initiatives

and missions of the European Union. The connections with the New European Bauhaus, the European Green Deal, the Education for Climate Coalition and the Living Spaces Initiative are presented.

Chapter 4 describes lessons, critical issues and added value milestones. The chapter provides in detail the prefiguration of the European association “Eco²-Campus”. This association aims to initiate local cross-border representation(s) of the New European Bauhaus Lab Eco²-Schools which will connect, develop and support several initiatives and projects in co-experimentation at the level European, relating to education and renovation Climate of schools, neighborhoods, villages in co-learning-actions for three generations. The primary objective of the association is to bring together a diversity of stakeholders, institutions and supporters, who will facilitate the start of educational activities and experimental renovation by formalizing innovative cooperation, common tools and means and a cooperative budget. Furthermore, it provides information on the added value of NEB-LAB on national policy level with the examples of the new curriculum “Active Citizenship activities” for all school levels in Greece and the EduRénov energy renovation programme for school buildings in France.

Chapter 5 concludes the document and presents the initial outcomes of the process and the next steps in the project implementation. It also highlights a number of opportunities for the wider exploitation of the project’s work.

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Preface of the authors



Figure.1. Kallikatzaroi sawing the tree from the earth, after a work by ΟΕΔΒ 1961 (Αναγνωστικό 4ης Δημοτικού)
[Public domain, Wikimedia Commons] <https://vivreathenes.com/les-traditions-des-fetes-de-fin-d-annee-et-de-noel-en-grece.html>

“In popular mythology, the Kallikatzaroi are a kind of horrible gnomes who gnaw the tree on which the Earth is placed. They do this so well that at the end of the year, there is only a little bark left to munch on. The world is in danger, it is likely to collapse!

At Christmas, the kallikatzaroi are attracted by the smell of cakes and return to the surface. They find some left for them in front of houses and devour them. Thus happy and satisfied, they enjoy causing havoc in the villages. This is why it is better not to venture too much into the streets on Christmas Eve and stay with family. Indeed, the next day, people notice the damage from the previous night: open jar of wine, nibbled sausages and stolen or spilled objects.

*After causing mischief throughout the holiday season, on Epiphany Day, these dreadful Kallikatzaroi return underground to continue their evil work. **But now the tree of the earth has had time to reconstitute itself in the meantime. So the world is saved! ...until the following year.**”*

This storytelling and ancient Greek tradition is a true invitation to reconnect as a protective careful community with the capacity to change. Coming out from a winter full of worrying uncertainties, the New Year is offering this community the capacity to bring new life into Mother Earth’s tree.

In the Climate-Societal crisis we live in, that challenges us today, “those who blame the system are in fact pointing the finger at themselves. Because we are the system, we created it and benefited from it. So it is deeply, in our attitudes and behaviours that a transition is required, within ourselves. ...So don't spend more money on (more complex centralized) education, but teach differently so that we can better utilize the potential of young people. That means thinking, feeling and acting differently, the basis of every system change.”

*(Jan Rotmans, DRIFT Professor in Sustainability Transitions at DRIFT, Erasmus Hoge School - NL).
17 Dec. 2023 [on LinkedIn](#) ; https://drift.eur.nl/people/jan_rotmans/; <https://youtu.be/EQtlmInRmFg>*

Our factual observation is that Schools need to become places for learning-action into Climate-Societal transition.

1. Introduction

1.1. Purpose of the Roadmap (advisory guidance and consolidated documentation)

The aim of Work Package 3 is to develop with the “Roadmap” a framework for guiding Eco² Schools as New European Bauhaus Labs step by step process.

The first edition of the NEB-LAB Eco² Schools Roadmap provided all the appropriate information about the 4 first “Test activities” the Advisory Board (invited Experts) proposes to test with the 5 volunteer pilot sites, then consolidate and upscale to follower schools interested to discover and step in NEB|LAB ECO²-SCHOOLS initiative. This has as purpose to propose a co-design method for start involvement (Schools with their local community first steps exploration of learning-action).

This second edition of the Roadmap describes the co-design process that forms the main strategy of the Chamber of Quality in the transformation journey of the educational buildings. It provides information on the co-experimentation implementation process in NEB-LAB. Furthermore, it describes in detail the continuous collaboration between the 5 pilot sites and the Chamber of Quality with the implementation reporting template that was developed for this purpose.

It provides references to initiatives and missions of the European Union that are related to the work of the NEB-LAB Eco² Schools project. More importantly, this edition of the Roadmap provides a clear insight into the dedicated framework of climate education through step-by-step community learning-action as well as information on the first activities of implementation of the 5 pilot sites. It focuses on the description of the first implementation of the NEB-LAB Eco² Schools process. NEB-LAB is considering schools as “learning organizations” and “core social centers” that can react more quickly to changing external environments, embrace innovations in internal organization, and ultimately improve student outcomes.

1.2. Scope and audience of the Roadmap

The second version of the Roadmap is a public output of the project. A revised version of this Roadmap will be shared as a public resource (CC BY-SA).

1.3. Formation of the “Chamber of Quality”

The aim of NEB-LAB ECO²-SCHOOLS is to break down the silos, initiate a decentralized transformation of a variety of existing educative buildings, with(in) their context (schools, university campuses, third places, sports facilities, museum, educational forest-garden and farms, open schooling sites, neighborhood houses). This by considering the role they can play as enablers of change for neighborhoods/cities in transition at 3 generations with “Climate education” and “Climate neutral renovation”.

As central supporting tool for NEB|LAB ECO²-SCHOOLS experimental space, a dedicated “Chamber of Quality” has been created from the start of the project and for its whole duration, bringing together:

- an Advisory Board: invited Experts with complementary skills, views, experiences, committed for a 3-year period 2023-2025, and
- a Community in learning-action: started with 5 volunteer pilot-sites and follower sites that are ready to step in the challenge.

This is giving an adaptive response to the need to support the overall Quality of the Erasmus+ Forward Looking project with common bottom up learning-action between the 5 “pilot-sites”, as first interested “follower schools”. This is also establishing fruitful links with best existing innovative initiatives and solutions ready for joint implementation within the NEB-Lab of the EU.

As this is a wide cooperative experimentation, that is challenging all parties, including the experts themselves, in changing views; understanding the shift in needs, opportunities, common process, challenges and tests of innovative solutions, support, tools and services.

Expected involvement for supporting the Eco² Schools as New European Bauhaus Labs forward looking co-experimentation:

- **Plenary Sessions (every two months) and Working groups (as required)** | The Chamber of quality will hold a plenary meeting every two months (online, with a program in 2 half days). There will be complementary work sessions as needed (thematic work groups).
- **Independent advisory notes** | The Chamber of Quality will offer comprehensive guidance and support throughout the entire process with writing (as needed) “Advisory notes”, which will enlighten key aspects for quality building in the processes, for work packages leaders, involved stakeholders, pilot sites and follower demonstration projects.
- **Advisory sessions** | The Chamber of quality will organize, as needed and at least for the key phases of the co-experimentation, common and individual “Advisory sessions”.
- **Work Room** | For supporting the Core Teams in preparing the pilot site implementation of their “Climate neutral Green Action Plans”, the Chamber of Quality is willing to open a “Work Room” (on distance by videoconference and as possible in presence aside the consortium meetings for the key steps).
- **Co-learning workshops** | The Chamber of quality will organize “co-learning workshops” with the educational buildings (pilot sites/demonstration sites, follower schools) and partner entities being involved in the NEB|LAB ECO²-SCHOOLS activities. These will help the pilot sites/demonstration projects to be actively engaged in the quality building process during the co-experimentation.
- **Challenging conversations and test activities** | The Chamber of quality as independent body will take the initiative to organize “Challenging conversations” and “Challenging test activities” within the New European Bauhaus (NEBLAB). These will as need associate external experts and connect with others initiatives (ex. Education for Climate coalition, UN Schools 2030, NEB Light house demonstrators).
- **Roadmap (3 versions following advancement of the co-experimentation, for continue improvement)** | The Chamber of quality will document the project’s learning’s, references, best practices, tools and methods. This will make recommendations for continue improvement of the NEB|LAB ECO²-SCHOOLS quality building process. The Roadmap will be formalized and published in 3 consolidated editions.

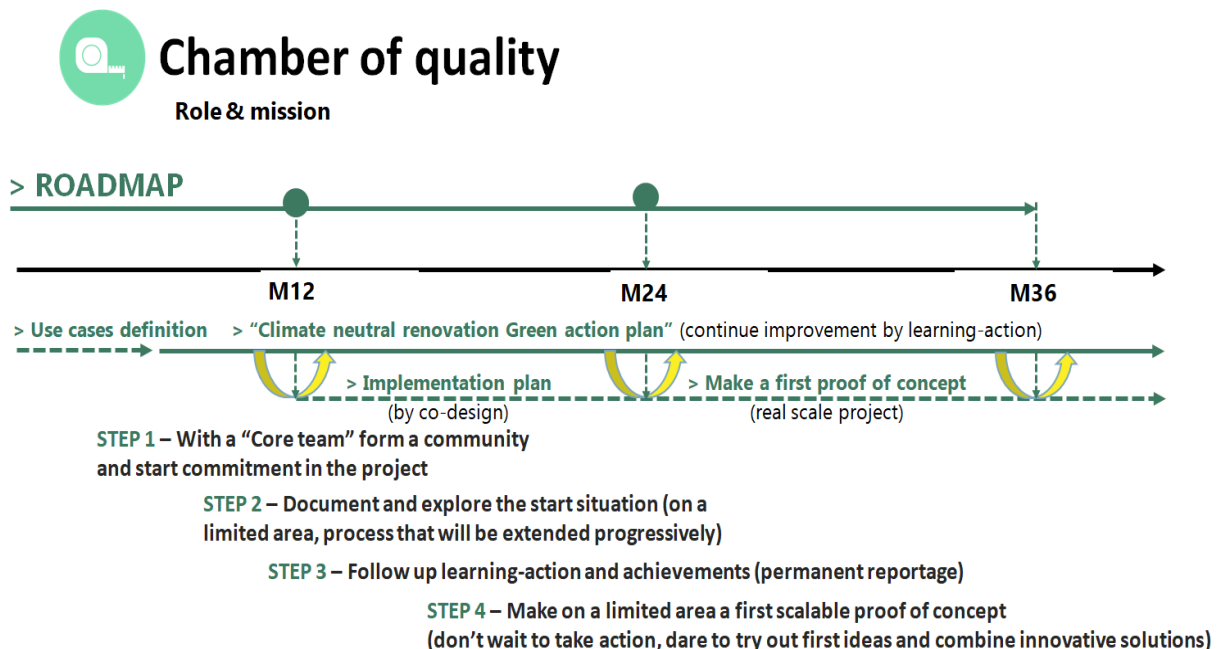


Figure 2. NEB-Lab Eco² Schools Global process with 4 key steps for learning-action and 3 key phases (Use case definition/Climate neutral renovation Green action plan/Implementation plan with a real scale project).

1.4. Actions of the Chamber of Quality

The Chamber of Quality has been installed at the very beginning of Eco² Schools as New European Bauhaus Labs Erasmus+ forward looking project, with committing a first team of experts with complementary skills and experiences.

The Chamber of Quality is composed of 5-6 persons that provide common guidance with complementary expertise and skills:

- **Alliance Sens & Economie (FR) | Christophe BARTHOLEYNS,**
Urban town planner-architect, Expert Sustainable City, Innovation partnerships
Function = Manager of NEB-Lab Eco² Schools, step by step guidance of the Chamber of Quality
- **CY Ecole Design School (FR) | Stéphanie HEMON,**
Designer-researcher phd, Expert in Multi-stakeholders community co-design process, *Function = Support to the pilot sites Co-design, tools, templates and guidelines*
- **Venhoeven CS (NL) | Cécilia GROSS,**
Principal Architect, Expert in bio-inspired construction design,
Function = Desirable Architecture, communication of concepts, tasks and process management
- **Good Planet (BE) | Théophile LIENHARDT,**
Educational project manager, Expert in Inspiring children and adults to realize a sustainable planet by undertaking positive action,
Function = Challenging the pilot sites, advisory support for Energy renovation and environmental learning-action
- **Lernlandschaft (DE) | Almut VON KOENEN,**
Facilitator Futureproof Learning landscapes and users centred spatial functionalities, Expert in Schools adapted renovation strategy, Cultural approach,
Function = Pedagogic-functional advisory support to the pilot sites.
- **Lernlandschaft (DE) | Laura WEGLEHNER-MOTZ,**
Project management of school and teaching development, Expert in Pedagogic and cognitive psychology, Collective resilience,
Function = Learning landscape educational quality.

It interacts with other key competences Experts (using valuable expertise in the consortium):

- **Ellinogermaniki Agogi (GR) | Sofolkis SOTIRIOU,**
Professor Phd in Physics, Educational Research and Innovation, Director of EA Research Department (~20 persons)
Function = Open Schooling systemic change approach, Research guidance for Educational learning-action.
- **Universität Bayreuth (DE) | Prof. Franz Bogner,**
Researcher phd in Environmental attitudes, Education for Sustainable Development,
Function = Social Impact Assessment, measuring community's progress with KPI's.
- **An Taisce (IE) | Maya Gryesten Fields,**
Science Education Officer & GLOBE Ireland Deputy Country Coordinator,
Function = Common community driven communication with the pilot sites.
- **Foundation for Environmental Education Global (DK) | Pramod KUMAR SHARMA,**
Senior Director of Education (Eco-Schools/Eco-Campus, Young Reporters for the Environment, Learning About Forests), UNESCO Green Schools program,
Function = Environmental education and Education for Sustainable Development.

The plenary sessions (advisory meetings, reviews, and on-site exchanges), as needed thematic workgroups, are the main occupation. The team is willing to combine expertise, methods, tools and innovative solutions, share exemplary inspiring realizations (international benchmark of solutions and initiatives), consolidate the NEB-LAB holistic vision and use case definition, organize multi-stakeholders focused work and exchange seminars, coach the five pilot sites (involve in co-design workshops and on distance advisory sessions), prototype and propose new tools, question and support cross co-investment partnerships, provide independent advices, publish papers and video reports, level

barriers, by enlightening mitigation measures and supports, co-study and test feasibility of a cooperative structure for operational development of NEB|LAB ECO²-SCHOOLS services, with a framework that is linking.

Throughout the first activities of the implementation phase of the project, there has been a continuous collaboration between the Chamber of Quality and the 5 pilot sites. As one of the most important aspects of the implementation phase of the NEB-LAB Eco² Schools process is the close collaboration between the 5 pilot sites and the Chamber of Quality. In order to facilitate this collaboration, an implementation reporting template was developed is being continuously consulted. This reporting template is presented in chapter 2. Furthermore, during the implementation phase of the project dedicated “**NEB-LAB Implementation Support**” meetings are organized every two weeks with the participation of members of the Chamber of Quality and representatives of the 5 pilot sites.

1.5. Presentation of the integrated services of the NEB-LAB Eco² Schools and the Chamber of Quality in the New European Bauhaus Festival

The NEB-LAB project has participated with a dedicated stand on the NEB FAIR during the New European Bauhaus Festival (9-13 April 2024). The New European Bauhaus Festival 2024 in Brussels was a beacon of success, drawing in thousands of participants – on site and virtual - over five days who connected with over 250 artists, exhibitors, speakers, and policymakers during interactive panel discussions, workshops, demonstrations, and artistic performances. Through immersive displays and interactive experiences, visitors gained insights into cutting-edge solutions that harmonise design with societal and environmental needs, fostering a collective commitment to building a more sustainable and equitable future. Members of the consortium were present to inform participants about the activities of the project and its 5 pilot sites.



The NEB-LAB stand in the NEB FAIR.

On 10th April 2024, the NEB-LAB project organized the Lab session “Eco²-Schools as New European Bauhaus Labs”. This session presented to participants the project concept and the action plans of the 5 pilot sites. The event was also live streamed online while different stakeholders took also part online. Dr. Ulrike Pisiotis from the Directorate-General for Education, Youth, Sport and Culture, Unit Schools and Multilingualism kindly participated in the lab and expressed active interest in the NEB-LAB activities.

On 13th April 2024 the NEB-LAB project organized the workshop “Discover NEB-LAB Eco²-Schools tools and first steps method for starting community driven learning action.” During the workshop, the NEB-

LAB Eco²-Schools Team presented examples of the educational activities taking place in the 5 pilot sites.

Throughout the duration of the New European Bauhaus Festival, the NEB-LAB project organized a series of events, mainly in the form of informal conversations to bring together various stakeholders and discuss issues related to open schooling, climate education and Climate neutral renovation

2. NEB-LAB ECO2-SCHOOLS Climate education through step-by-step community learning-action

2.1 Framework

As it is described in the first version of the “NEB-LAB Roadmap”, the Chamber of Quality of the project formulated four key steps that form the dedicated learning action-design method in order to support the formation of local communities and help the different stakeholders to step in the proposed NEB-LAB learning-action activities. The four steps are:

- Step 1- **Form a “Core Team” and a “local Community”** that will self-engage in learning-action (together).
- Step 2- **Document and explore the initial situation** (learn and observe).
- Step 3- **Follow up learning-action and achievements** (permanent reportage).
- Step 4- **Make on a limited area a first scalable “proof of concept”** (realize a first beautiful motivating project, visible in a central place with innovative bricks and scalable effects for Climate renovation).



Figure 3. – The proposed Learning-action co-design method

These four key steps correspond to four “test activities” each enlightening important aspects of the learning action co-design method and step by step involvement. These four complementary test activities have supported the pilot sites first steps in the NEB-LAB process:

1. Community building: Focus to form your local community and start building a common commitment (set up the core team, map and involve the concerned community with codesign workshops),
2. Discovering & observing: Document and explore the initial situation on a limited area of the existing educative site,
3. Permanent communication and reportage: Follow up learning-action and achievements, with a community journal (wiki pilot-site dedicated webpage, facebook, newsletter), a person to person (peer to peer) transmission of knowledge and of responsibilities for further advancement, and a continuous improvement progress reporting,
4. Use innovative solutions: Dare a 1st step aside to try out and combine innovative solutions (with a community workshop, design & build a proof of concept for learning-action together with existing means).

2.2 The co-experimentation implementation process in NEB-LAB

To allow the 5 pilots sites to implement their projects, the 4 different steps from the NEB-LAB eco2-schools learning action co-design method were translated into the following 6 concrete stages. In this way, the 5 pilot sites were able to develop their localized implementation plans (presented in D4.1).

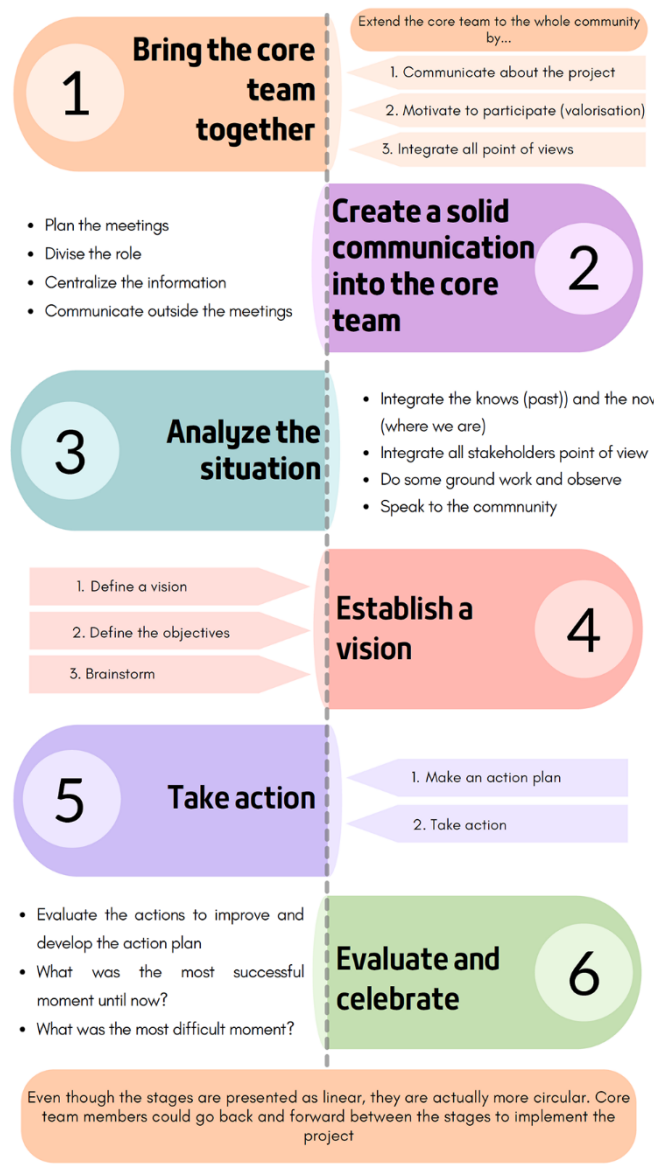


Figure 4. – The proposed Implementation Framework

2.3 Continuous collaboration between the 5 pilot sites and the Chamber of Quality

As it was mentioned previously, one of the steppingstones of the implementation phase of the NEB-LAB Eco² Schools process is the close collaboration between the 5 pilot sites and the Chamber of Quality. In order to facilitate this collaboration, an implementation reporting template is being continuously consulted. Each pilot site provides detailed information regarding the various activities undertaken throughout the implementation phase of the project. The information provided is being discussed during the biweekly meetings between the Chamber of Quality and the 5 pilot sites.

The reporting template provides crucial information and comments on the following aspects of the implementation process:

- How is the vision of the pilot site project served
- Which activities have been implemented? Description, type and steps
- Lessons learnt from the implemented activities (what went well? Where there any difficulties?)
- Which members of the community have been involved and how?
- Communication and dissemination activities

2.3.1 Involvement of “core teams” in local communities

Since the second consortium meeting in Lisbon, the Chamber of Quality has introduced and codesigned experimental involvement of local “core teams” in the 5 first voluntary pilot-sites. The pilot-site manager(s) (for best 2 persons, as this function is essential and can not be interrupted during the process) have first engaged an internal communication with their managers and supportive team a collaborative work, with mapping a first circle community that can/shall be involved in the Climate renovation of the school and correlated learning-action process. These local “core teams” have been challenged by the “Chamber of Quality” with a first implementation of “test activities”. The pilot site managers have developed internal codesign workshops, involving external stakeholders and useful skills support. Each has received advisory support from a dedicated expert, member of the Chamber of Quality.

By the third consortium meeting in Sigtuna, the 5 pilot sites “core teams” have presented their local “Climate renovation Green action plans”, with a first intentions strategy for implementation in 2024-2025. The “test activities” have been consolidated following the observed results and improvements suggested by the pilot sites managers, users and experts. CY Ecole de Design and LernLandschaft have lead a series of observations and interviews, that have enlightened how the tools where used and can be improved. A fact is that the formation of “local communities” by the 5 “core teams” is an intense patient effort, surely when external stakeholders and supports are invited in the process, with step by step training, participation and commitment beyond the start institution (school, museum, university, foundation, municipality). The first 6 months work (Dec 2023-June 2024) was mainly dedicated to train and convince the local communities first participants to understand the desirable change of “Eco²-Schools as NEB-LABs”, dare a first side step into the coexperimentation, not to stay as observer but involve into learning-action with being part of a first steps implementation.

The added value Milestone of the New European Bauhaus Festival in Brussels Parc du Cinquantaire - with Eco²-Schools as NEB-LABs ’s stand in the heart of the NEB FAIR + 7 side-conversations organised in the neighbourhood enlightening key forward looking initiatives in the NEB Community - has caused an awareness among the “core teams” of the interest to engage learning-actions within the New European Bauhaus and Education for Climate coalition. Ellinogermaniki Agogi has set a forward looking objective to develop with year by year transmission a series of learning activities towards NetZero energy adaptation of the educational facility with solar energy (ex. Eratostene experiment adapted to solar panels presented on the NEB FAIR Lab session) and sober lifestyles by reducing consumption of the school canteen (bio-canteen food and energy shift). Cities as Courcy, Communauté Urbaine du Grand Reims have then understood the supportive role they had in hand to become part of European programs and real opportunity to realize the 5 Climate renovation Green action plans. After this event, Courcy has prepared its candidature to be part of “NetZeroCities Twin Learning program cohort2 2024-2026” and has succeeded on 16 Sept 2024 becoming the first village to step in Mission 100 Climate neutral and smart cities of the European Union (pearing with Lisbon, all 5 pilot-sites are now located in a NetZeroCity which is a big opportunity for growing the ambition of the NEB-LAB by coexperimentation). The first demonstrative Eco²-Campus that is becoming the heart of Microville112 (former military air base 112 that is being renovated as a Climate neutral neighbourhood by 2030) is started with both indoor (project room, net zero retrofitting with 100% solar/wind energy for heat-cold-electricity) and outdoor activities (a biodiversity outdoor classroom exploration base with for sport and edible forest garden project) that are started with the school and college of Courcy and neighbour villages, a worksite school process is being tested and developed with AFPA Grand Est the higher education schools ecosystem of Greater Reims). Ciencia Viva has adopted a cross-activities approach with Eco²-Schools as NEB-LABs bridging existing exhibitions, events and experimental learning actions within the network of science centers and farms in Portugal (with commitment of Directors, teams of educators, visiting schools, families and researchers). University College of Cork has done the same with focussing on key changemaking initiatives within its Eco-campus commitment (FEE Eco-schools/Eco-campus Green Flag), as nudges, internal communication , the renovation of Enterprise as first NetZero capacity building challenging the users, biodiversity on the eco-campus,



circular waste and demonstrative biogas composting, shared bicycles with health air quality measurements. Sigtuna Skolan Humanistika Läroverket has started and improved learning-action activities relating to innovative LED lightening renovated classrooms and competition between board houses groups of students challenging continuous improvement of energy consumption, seasonal products circular kitchen, students driven projects relating to Climate action as retrofit of a van for nature and cosmos observation, a net zero demo house that will enlight the possibilities for heritage buildings renovation, a circular windmill reusing pieces of washmachines, a high efficiency low energy carting; all of this being the 6 passed months brilliantly accelerated towards the 100 years celebration of existence of the first boarding school of Sweden in 2025. In the past 12 months, all 5 pilot sites “core teams” have made significant results in enlarging their involved local communities. As this is a patient step by step engagement, conclusion is that a solid support is required in the start commitment phase, also as institutional decisions and preparation with the educational teams are required almost 6 months before start of the implementation activities (in September and March, with taking in account the periods of vacation and exam periods/assessment gained of skills).

2.3.2 Documentation of the implementation process

Since the launch of Eco²-Schools as NEB-LABs 5 pilot sites commitment into cross-experimental learning-action (second consortium meeting in Lisbon), the 5 pilot sites have been invited to adopt a method of “design thinking” where all actions, learnings and questions should be continuously documented. The 5 “core teams” have followed this rule, but collected materials (photos, recordings, notes taken, communications before and after) have during the first year of implementation not been valued in a formatted publication. The 5 pilot-sites managers had to focus on human interaction, engagement of the community in all its dimensions, material constraints (due to the start with “test activities” out of the institution’s program of activities = no or very low available budget) and a moving agenda to which we must continually adapt (this is inherent to a truly open co-production approach). The team of educational experts of GoodPlanet and Ellinogermaniki Agogi have taken this reality into account and proposed an improved process, which will be progressively tested in 2025 for implementation with each community (cf. D4.1 Implementation plan, monthly advancement template .xls online table). The “chamber of quality” has also the intention to prepare a first public communication of NEB-LAB Eco²-Schools offer and activities, that will be an opportunity for each pilot site to communicate towards its local community, host city and supportive institutions. The “project room” under experimentation in the first Eco²-Campus Microville112 in Courcy will also demonstrate with support of CY Ecole de Design how a Community can self manage a permanent documentation and correlated action sheets with a common agenda. In this “project room”, the documentation will be both material and digital, with an interactive screen, online tools such as a Miro white board, GoogleWorkplace Drive and YouTube channel. Courcy’s core team is also willing to mobilize students in Global Design on an apprenticeship contract that will help to use, adapt and develop the appropriated tools, with involving (for first test) the village school and college, with involvement of the citizens collective Agora M112. A dedicated innovative portal will support interaction, with the adaptation of Hypha.Earth DAO “decentralized autonomous organization” website (in partnership with <https://neb-chapter.eu/initiative/> / Brussels-Stockholm-Bologna).

2.3.3 The role of the “editorial committee”

Communication and permanent documentation is a central issue for Eco²-Schools community driven learning-action. Since the beginning of the Erasmus+ project the consortium has developed with Antaisce (in charge of WP6) a communication strategy via <https://www.eco2-schools.eu> website and social medias : Facebook, LinkedIn, YouTube and Instagram (this last is supposed to be used later for relaying implementation photos and short reportages). Access rights have been shared with the 5 pilot sites (each “core team” is supposed to have a person in charge of Communication), including a common Canva account (for the layout of illustrations, invitations, communication brochures, ...). The NEB Festival was the first key event where the consortium has implemented the tools together, with as a result an almost professional communication that efficiently presented the project on NEB-LAB

Eco²-Schools 's stand in the NEB FAIR, the 5 days program with side conversations involving other projects and experts from the NEB community as Education for Climate coalition, with online diffusion by videoconference/youtube chain. The preparation needed a coordination of the contributive persons, wherefore the Chamber of Quality has proposed to organize the work within an "editorial committee". Intention is that this editorial committee will meet at least monthly for common sharing of contents and agenda related to the 5 pilot sites implementation phase. It will be also in charge of a supportive coaching of local teams of students that will take part to the "Young reporters for the environment" FEE challenge. With the new year 2025 (year 3 of Erasmus+ project) it will also prepare common communication documents that will present NEB-LAB Eco²-Schools activities for interested stakeholders, as follower schools, host cities and supportive institutions that are ready to step in the co-experimentation.

2.3.4 The role of the "chamber of quality" in bringing the "pilot sites managers" together

The "chamber of quality", that was started since first consortium meeting in Athens (January 2023), has progressively adapted its supportive efforts relating to the advancement of the 5 pilot-sites involvement and step by step experimental implementation of Eco²-Schools as NEB-LABs method, with codesign sessions, advisory meetings, providing tools and templates and by organizing targeted "focus conversations". By the 2nd consortium meeting in Lisbon (September 2023), the team of complementary experts has codesigned a steps by step method for first involvement of local "core teams" with first "test activities" and helped the pilot-sites managers in a human peer to peer supportive relation. Codesign workshops have been organised by the pilot-sites managers with support of the Chamber of quality in an advisory-supportive position. By the 3rd consortium meeting, the Chamber of quality has rearranged the method for alignment with the codesign of first learning-actions with/by the local communities, to obtain a first commitment and prepare a first steps implementation. The added value Milestone of the NEB FESTIVAL in Brussels Parc du Cinquantenaire in April 2024 has been used as a stimulus to engage each of the pilot sites into first implementation of their Climate renovation Green action plan. The "Workshop session" (10th April 2024) organised in presence of representatives of the European Commission (DG Education) has been experienced as an official moment of sharing that has given new fuel to the local communities. During this whole week in Brussels the Chamber of quality has organised multiple connection-meetings and 7 side conversations that have established bridges with best existing initiatives with experts ready to support the pilot-sites. After the NEB FESTIVAL it has been decided to continue the every 15 days Chamber of quality's meeting with rotating "advisory sessions" to the pilot-sites (a pilot site is highlighted at each session) and "focus conversations" that will help the implementation in different aspects (with invitation of external experts, enlightenment of best existing initiatives/ready to use bricks, best practices). These "focus conversations" will be organised monthly from begin of the year 2025. The Chamber of quality has also the intention to organize thematic workshops involving professionals for implementation of disruptive innovative solutions, with the pilot-sites (ex. indoor-outdoor project room, water recovery and reuse, solar canopy heat-cold-electricity installation 100% in self consumption, nature based materials, NetZero renovation worksite school, biocanteen short distance food belt...).

2.3.5 The importance of "focus conversations"

"Focus conversations" are a main driver for stimulating the co-experimentation within NEB-LAB Eco²-Schools open initiative. The "Chamber of Quality" has organised, with significative commitment of Alliance Sens & Economie (both involved as Official Partner of the New European Bauhaus and in the advisory group of "Education for Climate coalition" + since 16 October 2024 "NetZeroCities Twin Learning program"), a first test of 7 "side conversations" during the NEB FESTIVAL in Brussels Parc du Cinquantenaire.

Intention is by February 2025 to support the 5 pilot-sites implementation with targeted "focus conversations" that will alternate with monthly "advisory sessions". These conversations will build on best existing initiatives in the 5 cross-border regions (UNESCO Green Schools and climate education whole school approach, implementation of disruptive solar-wind energy in renovation in self

consumption, nature based circular renovation, literacies empowering a community in learning-action, cooperative decision and funding within a decentralized autonomous organization, celebration of achieved progress/peer to peer evaluation and transmission) and programs that are developed by the European Commission (NEB-LAB, Education for Climate coalition platform, Mission 100 climate neutral and smart cities/NetZeroCities network, EU Preparatory Action on Innovation for Place-Based Transformations, NEB Facility Funding/NEB Pilot project EU Parliament on small entities).

Throughout the duration of the New European Bauhaus Festival, the NEB-LAB project organized a series of events, mainly in the form of focus conversations to bring together various stakeholders and discuss issues related to open schooling, climate education and Climate neutral renovation:

Conversation 1 | Wednesday 10/04, 10h30-12h, (La Librairie Européenne, rue de l'Orme 1, 1040 Bruxelles). How to support Schools Climate renovation with local Green action plans, involving open communities in Climate Education by learning-action?

- Sofoklis SOTIRIOU – NEB|LAB Eco²-Schools, OSOS Network (GR): Open schooling for Climate citizenship from learning to action, from scanning the horizons to use cases adapted « Climate renovation Green action Plans » community driven tests, step by step implementations.
- Valeria NAPOLI – Green Comp Community Manager ISPRA (EU-IT): supporting a community into making first implementation of Climate Education, with www.education-for-climate.ec.europa.eu community platform. An illustration of cooperative learning-action: the Greencomp.eu initiative.
- Chris DELEPIERRE – Trézorium, Open Badges peer to peer recognition (FR): Open Badges peer to peer recognition, a changemaking opportunity for community driven transmission of skills, knowledge and experience by learning-action.
- Alessandro RANCATI – NEB Chapter Brussels (BE): From limiting central decisions to joint forces open initiatives, the power real people have in hands to be involved in community that takes actions within a decentralized autonomous organization

Conversation 2 | Wednesday 10/04, 17h-18h30, (Bamboo Pavilion Parc du Cinquantenaire). How to reconnect Schools with the Living and let inspire by Nature?

- Vincent VAN DER VEEN - IVN Green schoolyards evaluation tool, Tuiny forests (NL).
- Jan WURM - Arup, KU LEUVEN BioFab & Construction Lab (BE),
- Brian Wennersten - Dutch Bamboo Foundation Bamboo Ambassador + Bamboo Pavilion (NL),
- Paulo PALHA - Neoturf, EU Federation for Green Roofs and Walls, Kork circular Green Roofs (PT),
- Nikos ZYGOURITSAS - EA, Erasmus+ Foodshift (GR),
- François JEGOU - SDS, URBACT Biocanteen (FR).

Visiting exchange | Thursday 11/04, 9h-10h30, (Ecole Fondamentale Emile Jacqmain, rue Véronèse 21 – 1000 Bruxelles). Learnings from the school modernization from Charles Buls in 1873, to the present 'school contracts' renovations in Brussels

- Christophe BARTHOLEYNS – NEB|LAB Eco²-Schools (GR-FR-PT-IE-SE/NL-DE-DK): Historical overview of the major school modernization program initiated by Mayor Charles Buls in 1873 building Brussels Capital city, today's motivation to initiate NEB|LAB Eco²-Schools initiative.
- Pramod KUMAR SHARMA – FEE Eco-Schools | Eco-Campus (DK-INT): from Eco-schools Green Flag to UNESCO Green Schools greening education partnership.
- Faouzia HARICHE – City of Brussels (BE): the motivation of Brussels Capital (Netzero cities committed city) to step in Climate Education and widen the change to the neighbourhood with 'Contrats Ecole'.

Conversation 3 | Thursday 11/04, 15h30-17h, (Bamboo Pavilion, Parc du Cinquantenaire – 1000 Bruxelles). Bridging exchange with first lighthouse demonstrators of the NEB, how new literacies and explorations in public space cans empower a cultural change?

- Frederico DUARTE - Politecnico Lisbon, Bauhaus of the SEAS (PT-IT-BE-NL-DE-DK),
- Sylvia PINTARITS - City of Munich, NEBourhoods (DE),
- Jan ROTMANS - Erasmus Universiteit Rotterdam, DRIFT, Cultuurcampus (NL),
- Kristin KVERNELAND - City of Stavanger, NEB STAR Stavanger (SE),



- Aase Højlund Nielsen – BLOXHUB, *DESIRE an irresistible circular society* (NL, LV, DK, IT, SL),
- Alessia PELUCHETTI - RINA Consulting / Sofie TORFS – KAMP C, *EHUR Eyes Hearts Hands* (IT, DK, BE, PT, HR, GR, TUR),
- Lidia MATRINS - CCDRC, EUROACE, network Bauhaus villages for the future (PT).

Conversation 4 | Friday. 12/04, 10h-11h30, (Parc du Cinquantenaire - 1000 Bruxelles). Let's dare the step aside to involve local communities, for a common value renovation of educational buildings, cultural centres, neighbourhoods, villages!

- Florian VERTRIEST – Collectif Alma gare contre la démolition (FR),
- Annabelle PUGET – Collectif Créatifs des Territoires (FR),
- Patrick BERNARD – La République des Hypervoïsin (FR),
- Catherine ARODT GALL – Ville des 15-30', territoire des Proximités (FR-INT)

Conversation 5 | Friday. 12/04, 16h-17h30, (KIK-IRPA Parc du Cinquantenaire 1 - 1000 Bruxelles).

With hands and brain, how to coproduce the needed cultural change of skills?

- Milène GUERMONT - Engineer-Artist (FR): Maison Guermont Total Artwork, a living challenge from 100 best craftsmen talents to interactive immersions, bridging european heritage with forward looking cultural change.
- Ivars Pilipas MATTISONS - Teacher-Designer (LV): Liepaja Restoration Centre, a pop-up co-creation studio to know, appreciate and preserve traditional hands skills.
- Béatrice AUXENT- Habiter 2030 (FR-BE-NL): Metaplateau Projects, from the Solar Decathlon 1st prize, a collective circular innovation each year improved by crossborder learning-action.

Manifest Artistic dialogue| Thursday. 11/04, 11h-12h30, (MRAH-KMKG Parc du Cinquantenaire - 1000 Bruxelles). From Vandevælde to Maison Guermont, how Art can enlight the change in a desirable way?

- Milène GUERMONT - Engineer-Artist (FR): Brussels Total Artwork, Immersive presentation of Maison Guermont Total Artwork + Brussels Total Artwork Palais Stoclet 3D reconstitution

Dialogue with:

- David LO BUGLIO - Teacher-Researcher, ENSAV La Cambre (BE): Palais Stoclet 3D reconstruction.
- Pablo LOHAS – Architect-Director ENSAP Lille: Fonds Vandevælde La Cambre.
- Guido STEGEN - Architect-restaurator (BE): Villa Bloemenwerf Uccle.
- Alessandro RANCATI – Designer-Artist (BE): NEB CHAPTER Brussels.

3. Implementation activities of the 5 pilot sites

3.1 First implementation of NEB-LAB Eco² Schools process

NEB-LAB is considering schools as “learning organizations” and “core social centers” that can react more quickly to changing external environments, embrace innovations in internal organization, and ultimately improve student outcomes. Such school environments promote Open Schooling: where schools, in cooperation with other stakeholders, become an agent of community well-being; the walls around schools come down but they remain strong, sharing responsibilities with other community bodies. Non-formal learning, collective tasks, and intergenerational activities are strongly emphasized; school projects are revitalized around a knowledge agenda in cultures of experimentation, diversity, and innovation.




Figure 5. The full cycle of the NEB-LAB process for the development of the Green Neighbourhood Living Labs: The process starts with the pilot sites acting as Change Agents in their local communities presenting innovative ideas (energy efficient solutions, sustainable architecture and ICT-based systems to optimize the building operations). The pilot sites are becoming Drivers of change in the local settings: School Buildings are becoming Learning Commons, by spreading best practices, by supporting the development of positive behaviours and habits for resources efficient energy use, by acting as research and innovation hubs and epicentres of social change. The overall mechanism is based on continuous interaction with the citizens based on the living lab participatory approach. Finally, the Green Neighbourhood acts as a sustainable ecosystem by adopting the same process in the future developments.

It is an open system, welcoming approaches from potential external collaborators; The school scans its external environment to respond quickly to challenges and opportunities; families are encouraged to become real partners in school life and activities; professionals from enterprises and civil and wider society are actively be involved in bringing real-life projects to the classroom. Partnerships are based on equality of relationships and opportunities for mutual learning; Relevant policy makers encourage policy buy-in and the mainstreaming of good practices and insights into policies, and hence sustainability and impact. Such partnerships foster expertise, networking, sharing, and applying science and technology research findings across different enterprises (e.g., start-ups, SMEs, and larger corporations). The overall process is described schematically in Figure x.

The first actions of implementation of each one of the 5 pilot sites are described in the following passages.

3.1.1 Ellinogermaniki Agogi

	Name of campus: Ellinogermaniki Agogi	Pallini, Greece
	Sector: Primary Education	
	District buildings portfolio: School buildings	
	Target groups: 14-17	
	Link: https://www.ea.gr/en/index.asp	
Vision of the pilot site implementation project		
<p>EA is developing the Green School Living Lab concept to raise awareness on buildings energy efficiency to school students but also to the local community. EA aims to demonstrate that when schools partnering with their local communities and stakeholders, they could become agents of community well-being through their involvement in co-creative research and innovation on energy and resource efficiency in the school settings, inspired by the green school demonstrators. Exploring the interdependent relationship between the school, families and their community through an ecological systems perspective, the proposed interventions employ an interpretivist construct to demonstrate the importance of interconnected relationships as a mechanism for mobilising resources, strengthening social capital and building collective capacity. Develop citizen awareness raising activities spreading the concept of energy and resource efficient building and renovating and promote education and training for sustainability.</p>		
Ambition		
<p>EA is very much interested in forging a strong ethos to its students with regards to the environment, healthy living and the use of modern technology. Having established close links with schools from other countries, it has also created synergies with the Municipality of Pallini.</p> <p>EA team plans to integrate its pilot projects in the educational programme of the school. To do so, with the support of the Chamber of Quality, a series of testing activities have been designed and are implemented to introduce the energy efficient operation of the school canteen and of the school building to the school curriculum.</p> <p>By Dec.2025: -High energy performance and energy savings (energy production of 1,5 GWh per year), Reduction of carbon footprint - Improved indoor environmental quality for the users – Development of innovative digital solutions for energy management (Anticipated 20% reduction in electricity consumption due to this) – Zero-energy School Canteen - Creation of “living-labs” and innovation clusters/social innovation/social cohesion- Smart energy grid synergies.</p>		
Primary purpose, program, and use of the implementation activities		
<p>In the framework of the NEB-LAB project, EA has designed a large-scale pilot with several separate demos. The main focus of this intervention is the achievement of high energy performance and energy savings as well as the use of innovative and sustainable energy solutions. At the same time, the implementation activities aim to improve indoor environmental quality for the users. The focus of the pilot is the development of solutions for energy efficiency in school buildings (Green School Living Labs) through increased consumer engagement in energy saving practices and gamification. There are over 3000 daily users with a substantial energy consumption. Throughout the implementation activities of the NEB-LAB project, EA aims to demonstrate that when schools partnering with their local communities and stakeholders, they could become agents of community well-being through their involvement in co-creative research and innovation on energy and resource efficiency in the school settings, inspired by the green school demonstrators.</p> <p>We aim to take advantage of the major renovation project that is under development to enrich the environmental education program of the school by using the infrastructure as a place of experimentation and learning.</p>		

First actions of implementation

Focus on the development of Sustainability Citizenship

- Societal values are strongly formed by public models, this is also true for buildings. It is easier to gain people's attention to the need for change, to significantly increase the quantity and quality of energy-efficient retrofits in Europe, when public authorities and governments are adopting the appropriate approach. It is therefore important to demonstrate exemplary solutions at frequently used buildings like schools, universities, and science centers. Europe is dependent on having high-quality education spaces for its future generations. The use of educational buildings as frontrunners will help to increase the market penetration of high-performance retrofit approaches. The future standard should be 100% carbon-free school buildings.
- Furthermore, the qualities of a zero-energy (or energy-positive) school, university, or science center, and the process required to create it, can encourage student learning (formal and informal) and student success, create healthy, high-performance learning environments, provide sound fiscal management of community resources, and demonstrate environmental leadership in minimizing the impact of the built environment. Schools and educational buildings in general can act as an incubator for innovation and creativity to drive sustainable design across Europe and beyond, which is also appealing and affordable for all citizens. Schools could act as hubs that will network practitioners from across disciplines and mobilize creative minds to reimagine how sustainable living could and should be in the future.

Action 1 **Green Canteen- Schools as Role Models for the European Bauhaus and the Food2030 Agenda**

In EA the new bioclimatic canteen building is part of the school strategy towards the transformation of food systems that require low-carbon, circular, and planted-based approaches. The school operates an organic school garden that apart from acting as an open educational environment for all students is producing a significant amount of vegetation being consumed in the school canteen. The building-embedded photovoltaics will generate enough renewable energy on-site to cover 100% of its energy needs on a net annual basis.

The school stakeholders aim to transform the canteen into a learning hub for the students to test solutions for reducing energy, and water use and for interacting with the food systems. Through making these efforts highly visible, this leadership inspires a larger movement that significantly accelerates the adoption of a sustainable lifestyle – first around energy, but also other critical areas like food, use of resources, and relationship to the natural world.

The canteen is in the central campus plaza which is bridged over to interconnect the primary and secondary school buildings. The bioclimatic canteen building is part of the school strategy towards the transformation of food systems that require low-carbon, circular, and planted-based approaches. The school operates an organic school garden that apart from acting as an open educational environment for all students is producing a significant amount of vegetation being consumed in the school canteen.

ACTION 2 **Solar Panels- Schools as Role Models for the European Bauhaus**

The aim was to create a diverse range of activities that can captivate and maintain the interest of the students. These activities were designed in such a way that they not only promote engagement but also encourage active participation. These activities are tailored to the needs of the students so that they are both effective and enjoyable.

The concept introduces students to the world of renewable energy, focusing on the energy needs of their school and the ways in which they can be met in a more sustainable way. At the beginning, students gain an overview of the energy requirements of a building, using actual measurements from the school's meters. Then, they become familiar with the operation of photovoltaic systems and learn how their installation can contribute both to reducing the financial costs and limiting the environmental footprint of the school's day-to-day operations. Thus, not only do they understand the technical parameters of solar energy production, but they also understand the importance of the energy transition to greener forms of energy, recognising the benefits of using photovoltaic systems in real life.

3.1.2 Microville 112

	Eco²-Campus on Microville 112	Courcy, France
	Sector: non-formal education	
	District buildings portfolio: Educational third place for schools	
	Target groups: Elementary, middle, high schools, social centers, higher education.	
	Link: https://eco2-schools.eu/eco%2%b2campus-microville-durable-france/ ; www.microville112.org	
Vision of the pilot site implementation project		
<p>The Eco2-Campus, installed in the heart of the Microville Durable® 112 (former military airbase), presents a great opportunity for the region; to develop with nearby entities (primary schools, middle schools, high schools, social centers, higher education and continuing education schools) educational project being developed both locally and by immersion in the heart of the Climate renovation of a pilot school working as a hub open on the Greater Reims area (neighbourhoods, villages).</p> <p>It offers day-use access to multi-use educational spaces (classrooms, workshops, project room, documentation center, work-meeting room, exhibition room, outdoor spaces, demonstrators of innovative solutions, training site), devices and resources facilitating co-learning in action of the basic principles of Climate education.</p> <p>It responds to the need to develop educational projects in co-learning-action via spaces for testing, sharing resources and enriching best practices. The educational teams retain the freedom of the activities they wish to develop.</p> <p>The Eco2-Campus, an educational third-place for immersion experimentation, meets a real need for a local hub adapted to welcoming groups of students, whatever their level. In its development, it can cover with teaching teams a wide diversity of subjects, both ecological and technical, to raise students' awareness of the new behavior-skills to be developed for tomorrow (regenerating resources and ways of acting: biodiversity, food, circularity, energy, mobility...).</p>		
Ambition		
<p>Start an Eco2-Campus, an educational third place that allows schools, neighbourhoods, villages to explore the diversity of initiatives and possible learnings at the heart of the Climate renovation of a Microville durable® (sustainable microcity) www.microville112.org .</p> <ul style="list-style-type: none"> - Test a new offer of spaces for learning, educational devices and resources that facilitate co-learning in action the key principles of "Education for Climate" (adaptation to global warming, Sustainable Development Goals, ecological and social sustainability, positive impact of our cooperative actions). - Gradually allow interested schools, colleges and high schools to develop their educational projects, benefiting from immersion outing days in this educational third place. Spirit is the place is open to the community for supporting a cooperative network of schools, neighbourhoods, villages. <p>From 2025, the Eco²-Campus will develop a complete offer step by step, that will grow with the implementation of the Climate renovation Green Action Plan (cf. 3 key steps 2024-2025-2026)</p>		
Primary purpose, program, and use of the implementation activities		
<p><u>The "T2" building at the heart of the Sustainable Microville®112 will be the start-up "totem" building of the Eco2-Campus</u>, which will gradually become a third place open to the academic world and the educational community.</p> <p>In this totem building, we are leading a Climate renovation co-designed by the Community, with the commitment to reach a NetZero energy goal with 100% renewable heat-cold and electricity in self consumption (solar, wind, smart use, circularity).</p> <p>What areas are concerned for implementation of the Climate Education learning-action?</p> <p>Creation of learning spaces capable of welcoming groups of young people, discovery classes:</p> <ul style="list-style-type: none"> - Axis 1) Nature, fauna, flora, climate and natural cycles, in an exceptional place that has become wild again after having been occupied by man (inventory and conservation measures of biodiversity, nursery to save species-seeds, planting of hedges -nourishing groves, permaculture, etc.); 		

- **Axis 2) Eco-citizenship, change of posture and behavior** (documentation-exploration, questioning, new imaginative stories, co-learning in actions of sober, circular, renewable offers-solutions, recognition and celebration of achievements, evaluation- improvement, transmission to prepare a carbon-free world that respects living things;
- **Axis 3) Discovery of professions, tools and know-how via “test activities” and immersion on a “training site”**, (reconnection with the territory, local professions and know-how, testing knowledge gestures on real projects, opportunity to give meaning to the choice of orientation, outlets for a positive future that makes sense).

From 2025, the Eco²-Campus will develop a complete offer that will be tested and consolidated progressively:

- **Spaces suitable for welcoming groups:** with a **“project room”** (immersion in a 3-generations community in learning-action), **“resource-documentation center”** (provision of tools and instructions shared educational activities, e.g. production of a journal and video capsules published on the Eco²-Campus YouTube channel and social networks, etc.), **“classrooms and workshops”** (they will be fitted out and will evolve depending on the uses), a **“large multi-use greenhouse”** (cooperative café and New European Bauhaus cultural center, terrace, thematic exhibitions and school work, augmented visualization model of the Sustainable Microville[®]112, educational platform and mezzanine for group activities), **“locker rooms and toilets”**...
- **“Outdoor classroom” type outdoor space, managed in a participatory manner with students supervised by the educational team** (outdoor educational furniture, green schoolyard, discovery of biodiversity and natural cycles), first eco experience -citizenship (understanding the issues at stake in a territory, questioning and transforming our actions for the protection of the living);
- **Courses and resources intended for teaching in a natural environment** (“educational land area” shared with courses and activity stations adapted to educational needs);
- **Permaculture plots, nursery hedges and kitchen workshop** (permaculture design, agroforestry, food chain up to transformation-conservation, short circuit approach and seasonal menus of a “bio-canteen”);
- **Manufacturing-repair fablab with shared educational tools and materials** (discovery of tools and techniques with their application for different “test activities” and contributory actions in cooperation for the development, maintenance and improvement of learning spaces);
- **“Training site”** (secure spaces allowing small groups to discover professions and innovative technical solutions better suited to climate renovation, to regenerate resources and methods of action, e.g.: low-carbon eco-renovation, self-consumed renewable energy , shared mobility, zero waste, etc.);
- **“Accommodation” for groups, trainers and researchers** (ultimately, depending on the evolution of reception, it is possible to consider stays of several days on site by changing the accommodation offer to intended for staff in training towards a “green class” type offer, benefiting from the equipment of Microville 112, e.g. catering, etc.).

First actions of implementation

ACTION 1 EDUCATIONAL THIRD PLACE AREA FOR VISITING SCHOOLS “CLIMATE EDUCATION – CO-LEARNING IN ACTION”

Short description of the implementation (expected): A first exchange with the AGORA-M112 association, the Courcy schools ([elementary school of Courcy village CE2 to CM2](#)) and the [Mont d'Hor middle school in Saint-Thierry](#) (6th-4th) highlighted the double opportunity to register in support of existing projects;

Project 1 (Courcy village elementary school):

- **Knowledge transfer and monitoring of the Microforest in Courcy**, a project which was worked on by students who will enter 6th grade at Mont d'Hor college.
- **Handing over to the rising classes, interest in being able to involve the rising classes both in observing the Microforest and in discovering the natural Biodiversity as it has developed over the last 12 years on the closed Military Air Base 112.** The students will be able to participate with families in an inventory, the co-design of a plant protection plan, the conservation transplantation of plants and young trees, which can be reused on the Microville112, or also in the village (planting hedges, trees, biodiversity, incredible edibles...).

Project 2 (Mont d'Hor college in Saint-Thierry):

- **Transfer of knowledge between middle school students as part of the E3D course**, via a welcome and integration day at the start of the new school year (Renaissance Ecological Fresco, Mont d'Hor forestry course, careers forum and internship scholarship , design of benches for villages).

- **Mobilization on a new transversal project**, the opportunity to create an [innovative “Educational Land Area”](#), which can be designed and tested on the [Eco²-Campus on the Sustainable Microcity^{®112}](#). This innovative educational land area could then be used by the schools-colleges of Greater Reims, by developing a diversity of educational courses-modules. This could also lead to the development of a network of land-based educational areas in the Marne department (or even beyond at the Reims Academy and cross-border).

ACTION 2 COMMUNICATION, PERMANENT DOCUMENTATION, COMMUNITY IN ACTION_“YOUNG REPORTERS – SHARED RESOURCES – PROJECT ROOM”


Name of the action: Communication, permanent documentation, community in action.

Short description of the implementation (expected): From the beginning of the Erasmus+ project, the pilot site manager has started a permanent documentation of the Eco²-Campus project with regular short communications on the social networks (mainly LinkedIn, statistics record 150 to +750 reads of the posts within 48h). But this is followed by a large community.

Project 1 (targeted communication towards village of Courcy and starting local community):

The “core team” is testing a targeted communication towards the village of Courcy and starting local community of schools and to be involved stakeholders in the greater Reims area. There is also the challenge to involve the visiting schools and users of the Eco²-Campus in the coproduction of a shared permanent documentation locally visible to all and a diary of the project (blog and short news highlights on the websites, short video reportages).

3.1.3 Ciência Viva

	Pavilhão do Conhecimento – Centro Ciência Viva	Lisbon, Portugal
	Sector: non-formal education	
	District buildings portfolio: Science Centre building	
	Target groups: Science centre visitors, administrative staff and stakeholders, school representatives, external collaborators from academic institutions and the Network of Ciência Viva Centres).	
	Link: https://www.pavconhecimento.pt/	
Vision of the pilot site implementation project		
<p>Ciência Viva, the Portuguese National Agency for Scientific and Technological Culture, was created in 1996 to promote public awareness of science and technology and science education at a national level, with a particular emphasis on young people. Starting up as a unit of the Ministry of Science and Technology, it is nowadays an association, which includes as its members, public bodies and research institutes. The Agency promotes and supports science education projects at schools, placements for secondary school students in research laboratories during the holidays, and summer science activities for the public. Since its creation, Ciência Viva has been developing activities along three different and complementary streams: science education (schools), public awareness of science (citizens) and a national network of science centres.</p> <p>The implementation of measures aim not only to optimize energy resources and consumption in the building, but also to increase the number and range of activities/events related to sustainability, biodiversity and environmental protection. These activities/events present a focus on innovative solutions, in order to change the way people live, driving the transformation that society needs.</p>		
Ambition		
Empower citizens with the knowledge, skills, values and attitudes needed to contribute to environmental protection and to a more sustainable society.		

By December 2025:

- Optimization of HVAC system to reduce thermal needs;
- Installation of a photovoltaic solar system for self-consumption to reduce carbon dioxide emissions;
- Replicate the Pavilion of Knowledge example in other Ciência Viva Centres in Portugal and in other science centres around Europe;
- Inform citizens about European initiatives, such as The European Green Deal and The New European Bauhaus;
- Encourage schools, local communities and stakeholders to work together for mobilizing resources to foster environmental actions and establish green action plans;
- Develop hands-on experiences/activities/actions that show the transformation of the Pavilion of knowledge into a sustainable building.

Primary purpose, program, and use of the implementation activities

The Pavilion of Knowledge consists of three floors that comprise a total floor area of 11300 m²:

- basement located below ground (floor -1): parking lot.
- ground floor (floor 0): reception, exhibitions rooms, technical rooms, cafeteria, warehouses, Ciência Viva classrooms and bathrooms.
- first floor (floor 1): library, laboratory, auditorium, bathrooms and exhibitions rooms.
- mezzanine (floor 1): open-space, offices and bathrooms.

What areas are concerned by the Climate renovation process?

The climate renovation process will affect the entire building.

What areas are concerned for implementation of the Climate Education learning-action?

Exhibition rooms, auditorium, library, Ciência Viva classrooms and laboratory.

First actions of implementation

ACTION 1 “Full transition to LED lighting”

LED lights are up to 90% more energy efficient than incandescent light bulbs. The energy efficiency and longer lifespan of LED technology holds the potential for changing the way educational buildings brighten their facilities by reducing the cost of electricity and overall energy use. The Pavilion of Knowledge – Ciência Viva Science Centre just become fully equipped with LED technology, by replacing external lighting. This measure secures a better indoor and outdoor lighting environment together with better environmental performances.

ACTION 2 “Installation of more efficient water faucets”

Water is essential to life on Earth. Without water, no plant, animal or other species, including humans, could survive. Therefore, it is crucial to incorporate new technologies and solutions to save this precious natural resource. In the Pavilion of Knowledge – Ciência Viva Science Centre, 24 water efficient faucets (automatic taps with a flow regulators) were installed to reduce water consumption without compromising the hygiene of visitors and staff.

ACTION 3 “Installation of electric hand dryers in all the bathrooms”


A hand dryer typically uses a low level of electrical power and can last for a decade. Furthermore, with this modern equipment there is no used of paper. In the Pavilion of Knowledge – Ciência Viva Science Centre, 5 hand dryers were installed in all bathrooms (energy efficient).

ACTION 4 “Removal of the water bottle vending machine in the exhibition area”

The production of plastic waste can be reduced by removing the plastic water bottle vending machine in the exhibition area.

<p>ACTION 5 “Mobility, well-being and sustainability of human resources”</p> <p>The continuous awareness of more sustainable practices related to everyday commuting to work led to the installation of one charging station for electric cars in the garage for employees use. In addition, the promotion of flexible schedules, favoring the use of public transport during non-peak hours and the existence of rental bicycles available for commuting near the Pavilion of Knowledge – Ciência Viva Science Centre contribute to lower the carbon footprint. Whenever possible and appropriate, the promotion of virtual meetings as an alternative to physical meetings that involve additional travel are also implemented.</p>
<p>ACTION 6 “Teacher training and other activities”</p> <p>Teachers training session "APPROACH TO EXPERIMENTAL SCIENCES" - Ciência Viva School (preschool and primary school teachers).</p> <p>"No waste: Bread pudding" activities for families at "The Kitchen is a Lab", where the test tubs are replaced with pots and pans. There are always bread leftovers, that can be reused in a delicious bread pudding, preventing food waste in our houses.</p> <p>"School patios as learning places" - This online teacher training action constitutes the starting point of the Ciência Viva nos Pátios project, in which students and teachers will develop research projects, with schoolyards at the center of learning, and go through the various stages of the scientific process, from the placement of questions and formulation of hypotheses, through research and experimentation, until obtaining and communicating results</p>


3.1.4 University College Cork

	<p>UCC North Mall Campus</p>	<p>Cork, Co. Cork, Ireland</p>
	<p><i>Sector:</i> Tertiary Education and Research</p>	
	<p><i>District buildings portfolio:</i> University building comprising teaching, laboratory and canteen area</p>	
	<p><i>Target groups:</i> Staff and students, Other public sector bodies and Cork City Council, Local community (i.e. school visitors)</p>	
	<p>Link: https://www.ucc.ie/en/build/projects/current/deepretrofitoftheenterprisecentrenorthmallcampus/ </p>	
<p>Vision of the pilot site implementation project</p>		
<p>“To be an exemplar community of practice in material sustainability impact, within the UCC ecosystem. Driving the agenda towards net zero through world leading research at the BEES and Applied Psychology Schools, demonstration of best practice at the Pilot Site, and education of current and future leaders and decision makers.”</p> <p><i>The Enterprise Centre is a building situated on UCC’s North Mall Campus. It hosts both the UCC School of Applied Psychology and UCC School of Biological, Earth and Environmental Sciences (BEES). The building comprises lecture theatres, classrooms, canteen/restaurant, and offices of academic and administrative staff.</i></p> <p>The vision derived from UCC’s university level <i>Sustainability and Climate Action Plan (2023-2028)</i> and <i>Strategic Plan (2023-2028)</i>:</p> <ol style="list-style-type: none"> 1) Achieve a 50% reduction in GHG emissions (scope 1 and 2) at the pilot site following the deep retrofit project. 2) Enhanced awareness of staff, students and the surrounding community of sustainability and pro-environmental behaviour. Actioning the delivery of Sustainability Citizenship as a core ethos of UCC. 3) Greater awareness of the biodiversity and green-blue spaces adjacent to the pilot site. 4) Develop a limited scale proof of concept at or near the pilot site incorporating circularity of materials and low impact on the existing green space and conduct the other NEB-LAB test activities. 		

Goals 2, 3 and 4 each inform the four proposed test activities in UCC. Each sharing at least one of the Eco ² Schools experimental bylines; observe, communicate and proof of concept.	
Ambition	
<p>By February 2025:</p> <ul style="list-style-type: none"> ○ The outdoor proof of concept test activity will have commenced by Spring 2025. ○ The observation of commuting habits at the pilot site will commenced by start of semester January 2025. <p>By Dec.2025:</p> <ul style="list-style-type: none"> ○ The energy management statistics of the newly retrofitted Enterprise Centre will have been collected for a full calendar year, allowing assessment of achieving its stated energy efficiency and GHG emission goals. 	
Primary purpose, program, and use of the implementation activities	
<p>The Enterprise Centre is the focus of UCC's pilot site. A building undergoing a deep retrofit funded by a national pathfinder programme for the Irish higher education sector.</p> <p>The building comprises lecture theatres, classrooms, small labs, canteen/restaurant, and offices of academic and administrative staff.</p> <p>The Enterprise Centre is the only building at the pilot site being renovated in the duration of the Eco²Schools project.</p> <p>Future plans for both renovations of the existing built footprint (e.g. proposed renovation of the Cooperage building) and new developments (e.g. planned Tyndall National Institute extension) will be informed by the outcomes and learnings of Eco²Schools.</p> <p>Areas are concerned for implementation of the Climate Education learning-action?</p> <ul style="list-style-type: none"> ● 3 of the 4 proposed interventions are to be conducted in external spaces adjacent to the pilot site on the North Mall Campus (knotweed site, roads and paths to campus, North Mall Campus green spaces). ● 1 test activity concerns the overall indoor air quality monitoring of the Enterprise Centre. 	
First actions of implementation	
<p>ACTION 1 Measuring Pedagogical Impact of North Mall Green Biodiversity Trail (Learn)</p> <ul style="list-style-type: none"> ● The team will outline green items of interest on the North Mall Campus, informed by currently identified knowledge items. ● Participants will register for the guided trail and will receive the survey to do as a 'pre-test'. Once the tour has been completed, participants will receive the 'post-test' survey. A week after the tour, participants will receive the 'retention-test' survey. ● We anticipate to repeat this action multiple times until year end 2025, to receive as big a sample size as possible. <p>First "test activities" and Schedule:</p> <ul style="list-style-type: none"> ● Subject to resourcing and scheduling, the first measurable results from the test activity will be collected and securely stored by mid-November. ● This action will be substantially completed by end-May 2025. However, this allows for further testing if a larger sample size is desired. <p>Overall knowledge retention of action 1 participants.</p>	

<p>ACTION 2 Monitor indoor air quality at the pilot site. Survey building users and disseminate air quality data at pilot site (Observe, Communicate).</p> <p>An indoor air quality monitoring system has been installed as part of the Enterprise Centre deep retrofit. This will allow for measured monitoring of pollutants inside the building such as PM2.5.</p> <p>This action will entail; (1) dissemination of this air quality information with the community in an understandable way, (2) survey the community on relevant knowledge items and (3) alignment with ongoing initiatives in the research community (BE-HAV-I-AIR project) and the municipality (Clean Air Cork City, Cork Healthy Cities, Cork Learning Cities).</p> <p>First “test activities” and Schedule:</p> <ul style="list-style-type: none"> ● Subject to resourcing and scheduling, the first communications of indoor air quality will begin to be disseminated by Spring 2025. ● Subject to resourcing and scheduling, the knowledge item surveys will be deployed concurrent to the start of the communication intervention. ● Further dissemination with the wider community (site visitors and external institutions) ● This action will be substantially completed by Autumn 2025.
<p>ACTION 3 Observe commuter behaviour on paths and roads to campus (Observe, Communicate).</p> <p>In partnership with Cork Smart Gateway, measurement devices will be deployed on adjacent streets to the pilot site. These devices monitor the number of people travelling by different modes of transport.</p> <p>This action will help generate knowledge about how the community accesses the pilot site. And help inform and facilitate future behavioural change interventions. The results will be communicated with the local community (building users) and the wider university community via established for a (Green Forum, ULT Subcommittee on Sustainability).</p>
<p>ACTION 4 Pro-biodiversity intervention at a remediated site previously infested with Japanese Knotweed (proof of concept).</p> <p>plan is a pro-biodiversity intervention at a remediated site adjacent to the pilot site. UCC Buildings & Estates has approved the use of the site for a non-permanent intervention (as the site is slated for future development).</p> <p>The intervention is open to all ideas from the university community. Any ‘physical’ structure will need to be low impact on the surrounding environs and biodiversity, especially pollinators. This action will help generate learnings for future innovations on public/green spaces throughout the university. It may also form part of the assessment of some undergraduate students from a variety of fields (BEES, Psychology, Architecture, Health Sciences) subject to interest.</p>

3.1.5 Sigtunaskolan Humanistiska Läroverket

	SSHL School Campus	Sigtuna, Sweden
	<i>Sector:</i> Secondary Education	
	<i>District buildings portfolio:</i> School building	
	<i>Target groups:</i> Building owner and users (students, administrative & teaching staff), municipality	
	<i>Link:</i> https://sshl.se	
Vision of the pilot site implementation project		

Sigtunaskolan Humanistiska Läroverket, commonly known as SSHL, is a distinguished boarding school nestled in the historic municipality of Sigtuna, Sweden's oldest town.

As we embark on our journey towards our 100th anniversary, SSHL is committed to leading the way in addressing contemporary challenges that have surfaced in recent years. Issues such as reverence for the natural environment, prudent energy and resource management, and responsible recycling have become imperative elements in resolving pressing environmental concerns that resonate with the global community. Our school is dedicated to championing sustainability and, within this framework, strives to evolve into a zero-energy consumption complex. We aim to not only inspire similar actions but also engage and educate the local Sigtuna community, where SSHL stands as a prominent landmark. With heritage buildings overlooking Lake Mälaren, SSHL seeks to integrate participative sustainable renovation initiatives that transcend the boundaries of traditional education. At the intersection of two smaller towns undergoing urban expansion, our integrated approach is centered on adopting the NEB-LAB concept.

Our vision for making the school more energy-efficient with several separate interventions proposed, is focused on:

- Achieving high energy performance and energy savings
- Use of innovative and sustainable energy solutions for improved indoor environmental quality for the users
- Optimal dynamic matching between on-site renewable energy generation and building/neighborhood consumption
- Creation of innovation clusters that will apply new technologies and methodologies that can be used as references in future similar projects

Ambition

Our ambition is to monitor and evaluate the energy consumption of classrooms equipped with a smart lighting system compared to reference classrooms, using the data for educational purposes and to develop a roadmap for similar interventions.

By Dec. 2025:

- Continue monitoring and data logging of the smart lighting system for a second year to ensure reliability and consistency in the findings.
- Provide a clear, comprehensive analysis of the efficiency of the smart lighting intervention.
- Develop and publish a roadmap for similar energy efficiency interventions in other school buildings.
- Continue integrating the project into the curriculum, enhancing lesson plans and student assignments with ongoing data.
- Conduct further events and initiatives to disseminate findings and engage the local community and stakeholders, organized by student organizations and school staff.

Primary purpose, program, and use of the implementation activities

The concerned buildings are educational facilities participating in the EU project NebLab Eco²schools. These buildings are being retrofitted to enhance energy efficiency and sustainability, aligned with the New European Bauhaus priorities. The buildings serve multifunctional uses including classrooms, workshops, offices, restrooms, dormitories/boarding houses, lab facilities, conference and expo rooms, external spaces, The specific building we did the interventions is that main school building (Instaan).

For the moment the areas concerned by the Climate renovation process include the school Building Instan (classrooms, corridors, and offices). The plan is to expand the renovation to Dormitories/Bording houses (step 2), and to the whole campus.

These renovations aim to increase energy efficiency, transition to energy-positive buildings, and support renewable energy technologies. Additionally, we are specifically focusing on changing the lighting system in selected classrooms to evaluate its energy efficiency and potential for broader implementation. As part of the project, the lighting system in some classrooms is being changed to assess energy efficiency. This initiative allows students to use daily online data and a database for school homework and projects. Teachers, especially in math and science, have real-world examples to enhance their environment and sustainability lessons.

First actions of implementation

ACTION 1 Installation of the Smart Lighting System

The smart lighting system was installed in selected classrooms by the end of 2023. The system includes energy-efficient LED lights with smart controls to optimize lighting based on occupancy and daylight availability. The implementation aimed to significantly reduce energy consumption and serve as a practical example of sustainable development within the school.

First “test activities”:

- Initial system setup and calibration
- Monitoring and data collection on energy consumption
- Evaluation of system performance during different times of the day and year
- Feedback collection from students and teachers regarding lighting quality and usability

ACTION2 Innovative educational activities

- Electric Go-Kart Project: Disassembly of the petrol-powered go-kart to its frame and preparation for painting. The team began studying the electrical systems required for the conversion.
- Mobile Observatory Project: Acquisition of the caravan and initial design discussions for converting it into a mobile observatory. Students brainstormed sustainability features such as energy-efficient components.
- Integration into Curricula: MYP5 students prepared for the NetZero House project, scheduled to begin in early December. IB students worked on sustainability-focused IAs in ESS, and Swedish 3rd ringers started incorporating sustainability into their business plans.
- Boarding House Energy Competition: Launched a campaign to encourage students to turn off lights and monitor room energy use, coupled with a recycling initiative.

3.2 References and connections with initiatives and missions of the European Union

The NEB-LAB Approach is considering the 5 pilot sites as open schooling environments, “*learning organisations*” and “*core social centres*” that can react more quickly to changing external environments, embrace innovations in internal organisation, and ultimately improve learners’ and visitors’ educational outcomes and attitudes. The NEB-LAB Approach is adopted to the five selected pilot sites through a participatory Scan the Horizon exercise that involve the communities of the stakeholders in the process. The **pilot sites are acting as Living Labs driven bottom-up by their communities and the Chamber of Quality stakeholders** rather than by top-down plans that ignore the innovative potential of grassroots efforts. The NEB-LAB Approach is being further advanced - towards successfully promoting the **European Commission’s Green Deal** agenda and supporting the new **Education for Climate Coalition**. At the same time, the NEB-LAB partnership is involved in the Living Spaces initiative funded by the creative Europe programme of the European Union.

From the beginning of the lifespan of the project, NEB-LAB abides with the principles of the **New European Bauhaus** which is creating bridges between different backgrounds, cutting across disciplines and building on participation at all levels, inspires a movement to facilitate and steer the transformation of our societies along three inseparable values:

- **sustainability**, from climate goals, to circularity, zero pollution, and biodiversity

- **aesthetics**, quality of experience and style, beyond functionality
- **inclusion**, from valuing diversity, to securing accessibility and affordability

The New European Bauhaus brings citizens, experts, businesses, and institutions together to reimagine sustainable living in Europe and beyond. The New European Bauhaus highlights that:

- a) Societal values are strongly formed by public models, this is also true for buildings. It is easier to gain people's attention for the need for change, to significantly increase the quantity and quality of energy efficient retrofits in Europe, when public authorities and governments are adopting the appropriate approach. **It is therefore important to demonstrate exemplary solutions at frequently used buildings like schools, universities and science centers.** Europe is dependent on having high-quality education spaces for its future generation. The use of educational buildings as frontrunners will help to increase the market penetration of high performance retrofit approaches. The 100% carbon-free school building must become the standard of the future.
- b) The qualities of a zero-energy (or energy positive) school, university or science center, and the process required to create it, can encourage learning (formal and informal), create healthy, high-performance learning environments, provide sound fiscal management of community resources, and demonstrate environmental leadership in minimizing the impact of the built environment. **Schools and educational buildings in general can act as an incubator for innovation and creativity to drive sustainable design** across Europe and beyond, that is also appealing and affordable for all citizens. Schools could act as hubs that will network practitioners from across disciplines and mobilise creative minds to reimagine how sustainable living could and should be in the future.

3.2.1. The European Green Deal¹. A growth strategy that protects the climate

Climate change and environmental degradation are an existential threat to Europe and the world. To overcome these challenges, the European Green Deal will transform the EU into a modern, resource-efficient and competitive economy, ensuring:

- no net emissions of greenhouse gases by 2050
- economic growth decoupled from resource use
- no person and no place left behind

"Climate change is the biggest challenge of our times. And it is an opportunity to build a new economic model."

The European Green Deal set the blueprint for this transformational change. A change which will bring with it many benefits, from creating new opportunities for innovation, investment and green jobs, to improving our health and wellbeing.

All 27 EU Member States committed to turning the EU into the first climate neutral continent by 2050. To get there, they pledged to reduce emissions by at least 55% by 2030, compared to 1990 levels.

The EU now has legally binding climate targets covering all key sectors of the economy. The overall package includes

- emissions reduction targets across a broad range of sectors
- a target to boost natural carbon sinks
- an updated emissions trading system to cap emissions, put a price on pollution and generate investments in the green transition
- and social support for citizens and small businesses

Member States will now spend 100% of their emissions trading revenues on climate and energy-related projects and the social dimension of the transition.

¹ https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en

The new Social Climate Fund will dedicate €65 billion from the EU budget, and over €86 billion in total to support the most vulnerable citizens and small businesses with the green transition. This will ensure there are opportunities for everyone, by tackling inequality and energy poverty, and strengthening the competitiveness of European companies, leaving no one behind.

To ensure a level playing field for European companies, the new Carbon Border Adjustment Mechanism will ensure that imported products will also pay a carbon price at the border in the sectors covered. This is a valuable tool for promoting global emissions reductions and leveraging the EU market to pursue our global climate goals.

As a further step on the path towards climate neutrality, the Commission presented its assessment for a 2040 climate target for the EU in February 2024. It recommended to reduce net greenhouse gas emissions in the EU by 90% by 2040 compared to 1990 levels, which is in line with recent scientific advice and the EU's commitments under the Paris Agreement. The European Parliament and Member States will discuss this target, and the next Commission will put forward legislative proposals on that basis.

3.2.2 Education for Climate Coalition²

The Education for Climate Coalition is the European participatory community to support teaching and learning for the green transition and sustainable development.

As a flagship initiative of the European Education Area by 2025 and essential part of the European Green Deal the Education for Climate Coalition is part of the European Union's comprehensive approach to environmental sustainability education.

As a community of practice, it enriches both the Council recommendation on teaching and learning for the green transition and sustainable development and GreenComp, the sustainability competence framework, with its participatory approach for taking action on education for climate challenges on the ground.

The Education for Climate Coalition aims to:

- Inspire, develop and draw on European education capabilities to support the changes needed for a climate-neutral society by deciding collectively, acting collaboratively, adapting sustainably
- Advance as a participatory community led by teachers and students with their schools and networks, and other educational actors to work and progress together
- Tackle fragmentation between educational sectors, domains, actors and stakeholders, including leadership

To advance as a participatory community through diverse community engagement, the Education for Climate Coalition:

- Mobilises all relevant education actors through awareness raising and qualitative exchanges to invite participation and imagination
- Connects education actors engaged in education for climate activities towards a more integrated schools system approach
- Builds capacity by co-creating learning experiences to develop students' and teachers' future-oriented skills and competences

To tackle fragmentation through inclusive community structures, processes and practices, the Education for Climate Coalition:

- Takes a holistic and inclusive long-term learning approach
- Bridges education with science and business and links with existing or emerging climate change strategies

² <https://education-for-climate.ec.europa.eu/community/>

- Starts with grounded experiences and multiplicity of engaged core groups to facilitate qualitative outcomes

3. 2.3 The Living Spaces Initiative³

Living Spaces is a peer-learning programme designed for local and regional authorities to learn how to plan and implement high-quality architectural policies and projects.

Architecture has a fundamental impact on people's quality of life. Cities and regions today must have well-designed buildings and environments that are inclusive and considerate of everyone's needs. At the same time, these designs should not harm the environment or use up more resources than the Earth can handle. This is crucial for the happiness and health of contemporary society and for the well-being of future generations.

The activities of the Living Spaces initiative demonstrate that building and planning for everyone improves cohesion, attractiveness, and the sustainability of our cities and regions.

Members of the NEB-LAB consortium participated in the living spaces peer learning visit organized in Bordeaux 3-5 July 2024. The visit was an opportunity for decision makers in the fields of architecture and the built environment, as well as culture and cultural heritage and those tasked with spatial planning and sustainable development at the local and regional level, experts and other stakeholders from one or more cities/regions to visit Bordeaux and see first-hand how it has successfully implemented its policies, projects and/or initiatives in the field of high-quality living environment for everyone. The peer-learning visit also provided an intimate and trusting setting to discuss possible pitfalls and failures, provide feedback and constructive criticism and build solutions together.

The focus of the peer-learning visit was on architecture and the built environment, and they will address various cross-cutting topics such as climate change, social equality, sustainable development, housing, public and open spaces, mobility etc.

³ <https://culture.ec.europa.eu/cultural-and-creative-sectors/architecture/living-spaces>

4. Lessons, findings, critical issues and added value milestones

4.1 Prefiguration of the European association “Eco²-Campus”

This association aims to initiate, **(a) local cross-border representation(s) of the New European Bauhaus Lab Eco²-Schools** which will connect, develop and support several initiatives and projects in co-experimentation at the level European, relating to education and renovation Climate of schools, neighborhoods, villages in co-learning-actions for three generations.

The association adopts a posture of decentralized autonomous organization, that is to say it remains open to a diversity of project initiatives with potentially several hubs, each in proximity to a density of project initiatives on a territory.

The Eco²-Campus takes the form of a “Third Place of Climate Education” for schools, neighbourhoods, villages, open to welcome, document and support a diversity of cooperative initiatives and experiments.

The first “Eco²-Campus” to see the light of day is located at the heart of the Sustainable Microcity “Microville 112” project www.microville112.org, located in Courcy (51220 - France).

It is an open third place for immersive experimentation and training on all themes of a sustainable city, by cooperation and learning-action, at all ages of life and for all skill-qualification levels.

The primary objective of the association is to bring together a diversity of stakeholders, institutions and supporters, who will facilitate the start of educational activities and experimental renovation by formalizing innovative cooperation, common tools and means and a cooperative budget.

The association positions itself as the initiator of a territorialized representation(s) of the New European Bauhaus Lab (NEB-Lab) Eco²-Schools. It runs a network of pilot sites, follower schools, host cities and support structures, with the ambition of developing a European network of Eco²-Campuses, spread over several cross-border climatic-cultural regions

It is open for all, by simple membership and to any form of cooperation formalized by partnership agreement(s) and action sheets, which may be regularly updated.

It is created in November 2024 in its prefiguration, to support and incubate the experimental start of the “Eco²-Campus Microville112”, Third place of Climate Education and co-learning-action for schools, neighborhoods, villages of the Greater Reims. Each of the phases of development of activities and resources in the purpose of the association will be shared in a plenary general assembly and submitted to the approval of the association. The first plenary general assembly, scheduled for early February 2025, will confirm the founding partners, the first action program, the cooperative budget and associated resources.

The ambition is to install and develop:

- **a demonstrative place for Climate Education carrying out the renovation of a school step by step with the community of its users, its neighborhood, its village**; by immersion in the heart of the former military air base 112 and its renovation step by step into a Sustainable Microcity®, with involving an open community of stakeholders who contribute to the experimental project with involvement of institutions, training and learning entities in the Greater Reims area (CU du Grand Reims, Région Grand Est);
- **a cross-border hub for exchange and cooperation cross-cutting existing best practices, easing cooperative experimentations in “Climate Education” and renovation of educational buildings**, with their village-neighbourhood (for the Eco²-Campus in Courcy: northeast of France, Benelux, Germany, Switzerland);
- **a decentralized network involving the 5 pilot sites initiating the “NEB-Lab Eco²-Schools”** (Microville112 Courcy/Grand Reims FR, EA Pallini/Athens GR, Ciencia Viva Lisbonne PT, UCC

Cork IE, SSSL Sigtuna/Stockholm SE), interconnecting as many NetZeroCities pilot cities (including first Lisbon, peer city of Courcy for the 20 months duration of the NetZero TwinLearningCities program cohort2 2024-2026);

- **a cooperative model which will make it possible to extend and replicate the Eco²-Campus across several climatic-cultural cross-border regions**, by involving a network of host cities, experimentation sites, beneficiary educational establishments, citizen collectives and sponsors.

You can consult the official Constitutive statutes of the Association and the publication in the Official Journal of the French Republic in Annex.

4.2 The NEB-LAB added value on policy level

4.2.1 The new Curriculum "Active Citizenship Activities" for all school levels in Greece

The coordinator of the NEB-LAB project Ellinogermaniki Agogi has long and fruitful collaboration with the Institute of Educational Policy in Greece. This year the Institute of Educational Policy has initiated the new Curriculum "Active Citizenship Activities" which reflects the principles of the NEB-LAB approach.

Today's citizens are called upon to respond to the ever-changing global environment by taking responsible action and initiatives. To prepare students to be active citizens, the 17 Sustainable Development Goals (SDGs), as adopted by the United Nations (UN) in 2015, were chosen as a framework. The SDGs offer a global charter for sustainable development, calling on citizens to help shape a just, peaceful and sustainable future.

In this context, the Active Citizen Action Curriculum (AC) promotes a holistic approach, integrating the 17 SDGs and fostering in students the ability to address complex social, economic and environmental issues. It aims to prepare citizens with critical thinking, cooperation and social responsibility skills who actively contribute to the creation of a sustainable society based on sustainability, social justice and environmental protection.

The Curriculum emphasises the principle of individual and collective responsibility, promoting the active involvement of the school community and wider social groups in actions that prepare and shape creative, active and critical thinking citizens. These citizens can contribute substantially to the achievement of the 17 UN SDGs, as well as to important aspects of civic competence as defined in the Council of the European Union Recommendation (2018/C 189/01), by creating a school environment that promotes cooperation and solidarity. Through their active participation in activities and projects, students are trained to understand the complexity of contemporary challenges, to act with a focus on sustainable development and to cultivate the knowledge, skills and attitudes needed to contribute to a sustainable, just and inclusive future. Active Citizenship actions are linked to the 17 UN SDGs through the implementation of practical and targeted programmes that combine education, action and socio-critical reflection. Education for sustainable development is reinforced by European and global initiatives such as the European Green Agreement of the European Council and the Greening Education Partnership (GEP) promoted by UNESCO.

The initiatives aim to promote the integration of sustainability in educational programmes and paradigm shift in the educational process by laying the foundations for the creation of schools that embrace sustainability and adopt a sustainable approach at all levels. The Curriculum is organized in 17 thematic units, corresponding to the 17 Sustainable Development Goals (SDGs), and is addressed to students of four (4) age levels. The expected learning outcomes are achieved through programmes of active citizenship activities, skills workshops, individual subject areas, school activities and activities related to sustainability and active citizenship days.

The methodological approach of the Curriculum focuses on a holistic, interdisciplinary and interdisciplinary analysis of the issues in order to highlight the complexity and diversity of global challenges. In this way, students identify problems, think critically about their solutions, collaborate to

propose alternatives and apply strategies that promote sustainability. Each subject area can be cross-curricular, leading to the development of a shared vision at the school and community level, effectively promoting the achievement of objectives. In this context, it is important for teachers, either individually or in groups, to go beyond the traditional boundaries of lessons and subject areas by designing and implementing appropriate actions of an active and holistic nature, fully in line with the 17 SDG.

In this way, a new eco-social educational environment for sustainable citizenship is formed, where the actions of the educational community are enriched with new meanings, social practices and material entities. The actions included in the Curriculum and those related to it that are designed and implemented by teachers in collaboration with students contribute to the creation of a school that embodies political/social self-action, participation and inclusion. This model equally encourages cognitive, emotional and social learning, as teachers and students develop the ability and will to critically participate in democratic processes. This fosters critical thinking and creates a resilient school that can address global challenges and solve sustainability problems at local, national and global levels.

4.2.2 EduRénov⁴: energy renovation programme for school buildings

One of the 5 pilot sites of the NEB-LAB project, Microville 112 has established collaboration with the energy renovation programme for school buildings EduREnov.

The necessary energy renovation of school and educational buildings

Local authorities face the challenge of **energy transition** on a daily basis. Among the levers to be deployed, the **energy renovation of public buildings** is at the forefront. This particularly concerns all educational buildings, especially schools and colleges. The aim is threefold: to improve **user comfort**, adapt buildings to **climate change** and generate **energy savings**.

An impressive stock of ageing, energy-guzzling buildings

At a time when heat waves and extreme weather events are on the increase, educational buildings across the country are proving to be old and ill-adapted to today's **climatic challenges** - a **source of discomfort** for the educational community. They are also often old and **consume** a lot of **energy**.

Renovation is therefore essential. It's a major undertaking, as these key figures on school buildings and the education community in France reveal.

- There are around 53,000 state schools (écoles, collèges, lycées). And that's not counting the many extra-curricular establishments, universities, leisure centres, etc.
- More than 60% of schools are located in municipalities with fewer than 10,000 inhabitants.
- They bring together more than 10 million pupils (schools, collèges, lycées) and more than 1 million professionals (teachers, advisers, management).
- Their total surface area is 130 million square metres - that's almost half the property stock owned by local authorities.
- School buildings account for almost 30% of energy consumption in local authority buildings.

EduRénov: an ambitious school renovation programme

Run by the Banque des Territoires, the EduRénov programme supports local authorities in renovating their schools and educational establishments. It aims to **improve study and working conditions** for pupils and educational staff, as well as **reducing the energy consumption of buildings**, the cost of which is rising every year.

⁴ <https://edu-renove.org/>

To this end, local authorities that are members of the EduRénov programme have access to:

- **resources** - themed webinars with experts, testimonials from local authorities, guides and resources, reports and interviews, etc;
- a **community of project owners** to share ideas and get inspired;
- **engineering funding** - energy studies, support for the financial set-up of the project or consultation with the educational community, etc. - allocated on a case-by-case basis and in the order of priority defined by the Banque des Territoires' regional offices. - allocated on a case-by-case basis, and in the order of priority defined by the Banque des Territoires' regional offices;
- **loans at preferential rates**, via the Édu Prêt or Intracting schemes (repayable advances calculated on the basis of expected energy savings).

To this end, the Banque des Territoires has set aside **€2 billion** over 5 years for loan financing, and another **€50 million** for engineering financing.

A tool to guide school renovation plans

EduRénov has drawn up a **Charter for the renovation of school buildings**. The aim of these recommendations is to define what constitutes **energy-efficient renovation**, in order to provide the best possible guidance to those involved in the project, and to create a **common language** for local decision-makers and the technical teams who support them. The Charter's recommendations cover **six aspects** of energy-efficient renovation of school and educational buildings:

- the role of the local authority and the stages of the project ;
- knowledge of existing buildings ;
- energy and environmental performance ;
- adapting to climate change ;
- the comfort and quality of buildings and outdoor spaces;
- the quality of use of these buildings.

5. Next steps and challenges

5.1 Consolidation of the “test activities” for replicable implementation

NEB-LAB Eco²-Schools aims to create benefits for a larger community surrounding the educational building; it also aims to be a role model and provide step-by-step guidance for other buildings to follow suit. While social value output refers to the activities done by the organization, social value outcomes refer to long-term observed effects, in this case, sustainability. In order to quantify the multiple benefits and success of the project a Social Value Framework has been developed. Social value within the project aims to affect all generations within a community and to support the transformation of educational buildings toward low-carbon and climate resilience, based on social, technological, and financial innovation. The whole community is involved in supporting this transformative process. Figure x presents a step-by-step guide to implement the Social Value Framework within the NEB-LAB Eco²-School approach as a role model for other educational buildings to follow suit.

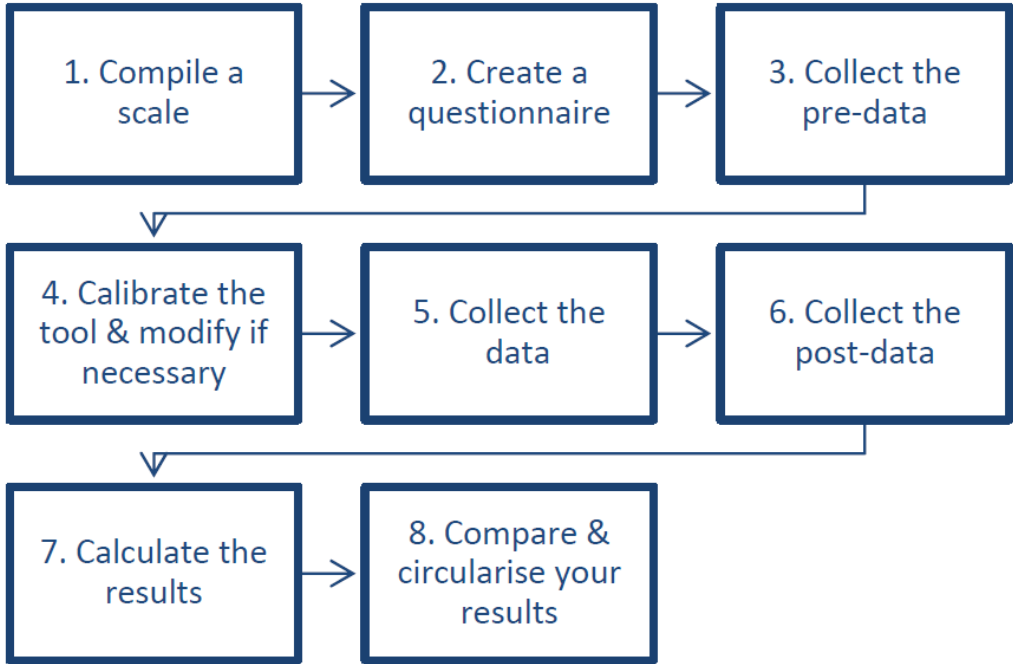


Figure 6. - Impact assessment of the Social Value Framework

Figure 5 illustrates the outcome of the pilot study of the proposed multidimensional model for sustainability education (as proposed in the D5.1 Social Value Framework and Self-Reflection Tools). The involved partners had applied the item set to their national audience (see below). It builds on and supports established findings in environmental education research with attitudes, knowledge, and behaviors at its core: Environmental attitude (i.e., people’s propensity to protect the environment or harm it as little as possible) affects the sustainability-related knowledge people gain and retain (Baierl, Kaiser, et al., 2022; Taube et al., 2021) and is a determinant for acting pro-environmentally (e.g., Kaiser & Byrka, 2015; Taube & Vetter, 2019). Attitude toward nature (i.e., people’s propensity to appreciate and enjoy natural environments) is also positively related to pro-environmental engagement (e.g., Clayton, 2003; Kals et al., 1999; Whitburn et al., 2019). More recent research has corroborated previous findings and identified a causal relationship between both attitudes: environmental attitude mediates attitude toward nature’s effect on learning about sustainability-related issues (Baierl et al., under review). As such, attitude toward nature is considered a predecessor for environmental attitude, knowledge, and behaviors.

Based on that knowledge, we need to learn more about both attitudes, particularly strengthening them through teaching. Since attitude toward nature reflects people’s use and enjoyment of natural

environments, outdoor experiences only naturally support it. This refers to solitary and interpersonal outdoor experiences and incorporates outdoor teaching units or original objects used in lessons.

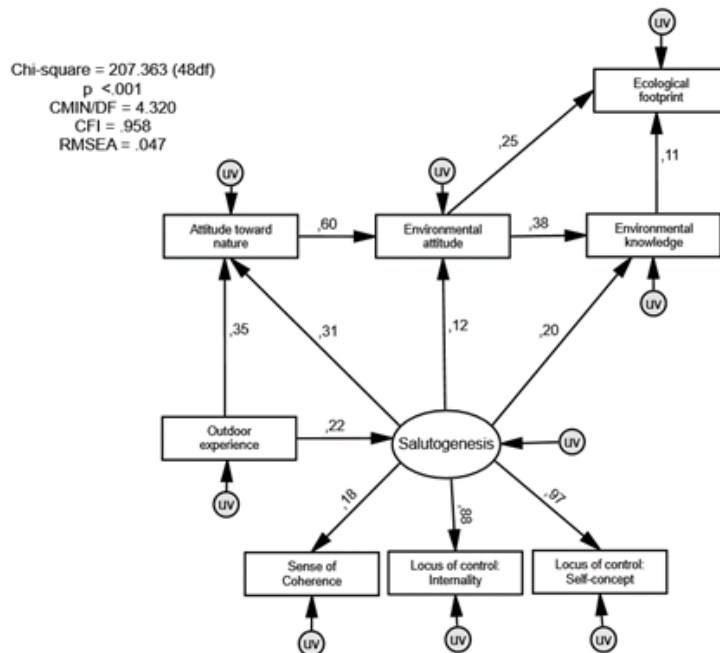


Figure 7 - Multidimensional model for sustainability education; at its core are salutogenetic—health promoting—factors, being fundamental to attitudes which, in turn, enhance learning and pro-environmental engagement. Single headed errors reflect regression scores and variables termed uv reflect unobserved variables, acknowledging measurement errors

More interestingly, salutogenetic factors such as people’s sense of coherence and locus of control are directly related to attitudes and learning. Salutogenesis is the maintenance and improvement of human health through coping strategies and personal resource management (Lindström & Eriksson, 2005). So, there is some ratio that the more coping strategies a person has or the more stable they are in life, the more capacities they possess toward living sustainably. Therefore, such factors are integrated into the Education for Sustainable Development approach and reflected by the GreenComp framework. As such and in line with Figure 6, the stronger a person’s coping capacity (i.e., their salutogenesis), the stronger their attitudes and knowledge scores are.

Figure 6 depicts the variables linked with the complete data set, and the results hold for each country with only marginal differences in regression scores. So, the cross-cultural design supports the indicated relationships in Figure x. This helps derive teaching recommendations toward sustainability. It suggests that we should fundamentally support salutogenetic factors such as people’s sense of coherence or locus of control in classroom settings. Based on this, we should strengthen both attitudes, with attitude toward nature strongly supported by outdoor experiences—solitary and interpersonal—and through enriching classroom teaching with original, real-life objects. After all, knowledge is vital but insufficient to change behaviors, supported by the regression coefficients in Figure 6. What we do need to focus on seems to be attitudes, outdoor experiences, and salutogenesis.

5.2 Involving a wider community

Since 2023 (first consortium meetings in Athens, Lisbon, Stockholm) and during the whole year 2024 Eco²-Schools as NEB LABs team has developed with the 5 first pilots a win-win openness that connects internal resources, mapped stakeholder’s and best existing initiatives and in their territory of proximity (host city, climate-cultural cross-border region). With help of the Chamber of quality, the consortium has developed opportunities to bridge best existing initiatives in the European Union relating to

Climate education and NetZero renovation of Schools, neighbourhoods, villages, with a posture of learning-action involving 3 generations.

- Synergy with the host city and surrounding territory (Courcy has developed local-national synergies in Greater Reims/France with ongoing programs and supportive institutions, Ciencia Viva has developed openness with its network of science centres and farms as with institutions in charge of science supported education, Ellinogermaniki Agogi builds on its involvement in a diversity of European and National research-innovation programs as the schools community in Greater Athen).
- With EA, AS&E has build as official partner of the New European Bauhaus fruitful connections linking European programs and missions : NEB FESTIVAL, NEB Chapter Bxl, Education for Climate coalition (contributive member of the advisory board), Mission 100 Climate neutral and smart cities (Courcy is first village to commit in NetZeroCities TwinLearning program cohort2), 6 NEB Lighthouse demonstrators, NEB-LAB hosted projects (Rebuild Ukrain, Neighbourhoods), Creative Europe (LivingSpaces learning visits), national initiatives (EduRénov, Renaissance Ecologique, Profs en Transition/Classe Dehors, Cours Oasis, Résilience Alimentaire, Fabrique des Mobilités, ...) other European crossborder projects (Habiter2030/Circular Trust Building, DUT 15 minutes City, , Urbact Biocanteens, Foodshift Pathways, Synapses Energy House, RedWolf...).
- We have voluntarily build from start a solid partnership with Foundation for Environmental Education/Eco-school global program that will commit by 2030 50% of its members in “UNESCO Green Schools whole school approach” (as trusted leading entity worldwide). Eco²-Schools as NEB-LABs is testing the new framework, with a demonstration of replicable step by step method which is open to combine best existing tools and initiatives.

And this is exactly why we have created since November 14th 2024 the European association Eco²-Campus. An association that aims to initiate, **local cross-border representations of the LAB of the New European Bauhaus Eco²-Schools (Eco²-Schools as New European Bauhaus Labs)** which **will connect, develop and support several initiatives and projects in co-experimentation, relating to Climate education and renovation of schools, neighbourhoods, villages by co-learning-actions at three generations** (cf. chapter 4.1 Prefiguration of the European association Eco²-Campus).

** It is the first decentralized lab initiated by NEB Community members in an open cooperative way to be hosted in the NEB-LAB of the European Union (and this is a breakthrough innovation).*

2025 will be the year of visibility of the 5 pilot sites implementation of NEB-LAB Eco²-Schools method and experimental activities (long prepared by own cooperative means, this can be amplified with the rich synergies we can build on at local and global level).

Here are first examples of how openness and cooperative support are essential to success:

1 “Eco²-Campus Microville112 project room” in Courcy (FR):

Within this first Eco²-Campus, Courcy’s “core team” is willing to make a replicable demonstration of a “project room”, which role is to train and commit the local community by learning-action in a lighthouse building that will be renovated step by step with its surrounding. This will involve the schools and college of the village and beyond other Schools, neighbourhoods, villages of the Greater Reims area into Climate education.

The “project room”, located in a central visible place, will offer adapted space for shared documentation, co-design and first tests experimentations as a start point for a “Climate neutral renovation Green action plan” step by step implementation, as community in learning-action.

The challenge is to co-design and make, with no more than 2 workshops, a first real scale demonstrator of the “project room” which will become an indoor-outdoor extended space capable of hosting a diversity of activities with support of a "design facilitation team" and “common permanent documentation”.

With 2 facing walls:

- a first wall for sharing a common VISION and desirable storytelling of the needed change of Climate Renovation (Climate adaptation, change of offers-habits, cooperative commons, diversity of existing, ready to test changemaking solutions),
- a second opposite wall for sharing a living documentation, with all necessary key informations (plans, documents, photos... organised in 3 parts: heritage of the past, the present situation, the future improvements). The community is invited to formalize (and/or complete) "action sheets" with the description of a first steps "test activities", dedicated tasks and resources. All learning-actions share a common agenda and communication (permanent reportage, shared learnings, peer to peer transmission).

The “project room” will be developed in a fixed and outdoor mobile version, with a combination of forward looking innovations:

Innovation 1) Fresque Renaissance Ecologique, we will build on the tools developed by Quattrolibri/Renaissance Ecologique (with Julien DOSSIER we will adapt a specific scenography for indoor-outdoor).

Innovation 2) Tools, templates and method for community driven co-design (Eco²-Schools tools and method developed by the "Chamber of Quality"). A team of trainee students in Global Design (CY Design School/ Paradigm) will develop a users centred supportive guidance, with step by step adapted facilitation and exemplary documentation.

Innovation 3) The Eco²-Campus “core team” is willing to implement a Decentralized Autonomous Organization web site (in collaboration with the NEB-Chapter Brussels, Hypha.Earth DAO website blockchain platform), that will enable the the community to participate in common actions with sharing resources, time, democratic decision/coownership rights and a cooperative budget.

Ambition : from March until September 2025, make a real scale test of the "project room" in the Eco²-Campus Microville112, that will be used for immersive learning-action relating to all aspects of the Climate renovation of the former military airbase into a NetZero neighbourhood by 2030.

This will be replicable in other locations with a ready to use method, tools and services.

Ellinogermaniki Agogi (EA) “Biocanteen Lab” in Pallini (GR):

EA has initiated since October 2023 the idea of a “Biocanteen Lab” that will embody the Green School Living Lab in a central place of the school campus.

Ambition is to raise awareness on buildings energy consumption in all dimensions (electricity, heat, cold, water, fresh air, cooking, mobility, logistics...), with students but also the local community becoming actors of possible improvements. Ea has first test activity demonstrated how the educative team can be involved mixing different part of the educative program with using the school for real experiments working as a community in learning-action (Eratostene experience led with SSSL, students challenge for maximizing the energy performance of the solar panels installed on the roof, self made solar oven for understanding how to produce heat and cook traditional recipes). The educative team has also led a second test with an exploration of the energy footprint of the menus in the school

canteen and how to improve reducing energy need as change habits towards seasonal short distance food supply and cooking (bridging with Foodshift European project). A first test has been made involving families on invitation of their children to discover how not only the school canteen could be improved, but also the menus at home (this test was a very positive experience EA is willing to build on next year).

From January until June 2025, a first cohort of students from 6th and 1st classes will start working on the “Biocanteen Lab”, with a reportage on the for start existing situation, a documentation of the energy needs and time of uses, availability of renewables and possibilities to make changes that would reduce the consumption of energy (carbon emitting). The students will then codesign an action plan and work on specific test activities that will enlight the possible improvements.

At the end of the implementation cycle, participating students will organise dedicated workshops and events to showcase their work to the whole school community.

Ambition of the “Biocanteen Lab” is to engage the whole community, step by step with building awareness, improving the school facility as changing the organization and habits. The demonstration will include indoor and outdoor activities that will be the result of the learning-action process.

A connection is established with the host city of Pallini and Greater Athens, for a supportive partnership and possible replications.

Sigtunaskolan Humanistika Läroverket (SSHL) “NetZero Energy House” in Sigtuna (SE):

SSHL has shared since the 3rd consortium meeting in Sigtuna (dec. 2023) and matured in interaction with the School board, Sigtuna Stifsele (Wallenberg Foundations owner of the boarding school), students, the neighbouring museum of Sigtuna village and private companies the idea to renovate the former professors house at the entrance of the school into a “NetZero Energy House”. This project will be started in 2025 in a codesign, tests and challenges phase taking the opportunity of the 100 years of existence of SSHL (festive celebration, involvement of past students of the boarding school incl. the present King of Sweden, skills and material partnership with companies).

The former professor house, which is a symbolic heritage building in a central visible place, accessible for all, will become a local “Lab facility Zero Energy House”; that will enable the community of students to explore in different ways how to reduce energy consumption and develop renewables in self consumption (solar energy heat-electricity adapted to the roof and façades, collecting rain-recycling gray water, day/night and interseasonal storage, use of innovative smart daylight lightning, high efficient glazing compatible with heritage building renovation, bioclimatic seasonal strategy, use of nature based solutions and materials, development of light electric bicycle mobility...).

Ambition is to make of the “NetZero Energy House” a central place for Climate education-renovation learning-action for the boarding school community, the neighbouring villages with a possibly a widely share the students challenge and learnings with other schools via a website platform (ex. [Life-Link Friendship Schools network](#)).

Ciencia Viva (CV) “Visitors NEB-Lab” (PT):

Ciencia Viva’s team has, since the 2nd consortium meeting in Lisbon (September 2023), initiated a cross-appropriation of the opportunity of Eco²-Schools as NEB-LABs project, by mobilizing the board of directors, educators and researchers, technical team and some partners of [Pavilhão do Conhecimento](#). It has included in its “core team” directors, educators of its network of science centres, farms and clubs that are proactively involved in the codesign of first learning-action activities.

Synergies have been tested with the University of Lisbon and community of scientific researchers/experts. With the codesign of a “green wall” that could be installed at the entrance of the museum and/or science centres, CV has catch the idea to build with all expos in the pavilion a “Visitors NEB-Lab”; using this as a moving facility adapted to all expos in a living interactive way, for involving the visitors (classes, teachers, parents, visiting partners) into learning-action in all aspects relating to Climate education, reconnecting with nature (biodiversity, food, sea, nature based materials, bio mimicry) and renewable energy NetZero renovation.

The implementation of a wide range of measures in the Pavilion aims not only to optimize energy resources and consumption in the building, but also to increase the number and range of activities/events related to sustainability, biodiversity and environmental protection.

Ambition is to make the “Visitors NEB-Lab” widely open connected to real schools, neighbourhoods, villages by the mean of a program of expos, demos, visiting activities and conferences. A forward looking interaction will be build progressively bringing in the light and sharing best initiatives and achievements in Ciencia Viva network.

University College of Cork (UCC) “north mall biodiversity trail” in Cork (IE):

University College of Cork is leading since 2010 a students led “Green Campus” project, that has been awarded as first EcoCampus (FEE Eco-schools Green Flag) and has become in April 2024 the first University Campus in the world to secure five Green Flags. With the 3rd consortium meeting in Sigtuna, UCC’s core team has connected in its Climate renovation Green action plan a set of different activities relating to the step by step NetZero renovation of the campus, started with the passive renovation of the “Enterprise Building” (that includes an installation which enables the community to observe/track all energy consumptions as air quality, a diversity of activities will be developed with the building that is just renovated in its second phase this summer 2024). Between the buildings, the students and environmental education team of the University is willing to develop an interactive nudge communication with a trail that will connect different parts of the Campus. This “north mall biodiversity trail” will connect places and activities for learning-action involving the community of students, professors, researchers, visitors and neighbours.

Ambition of the “north mall biodiversity trail” is to build capacity of the community to be trained in Climate education and explore solutions we have to rise our positive handprint on Nature (biodiversity) and reduce our energy/material footprint with a step by step renovation (renewable energy in self consumption, high efficient insulation, bioclimatic adaptation with the seasons, natural ventilation, water recovery, biogas composting, light electric bicycles improving air quality...).

The trail as a green line, if the community participates into learning-actions as a whole, will possibly transform UCC campus into a wide NEB-Lab.

5.3 Realize and share the step-by-step implementation

As we are starting the third year of the Erasmus+ project and the 5 pilot-sites have prepared the implementation of progressive impact learning-action activities with involving their local community; it should become natural to catch the key moments of realization (photos, recordings, video reportage, journal, social networks posts) and share this with the local community and on Eco²-Schools website <https://www.eco2-schools.eu>.

There are a few reasons for making this effort:

1st – Eco²-Schools as NEB-LABs coexperimentation adopts a community driven approach, classes, educative team, families, professionals, public servants, visitors being together involved by learning-action into Climate education and the step-by-step NetZero renovation of the school, its

neighbourhood, village. This will grow with an enlarged commitment only if engaged activities, progresses and learnings are documented, shared, visibly and by becoming visitable for all. Inside-outside communication is a key for success.

2nd – All 5 pilot-sites are facing limits of available material means and available budget for making real realizations. The strategy of the NEB-LAB being decentralized with the European association “ECO2-CAMPUS” is to connect-share-challenge-support a joint implementation with host cities, sponsors and co-investors. This calls for establishing a partnership work program, with a permanent documentation and communication , shared actions-tools-services, supported with a cooperative budget; what is supposing a clear trusted step by step implementation (1- Bring the core team together, 2- Create a solid communication into the core team, 3- Analyze the situation, 4- Establish a vision, 5- Take action, 6- Evaluate and celebrate, 7- Transmit, improve and grow the implementation).

In D4.1 GoodPlanet has adapted the 7 steps of FEE Eco-schools to Eco²-Schools as NEB-LABs learning-action method. Intention of the consortium is, without losing the target of first pilots prototype demonstrations, to progressively implement in 2025 the step-by-step process.

5.4 Celebrate, transmit and improve the Climate renovation green action plan

Celebration of first achievements, learning-actions, test implementations, observed improvements, gained positive transformation and synergies,... this is a key moment of Eco²-Schools as NEB-LABs process ; to empower year by year a community driven transformation of schools into decentralized labs of the New European Bauhaus, in line with UNESCO Green schools whole school approach, involving youth, educators, families, professionals into the needed Climate renovation of schools/neighbourhoods/villages by continuously improved learning-action.

Because schools follow an annual learning cycle with progression of learners, evaluation of acquired skills, transmission of ongoing projects between classes, activities follow the rhythm of seasons and renovation works are mostly concentrated on the vacations period (lower activities), June and February are key moments in the school year for celebration and transmission.

As the 5 pilot-sites will all be engaged in implementation, 2025 will be the first year of celebration and transmission with the community. In February, the European association ECO2-CAMPUS will hold its first General Assembly; this is a key moment where all 5 pilot-sites will be invited to share their starting experimental implementation initiatives, build a common support with a partnership work program and first cooperative budget, wherein host cities and supportive entities will possibly participate. The participants will have the opportunity to be contributors with possible enrichment of the presented program through a codesign workshop (using the open space method), being stimulated to improve implementation of the local Green action plans with the core-teams. The result of this collaborative work will be presented at the end of the codesign session and as pertinent integrated in the partnership work program of the association. The Chamber of quality is also willing to challenge the local teams to make a step-by-step communication, permanent documentation and before-after evaluation of the activities. This will be used for bringing the community actively involved and aware of the progresses of the different pilot-sites and groups. June will be the key moment of maturity of the local implementations, with first real visible results. We are planning a local-global celebration of first achievements in all 5 pilot-sites, involving the board, educators, classes/groups of students, possibly with their host city and supportive team. This will be a chance to make a peer-to-peer evaluation and transmission of the achievements, learnings and gained skills/experience. A festive event will mark the end of the school year and prepare involvement of the next cohort in September 2025.

The whole experimental process will thus be achieved with a consolidation of the method, steps, tools and services in a comprehensive brochure that will be presented in the next General Assembly and final conference of the 3 years Erasmus+ project. The process is expected to be circularly continued the next years.



Eco² Schools as New European Bauhaus Labs

Statuts constitutifs de l'Association ECO²-CAMPUS

établis selon la loi du 1^{er} juillet 1901 et le décret du 16 août 1901,
dans l'esprit d'une « Association européenne ».

<https://www.legifrance.gouv.fr/loda/id/LEGITEXT000006069570> ;

<https://www.legifrance.gouv.fr/jorf/id/JORFTEXT00000536388> ;

<https://www.associations.gouv.fr/vers-un-statut-d-association-transfrontaliere-europeenne.html> ;

<https://www.europarl.europa.eu/legislative-train/theme-an-economy-that-works-for-people/file-cross-border-activities-of-associations>

I – BUTS ET COMPOSITION DE L'ASSOCIATION

ARTICLE 1 – DÉNOMINATION

Il est fondé entre les adhérents aux présents statuts une association à but non lucratif, d'intérêt public, régie par la loi du 1^{er} juillet 1901 et le décret du 16 août 1901, ayant pour titre :

« ECO²-CAMPUS »



ARTICLE 2 - OBJET

Cette association a pour objet d'initier, une(des) représentation(s) locale(s) transfrontalière(s) du LAB du Nouveau Bauhaus Européen Eco²-Schools (Eco²-Schools as New European Bauhaus Labs) qui va connecter, développer et soutenir plusieurs initiatives et projets en co-expérimentation, se rapportant à l'éducation Climat et à la rénovation soutenable des écoles, quartiers, villages en coapprentissage-actions à trois générations.

L'association adopte une posture « d'organisation autonome décentralisée », c'est-à-dire qu'elle reste ouverte avec potentiellement un réseau de hubs sur plusieurs régions climatiques-culturelles transfrontalières de l'Union Européenne, chacun en proximité d'une densité d'initiatives-projets sur un territoire.

L'Eco²-Campus s'incarne sous la forme d'un "Tiers lieu d'Education Climat" à destination des écoles, quartiers, villages, ouvert pour accueillir, documenter, soutenir une diversité d'initiatives et d'expérimentations en coopération.

Le premier « Eco²-Campus » à voir le jour est situé au cœur du projet de la Microville Durable 112 www.microville112.org, situé à Courcy (51220 - France).

Il s'agit d'un tiers lieu ouvert d'expérimentation en immersion et de formation sur toutes les thématiques de la ville durable, par co-apprentissage-action, à tous les âges de la vie et pour tous les niveaux de compétences-qualifications.

L'objet premier de l'association est de réunir une diversité de parties prenantes, d'institutions et de soutiens, qui vont faciliter le démarrage d'activités pédagogiques et la rénovation expérimentale en formalisant une coopération innovante, des outils-moyens communs et un budget coopératif.

L'association se positionne comme l'initiatrice d'une(de) représentation(s) territorialisée(s) du LAB du Nouveau Bauhaus Européen Eco2-Schools. Elle anime un réseau de sites pilotes, d'écoles suiveuses, de villes hôtes et de structures soutiens, avec l'ambition de développer un réseau européen d'Eco²-Campus, répartis sur plusieurs régions climatiques-culturelles transfrontalières.

Elle est ouverte à tous, par simple adhésion et pour toute forme de coopération formalisée par une(des) convention(s) de partenariat et des fiches actions, qui pourront être régulièrement actualisées.

Elle est créée le 14 novembre 2024. Elle va dans un premier temps accompagner et incuber le démarrage expérimental d'un « Eco²-Campus » démonstratif (un tiers-lieu d'Éducation au Climat par co-apprentissage-action pour les écoles, quartiers, villages) situé au cœur de la démarche de rénovation Climat de la Microville112, impliquant le village de Courcy et une communauté locale ouverte sur le territoire du Grand Reims.

Chacune des phases de développement d'activités et ressources dans l'objet de l'association sera partagée dans une réunion plénière et soumise à l'approbation de l'assemblée générale de l'association.

La première assemblée générale ordinaire, programmée d'ici début février 2025, va confirmer les partenaires fondateurs, un premier programme de travail partenarial, des moyens communs et un budget coopératif.

L'ambition est d'installer et de développer :

- **un lieu démonstrateur de l'Education Climat portant la rénovation d'une école à 3 générations pas à pas avec la communauté de ses usagers, son quartier, son village** ; par immersion au cœur de l'ancienne base aérienne 112 et de sa rénovation en une Microville Durable®, en impliquant une communauté de parties prenantes qui contribuent au projet expérimental avec l'implication d'institutions, d'établissements de formation et d'apprentissage du territoire du Grand Reims (Grand Est) ;
- **un hub d'échange et de coopération transfrontalier pour croiser les meilleures pratiques existantes, faciliter l'expérimentation en coopération en matière « d'Education Climat » et de rénovation des établissements éducatifs**, avec leurs quartiers-villages (pour l'Eco²-Campus de Courcy : nord-est de la France, Benelux, Allemagne, Suisse) ;
- **un réseau décentralisé avec les 5 sites pilotes qui initient le LAB Nouveau Bauhaus Européen « Eco²-Schools »** (Microville112 Courcy/Grand Reims FR, EA Pallini/Athènes GR, Ciencia Viva Lisbonne PT, UCC Cork IE, SSSL Sigtuna/Stockholm SE), en s'appuyant sur plusieurs villes-pilotes NetZeroCities (dont Lisbonne, ville pair de Courcy pour la durée du programme NetZero TwinLearningCities cohort2 2024-2026) ;
- **un modèle coopératif qui va permettre d'étendre et de répliquer l'Eco²-Campus sur plusieurs régions climatiques-culturelles transfrontalières**, en impliquant un réseau de villes hôtes, de sites d'expérimentation, d'établissements éducatifs bénéficiaires, de collectifs citoyens et de soutiens.

ARTICLE 3 - SIÈGE SOCIAL

Son siège social est fixé à COURCY (51220 – MARNE), 6 rue de la Péniche (MICROVILLE 112, bâtiment T2).

Il pourra être transféré par simple décision du Conseil d'Administration. La décision prise sera justifiée expressément lors de l'Assemblée Générale suivante.

ARTICLE 4 - DUREE

La durée de l'association est illimitée.

ARTICLE 5 - COMPOSITION

Deviens membre de l'association toute personne morale ou physique ayant acquitté une cotisation dont le montant est fixé chaque année par l'Assemblée Générale.

L'association regroupe, sans distinction d'âge, sexe, religion, nationalité, des membres actifs et de droit :

- **les membres actifs de l'association Eco²-Campus** : sont des personnes physiques ou morales à jour de leur cotisation. Ils sont répartis dans différents collèges :
 - o **collège des « villes hôtes »** = collectivités (villes, villages, ...);
 - o **collège des « sites d'expérimentation »** = entités portant le lieu d'expérimentation ;
 - o **collège des « établissements éducatifs bénéficiaires »** = écoles, collèges, lycées, organismes de formation par apprentissage, enseignement supérieur, recherche éducative ;
 - o **collège des « citoyens »** = personnes physiques (enseignants, habitants, parents d'élèves, membres impliqués dans un collectif ou association...);
 - o **collège des « soutiens »** = collectivités autres que les « villes hôtes », organisations publiques ou privées, associations et personnes individuelles qui soutiennent l'association (au plan financier, matériel, compétences, participation aux activités et services développés).

- **les membres de droit** sont les fondateurs, les représentants désignés des personnes morales nominalement représentées et des personnes physiques, qui apportent un concours significatif à l'association Eco²-Campus, dans ses phases clés de développement. Proposés par l'Assemblée Générale, ils ont pour mission de veiller au respect des principes fondateurs et, à ce titre, ont voix délibérative tant que leur nom figure dans la liste établie et révisée à chaque Assemblée Générale.

Les fondateurs à la date de dépôt des statuts sont :

- Alliance Sens&Economie,
- Christophe BARTHOLEYNS (en tant qu'initiateur de la coopération Eco²-Schools as NEB-Labs, membre actif de la communauté du Nouveau Bauhaus Européen - Partenaire officiel),
- Collectif Citoyen Agora Microville 112,
- Commune de Courcy,
- Ellinogermaniki Agogi (Sofoklis SOTIRIOU, coord. du projet Erasmus+ Eco²-Schools as NEB-Labs),
- SCIC Microville112,
- ...

** La liste des fondateurs (membres de droit) sera finalisée le jour de la première assemblée générale ordinaire et mise à jour suivant l'évolution de l'association européenne Eco²-Campus.*

ARTICLE 6 – ADMISSION

L'association est ouverte à toute personne physique ou morale concernée par l'objet de l'association. Cependant, les demandes d'admission sont entérinées par le Conseil d'Administration qui peut, le cas échéant, les refuser sur avis motivé.

ARTICLE 7 - COTISATIONS

Le montant des cotisations est fixé par l'Assemblée Générale, examiné annuellement pour être si besoin adapté.

ARTICLE 8 – RADIATIONS

La qualité de membre se perd par :

- a) La démission.
- b) Le décès.
- c) Disparition d'entité juridique adhérente à l'association.
- d) La radiation prononcée par le Conseil d'administration pour non-paiement de la cotisation au terme de l'exercice échu ou pour motif grave (ex. non-respect de l'éthique de l'association), l'intéressé ayant été invité à fournir des explications devant le Conseil d'administration.

ARTICLE 9 - AFFILIATION

L'association peut, par ailleurs, adhérer à d'autres associations, unions ou regroupements par décision du Conseil d'administration.

II – RESSOURCES DE L'ASSOCIATION

ARTICLE 10 - RESSOURCES

Les ressources de l'association comprennent :

- 1) Les cotisations et autres contributions de ses membres.
- 2) Les subventions de l'Europe, de l'Etat, des Régions, des Départements, des Intercommunalités, des Communes et de leurs établissements publics.
- 3) Les ressources privées issues de dons, mécénat...
- 4) Le produit des rétributions perçues pour services rendus et l'utilisation d'équipements partagés, à hauteur de leurs coûts réels.
- 5) Le produit des manifestations organisées ponctuellement.
- 6) Toutes les ressources autorisées par les lois et règlements en vigueur en France et dans l'Union Européenne.

III – ADMINISTRATION ET FONCTIONNEMENT

ARTICLE 11 - ASSEMBLEE GENERALE ORDINAIRE

L'Assemblée Générale Ordinaire comprend tous les membres de l'association à quelque titre qu'ils le soient.

Elle se réunit chaque année au cours du 1^{er} trimestre.

Les membres de l'association sont convoqués, quinze jours au moins avant la date fixée. L'ordre du jour figure sur les convocations.

Le président expose la situation morale ou l'activité de l'association.

Le trésorier rend compte de sa gestion et soumet les comptes annuels (bilan, compte de résultat et annexe) à l'approbation de l'assemblée.

L'Assemblée Générale fixe le montant des cotisations annuelles des membres.

Les décisions sont prises à la majorité des voix des membres présents ou représentés. (Les conditions précises de représentation seront définies dans le règlement intérieur).

Après épuisement de l'ordre du jour, il est procédé au renouvellement des membres sortants du Conseil d'Administration, avec reconduction possible dans leur fonction. Les décisions des Assemblées Générales s'imposent à tous les membres, y compris absents ou représentés.

** Les personnes morales désignent un représentant et un suppléant, avec un seul droit de vote. Les personnes physiques ont un droit de vote en leur nom propre.*

ARTICLE 12 - ASSEMBLEE GENERALE EXTRAORDINAIRE

Si besoin est, le Conseil d'Administration peut décider de convoquer une Assemblée Générale Extraordinaire, uniquement pour modification des statuts ou pour dissolution.

Les modalités de convocation et de vote sont les mêmes que pour l'Assemblée Générale Ordinaire.

Les délibérations sont prises à la majorité des membres présents ou représentés.

ARTICLE 13 - CONSEIL D'ADMINISTRATION

Le Conseil d'Administration est constitué de 21 membres maximum, élus par l'Assemblée Générale.

- 6 postes sont réservés aux membres de droit (dont 3 postes réservés aux fondateurs de l'association). Ils sont désignés nominativement selon une procédure définie dans le règlement intérieur ;
- 15 postes sont réservés aux membres actifs, en représentation des différents collèges, par tranches de 3 par collège. Ils sont élus pour 3 ans et renouvelés par tiers chaque année (à partir de la 3ème année). Ces membres sont potentiellement rééligibles.

Les membres entrants sont désignés par un vote après candidature simple.

En cas de poste vacant, le Conseil d'Administration pourvoit provisoirement au remplacement. Les pouvoirs des membres ainsi désignés prennent fin à l'expiration du mandat des membres remplacés.

Il se réunit au moins une fois tous les six mois, sur convocation de la Présidence, ou sur demande d'un quart, au moins, de ses membres.

Les décisions sont prises à la majorité des voix simple. Dans le cas d'un résultat de vote 50/50, la voix des fondateurs est prépondérante (compte double).

Tout membre du conseil qui, sans excuse, n'aura pas assisté à trois réunions consécutives pourra être considéré comme démissionnaire.

ARTICLE 14 – BUREAU

Le Conseil d'Administration élit parmi ses membres, un bureau composé de :

- 1) Un-e- président-e- ou une co-présidence en fonction de la décision du Conseil d'administration.
- 2) Un-e- ou plusieurs vice-président-e-s.
- 3) Un-e- secrétaire et, s'il y a lieu, un-e- secrétaire adjoint-e-.
- 4) Un-e- trésorier-e-, et, si besoin est, un-e- trésorier-e- adjoint-e-.

** Les fonctions de président et de trésorier ne sont pas cumulables (cf. règlement intérieur de l'association).*

ARTICLE 15 – INDEMNITES

Toutes les fonctions, y compris celles des membres du Conseil d'Administration et du Bureau, sont gratuites et bénévoles.

Le cas échéant, les frais occasionnés pour l'accomplissement de leur mandat pourront être remboursés sur justificatifs. Le rapport financier présente à l'Assemblée Générale Ordinaire, par bénéficiaire, les remboursements de frais de mission, de déplacement ou de représentation.

ARTICLE 16 - REGLEMENT INTERIEUR

Un règlement intérieur peut être établi par le Conseil d'Administration, qui le fait alors approuver par l'Assemblée Générale.

Ce règlement éventuel est destiné à fixer les divers points non prévus par les présents statuts, notamment ceux qui ont trait à l'administration interne de l'association (ex. : fonctions, attributions et pouvoirs respectifs des membres du bureau).

ARTICLE 17 - CONVENTIONS

Afin de permettre l'objet de l'association Eco²-Campus et sa première ambition : **« Installer et développer un lieu démonstrateur de l'Education Climat portant la rénovation d'une école pas à pas avec la communauté de ses usagers, son quartier, son village »**, l'association Eco²-Campus peut être amenée à **formaliser des "conventions d'expérimentation"**; qui vont chacune préciser les sites d'expérimentations, lieux, moyens et modalités de mise à disposition. Pour chaque site d'expérimentation, une ligne comptable dédiée sera créée au budget coopératif de l'association.

Afin de développer une riche collaboration avec les villes hôtes, établissements éducatifs bénéficiaires et structures soutiens, une série de "conventions de partenariat" (cadres) sont formalisées et régulièrement mises à jour. Ces conventions de partenariat, complétées par des fiches-actions (en mentionnant les ressources dédiées), peuvent si nécessaire donner lieu à l'ouverture d'une ligne comptable dédiée au budget coopératif de l'association.

ARTICLE 18. - PROGRAMME DE TRAVAIL PARTENARIAL ET BUDGET COOPERATIF

Dans un esprit de transparence et pour stimuler la coopération, l'association Eco²-Campus édite un rapport moral annuel qui présente ses activités. Elle présente également le programme de travail partenarial pour l'année suivante et le budget coopératif correspondant. L'association poursuivant un objectif d'intérêt général (sans but lucratif), le programme de travail partenarial et le budget coopératif sont approuvés par un vote de l'Assemblée Générale.

Une rencontre annuelle est organisée avec des représentants de l'Union Européenne, en vue de partager l'avancement des travaux en co-expérimentation d'Eco²-School as NEB-Labs, de les promouvoir et développer un partenariat de soutien ; avec le NEB-LAB officiel de l'Union Européenne, la Communauté du NEB, Education for Climate Coalition, Mission NetZeroCities (100 Climate neutral and smart cities), ...

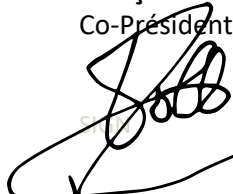
IV - DISSOLUTION

ARTICLE 19 - DISSOLUTION

En cas de dissolution prononcée selon les modalités prévues à l'article 12, un ou plusieurs liquidateurs sont nommés, et l'actif net, s'il y a lieu, est dévolu à une association ayant un but non lucratif conformément aux décisions de l'Assemblée Générale Extraordinaire qui statue sur la dissolution. L'actif net ne peut être dévolu à un membre de l'association, même partiellement.

Fait à Courcy, le 14 novembre 2024.

François JOLLY
Co-Président




Sofoklis SOTIRIOU
Co-Président



Patricia AUROY
Secrétaire



Christophe BARTHOLEYNS
Trésorier





Eco² Schools as New European Bauhaus Labs

Constitutive statutes of the Association ECO²-CAMPUS

established according to the law of July 1, 1901 and the decree of August 16, 1901,
in the spirit of a “European Association”.

<https://www.legifrance.gouv.fr/loda/id/LEGITEXT000006069570> ;

<https://www.legifrance.gouv.fr/jorf/id/JORFTEXT00000536388> ;

<https://www.associations.gouv.fr/vers-un-statut-d-association-transfrontaliere-europeenne.html> ;

<https://www.europarl.europa.eu/legislative-train/theme-an-economy-that-works-for-people/file-cross-border-activities-of-associations>

I – PURPOSE AND COMPOSITION OF THE ASSOCIATION

ARTICLE 1 – DENOMINATION

A for non-profit association of public interest is founded between the members adhering to these statutes, governed by the law of July 1, 1901 and the decree of August 16, 1901, having the title:

« ECO²-CAMPUS »



ARTICLE 2 - PURPOSE

This association aims to initiate, **(a) local cross-border representation(s) of the LAB of the New European Bauhaus Eco²-Schools (Eco²-Schools as New European Bauhaus Labs)** which will connect, develop and support several initiatives and projects in co-experimentation, relating to Climate education and renovation of schools, neighbourhoods, villages by co-learning-actions at three generations.

The association adopts a posture of “decentralized autonomous organization”, that is to say it remains open with potentially a network of hubs in different climatic-cultural cross-border regions in the European Union; each in proximity to a density of volunteer pilots, follower-schools and supportive host cities on a territory.

The Eco²-Campus takes the form of a “Third Place of Climate Education” for schools, neighbourhoods, villages, open to welcome, document and support a diversity of cooperative initiatives and experiments.

The first “Eco²-Campus” to see the light of day is located at the heart of the Sustainable Microcity “Microville 112” project www.microville112.org, located in Courcy (51220 - France).

It is an open third place for immersive experimentation and training on all themes of a sustainable city , by cooperation and learning-action, at all ages of life and for all skill-qualification levels.

The primary objective of the association is to bring together a diversity of stakeholders, institutions and supporters, who will facilitate the start of educational activities and experimental renovation by formalizing innovative cooperation, common tools and means and a cooperative budget.

The association positions itself as the initiator of a territorialized representation(s) of the LAB of the New European Bauhaus Eco2-Schools. It runs a network of pilot sites, follower schools, host cities and support structures, with the ambition of developing a European network of Eco²-Campuses, spread over several cross-border climatic-cultural regions.

It is open for all, by simple membership and to any form of cooperation formalized by partnership agreement(s) and action sheets, which may be regularly updated.

It is formed on November 14th 2024. It will first support and incubate the experimental start of a demonstrative “Eco²-Campus” (a third place for Climate Education by co-learning-action for schools, neighbourhoods, villages) located in the heart of the Climate renovation process of Microville112, involving the village of Courcy and a local community open on the territory of Greater Reims.

Each phase of development of activities and resources in the purpose of the association will be shared in a plenary meeting and submitted to the approval of the general assembly of the association.

The first ordinary general assembly, scheduled for early February 2025, will confirm the founding partners, first partnership work program, common resources and cooperative budget.

The ambition is to install and develop:

- **a demonstrative place for Climate Education carrying out the renovation of a school at 3 generations step by step with the community of its users, its neighborhood, its village;** by immersion in the heart of the former military air base 112 and its renovation step by step into a Sustainable Microcity®, with involving an open community of stakeholders who contribute to the experimental project with involvement of institutions, training and learning entities in the Greater Reims area (CU du Grand Reims, Région Grand Est);
- **a cross-border hub for exchange and cooperation cross-cutting existing best practices, easing cooperative experimentations in “Climate Education” and renovation of educational buildings,** with their village-neighbourhood (for the Eco²-Campus in Courcy: northeast of France, Benelux, Germany, Switzerland);
- **a decentralized network involving the 5 pilot sites that initiate the LAB of the New European Bauhaus “Eco²-Schools”** (Microville112 Courcy/Grand Reims FR, EA Pallini/Athens GR, Ciencia Viva Lisbonne PT, UCC Cork IE, SSHL Sigtuna/Stockholm SE), interconnecting as many NetZeroCities pilot cities (including first Lisbon, peer city of Courcy for the 20 months duration of the NetZero TwinLearningCities program cohort2 2024-2026);
- **a cooperative model which will make it possible to extend and replicate the Eco²-Campus across several climatic-cultural cross-border regions,** by involving a network of host cities, experimentation sites, beneficiary educational establishments, citizen collectives and sponsors.

ARTICLE 3 - HEAD OFFICE

Its head office is located in COURCY (51220 - MARNE), 6 rue de la Péniche (MICROVILLE 112, building T2).

It may be transferred by simple decision of the Board of Directors. The decision taken will be expressly justified at the following General Assembly meeting.

ARTICLE 4 - DURATION

The duration of the association is unlimited.

ARTICLE 5 - COMPOSITION

Any legal or natural person who has paid a membership contribution, an amount which is fixed each year by the General Assembly, becomes a member of the association.

The association brings together, without distinction of age, sex, religion, nationality, active and legal members:

- **active members of the “Eco²-Campus”, european association**, are natural or legal persons up to date with their contributions. They are spread across different colleges:
 - o **college of « host cities »** = public authorities (cities, villages, ...) ;
 - o **college of « experimental sites »** = entities carrying a place for experimentation (pilot site) ;
 - o **college of « beneficiary educational entities »** = schools, colleges, high schools, apprenticeship training organizations, higher education, educational research ;
 - o **college of « citizens »** = natural persons (teachers, inhabitants, parents, members involved in a collective or an association...) ;
 - o **college of « sponsors »** = public authorities other than the “host cities”, public or private organizations, associations and individuals who support the association (financially, materially, skills sponsorship, participation in the activities and services developed).
- **the ex officio¹ members** are the founders, designated representatives of the legal entities nominally represented and of natural persons, who provide significant support to the Eco²-Campus association, in its key phases of development. Proposed by the General Assembly, their mission is to ensure compliance with the founding principles and, as such, have a deliberative voice as long as their name appears in the list established and revised at each General Assembly.

The “founders” are :

- Alliance Sens&Economie,
- Christophe BARTHOLEYNS (as initiator of Eco²-Schools as NEB-Labs cooperation, active member of the New European Bauhaus Community - Official Partner),
- Collectif Citoyen Agora Microville 112,
- Commune de Courcy,
- Ellinogermaniki Agogi (Sofoklis SOTIRIOU, coord. of Eco²-Schools as NEB-Labs Erasmus+ project),
- SCIC Microville112,
- ...

** The list of founders (ex officio members) will be finalized on the day of first ordinary general assembly and updated following the evolution of the European association Eco²-Campus.*

ARTICLE 6 – ADMISSION

The association is open to any natural or legal person concerned by the object of the association. However, applications for admission are approved by the Board of Directors which may, if necessary, refuse them upon reasoned opinion.

ARTICLE 7 - CONTRIBUTIONS

The amount of contributions (membership dues) is set by the General Assembly, examined annually to be adapted if necessary.

ARTICLE 8 – MEMBER REMOVALS

Membership is lost by:

- a) Resignation.
- b) Death.
- c) Disappearance of legal entity member of the association
- c) The removal pronounced by the Board of Directors for non-payment of the contribution at the end of the past financial year or for serious reasons (e.g. non-compliance with the ethics of the association), the person concerned having been invited to provide explanations to the Board of Directors.

¹ ‘Ex officio’ refers to a person who holds a particular position or office and is therefore entitled to certain duties or privileges without additional authorization.

ARTICLE 9 - AFFILIATION

The association may also join other associations, unions or groups by decision of the Board of Directors.

II – RESSOURCES DE L'ASSOCIATION

ARTICLE 10 - RESSOURCES

The association's resources include:

- 1) Membership fees and other contributions from its members.
- 2) Subsidies from the European Union, States, Regions, Departments, Intermunicipalities, Municipalities and their public establishments.
- 3) Private resources from donations, corporate-foundation sponsorship, etc.
- 4) The product of the remuneration received for services rendered and the use of shared equipment, up to their actual costs.
- 5) The product of events organized occasionally.
- 6) All resources authorized by laws and regulations in force in France and in the European Union.

III – ADMINISTRATION AND OPERATION

ARTICLE 11 - ORDINARY GENERAL ASSEMBLY

The Ordinary General Assembly includes all members of the association in whatever capacity they may be.

It meets every year during the 1st quarter.

The members of the association are convened at least fifteen days before the fixed date. The agenda is communicated on the invitations.

The president explains the moral situation or the activity of the association.

The treasurer reports on his management and submits the annual accounts (balance sheet, income statement and annex) for approval by the assembly.

The General Assembly sets the amount of members' annual contributions (membership dues).

Decisions are taken by a majority of votes of the members present or represented. (The precise conditions of representation will be defined in the internal regulations).

After the agenda has been exhausted, the outgoing members of the Board of Directors are renewed members are renewed, with possible reconduction in their function. The decisions of the General Assemblies are binding on all members, including those absent or represented.

** Legal entities appoint a representative and a substitute, with a single right to vote. Individuals have the right to vote in their own name.*

ARTICLE 12 - EXTRAORDINARY GENERAL ASSEMBLY

If necessary, the Board of Directors may decide to convene an Extraordinary meeting of the General Assembly, only for modification of the statutes or for dissolution.

The convening and voting procedures are the same as for the Ordinary General Assembly meetings.

ARTICLE 13 – BOARD OF DIRECTORS

The Board of Directors is made up of a maximum of 21 members, elected by the General Assembly.

- 6 positions are reserved for legal members (including 3 positions reserved for the founders of the association). They are designated by name according to a procedure defined in the internal regulations;
- 15 positions are reserved for active members, representing the different colleges, in increments of 3 per college. They are elected for 3 years and renewed in thirds each year (from the 3rd year). These members are potentially re-electable.

Incoming members are designated by a vote after simple application.

In the event of a vacant position, the Board of Directors provides a temporary replacement. The function and powers of the members thus designated end at the expiration of the term of office of the replaced members.

It meets at least once every six months, upon convocation by the Presidency, or at the request of at least a quarter of its members.

Decisions are made by a simple majority of votes. In the case of a 50/50 voting result, the vote of the founders is predominant (double counting).

Any member of the council who, without excuse, does not attend three consecutive meetings may be considered to have resigned.

ARTICLE 14 – OFFICE

The Board of Directors elects from among its members, an office composed of:

- 1) A president or co-president depending on the decision of the Board of Directors.
- 2) One or more vice-presidents.
- 3) A secretary and, if applicable, an assistant secretary.
- 4) A treasurer, and, if necessary, an assistant treasurer.

** The functions of president and treasurer cannot be combined (see internal regulations of the association).*

ARTICLE 15 – INDEMNITIES

All functions, including those of members of the Board of Directors and the Office, are free and voluntary. If applicable, the costs incurred in carrying out their mandate may be reimbursed with supporting documentation. The financial report presents to the Ordinary General Meeting, by beneficiary, the reimbursements of mission, travel or representation expenses.

ARTICLE 16 - INTERNAL RULES

Internal regulations can be established by the Board of Directors, which then has them approved by the General Assembly.

This possible regulation is intended to fix the various points not provided for by these statutes, in particular those relating to the internal administration of the association (e.g.: functions, attributions and respective powers of the members of the office).

ARTICLE 17 - CONVENTIONS

In order to enable the purpose of the Eco²-Campus association and its first ambition: **“To install and develop a demonstrator of Climate Education carrying out the renovation of a school step by step with the community of its users, its neighborhood, its village”**, the Eco²-Campus association may be required to formalize **“experimentation agreements”**; which will each specify the experimental sites, locations, means and methods of provision. For each experimental site, a dedicated accounting line will be created in the association's cooperative budget.

In order to develop a rich collaboration with host cities, beneficiary educational establishments and support structures, a series of “partnership agreements” (frameworks) are formalized and regularly updated. These partnership agreements, supplemented by action sheets (with mention of dedicated resources), can if necessary give rise to the opening of an accounting line dedicated to the association's cooperative budget.

ARTICLE 18. - BY PARTNERSHIP WORK PROGRAM AND COOPERATIVE BUDGET

In a spirit of transparency and to stimulate cooperation, the Eco²-Campus association publishes an annual moral report which presents its activities. It also presents the partnership work program for the following year and the corresponding cooperative budget. As the association pursues an objective of general interest (non-profit), the by partnership work program and cooperative budget are approved by a vote of the General Assembly.

An annual meeting is organized with representatives of the European Union, with a view to share progress of Eco²-Schools as NEB-Labs co-experimentation work, to promote it and develop a supportive partnership ; with the official NEB-LAB of the European Union, NEB Community, Education for Climate Coalition, Mission NetZeroCities (100 Climate neutral and smart cities), ...

IV - DISSOLUTION

ARTICLE 19 - DISSOLUTION

In the event of dissolution pronounced according to the terms provided for in Article 12, one or more liquidators are appointed, and the net assets, if applicable, are devolved to a non-profit association in accordance with the decisions of the Extraordinary General Meeting which decides on the dissolution. The net assets cannot be vested in a member of the association, even partially.

Done in Courcy, the 14th November 2024.

François JOLLY
Co-President



Sofoklis SOTIRIOU
Co-President



Patricia AUROY
Secretary



Christophe BARTHOLEYNS
Treasurer



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Associations et fondations d'entreprise



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Annonce n° 1176

51 - Marne

ASSOCIATIONS

Créations

Déclaration à la sous-préfecture de Reims

ECO2-CAMPUS.

Objet : initier, une(des) représentation(s) locale(s) transfrontalière(s) du LAB du nouveau Bauhaus Européen Eco2-Schools (Eco2-Schools as New European Bauhaus Labs) qui va connecter, développer et soutenir plusieurs initiatives et projets en co-expérimentation, se rapportant à l'éducation Climat et à la rénovation soutenable des écoles, quartiers, villages en coapprentissage-actions à trois générations. L'association adopte une posture « d'organisation autonome décentralisée », c'est-à-dire qu'elle reste ouverte avec potentiellement un réseau de hubs sur plusieurs régions climatiques-culturelles transfrontalières de l'Union Européenne, chacun en proximité d'une densité d'initiatives-projets sur un territoire. L'Eco2-Campus s'incarne sous la forme d'un "Tiers lieu d'Education Climat" à destination des écoles,quartiers, villages, ouvert pour accueillir, documenter, soutenir une diversité d'initiatives et d'expérimentations en coopération.

Siège social : Microville 112 bâtiment T2, 6, rue de la péniche, 51220 Courcy.

Date de la déclaration : 5 décembre 2024.