

# After-LIFE myBUILDINGisGREEN **Communication and Transferability Activities Compilation Report**

LIFE17 CCA/ES/000088

2024 - 2028

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CENTRAL

Porto.







Instituto de Ciencias de la Construcción EDUARDO TORROJA









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	Año 2024

### LIST OF ABBREVIATIONS

ANCV	National Green Roofs Association		
ASESCUVE	Spanish Association for Green Roofs and Façades		
CIMAC	Central Alentejo Intermunicipal Community		
COSC	Online Catalogue of Building Solutions		
CSIC	Spanish National Research Council		
CTE	Technical Building Code		
DIPBA	Badajoz Provincial Council		
FEMP	Spanish Federation of Municipalities and Provinces		
GBCe	Green Building Council Spain		
IDAE	Institute for Energy Diversification and Saving		
IETcc-CSIC	Institute for Construction Sciences Eduardo Torroja		
LIFE-mBiG	LIFE-myBUILDINGisGREEN		
MP	Porto City Council		
SME'S	Small and Medium-sized Enterprises		
RJB-CSIC	Royal Botanical Garden		
NBS	Nature-Based Solutions		
EU	European Union		

## **1. PROJECT DATA**

Locations	Évora (Central Alentejo, Portugal) Porto (North, Portugal) Solana de los Barros (Extremadura, Spain)
Start date	01/09/2018
End date	29/02/2024
Duration	66 months
After-LIFE start date	01/03/2024
After-LIFE end date	28/02/2028
Duration	60 months
Eligible project cost	3,030,296.30 €
EU contribution	1,697,369 €
(%) of LIFE co-financing	55.73 %
After-LIFE budget	380,745.26 € (estimated)
Coordinating partner Beneficiary partners	Spanish National Research Council CARTIF, Badajoz Provincial Council, Porto City Council Central Alentejo Intermunicipal Community
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Project website	https://life-mybuildingisgreen.eu/en

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# 2. THE PROJECT

## Summary and objectives

Climate change is one of the most serious environmental, social and economic challenges facing the world. Educational buildings in Europe will face many challenges in the coming decades, such as the complete renovation of buildings that have suffered structural failure over time and where insulation measures have been largely ignored. In addition, climate change will add to these pressures through a range of impacts such as heat waves or changes in annual and seasonal rainfall patterns. This can affect the health and well-being of children, who are the main users of these buildings.

The LIFE-myBUILDINGisGREEN project aims to address the effects of climate change in terms of rising temperatures in school buildings, which have been exacerbated in recent years by successive heat waves across Europe, but with more adverse effects in the southern region of the continent. As a result, educational and social care facilities in southern Europe experience indoor temperatures above 32°C for several months of the year, making these buildings very difficult to live in.

LIFE-mBiG is a project developed by a group of partners from the Iberian Peninsula, co-funded by the LIFE programme of the European Union, whose objective is the design, development and testing of innovative NBS (prototypes) to improve the bioclimatic comfort of educational buildings in order to increase the well-being of the users of these buildings.

The project consortium is led by the Consejo Superior de Investigaciones Científicas through the Real Jardín Botánico, with technical support from the Instituto de Ciencias de la Construcción Eduardo Torroja. Beneficiary partners include the CARTIF technological centre, the Provincial Council of Badajoz, the Intermunicipal Community of Central Alentejo and the Municipality of Porto.



#### Metodology

In three primary schools in Spain (CEIP Gabriela Mistral, Solana de los Barros) and Portugal (EB1 Horta das Figueiras, Évora and EB1 Falcão, Porto), the LIFE-myBUILDINGisGREEN project designed, implemented and tested several NBS to minimise climate impacts. The proposed NBS consisted of a series of green roofs, green facades and other shading and water harvesting NBS designed to (i) keep indoor temperatures low during hot periods and thus minimise energy use for cooling, (ii) provide shade and (iii) improve water retention around the buildings by minimising rainwater runoff. At CEIP Gabriela Mistral, a water harvesting system was also installed in conjunction with the installation of two of the green roofs. The water collected by this system is reused to irrigate the implemented NBS and the school's green areas. To complement the effect of these NBS, more trees have been planted in the outdoor areas and an automatic ventilation system has been installed to open and close the school's windows during the night and in the morning to cool the building and reduce CO<sub>2</sub> levels. A permeable paving was also installed, allowing vegetation to grow on its surface and facilitating the infiltration of water into the ground, reducing the amount of water entering the sewerage system. At the Porto school, the intervention was also linked to a roof water collection system that feeds a pond next to the Horta Urbana da Oliveira. In this school, the intervention was also linked to the installation of photovoltaic panels (in a system linked to green roofs), so that the school becomes energy self-sufficient.

In addition to these physical actions on the ground, local and regional authorities with competences in climate change and green infrastructure were involved in capacity building to enable the transferability of the implemented NBS. To this end, visits were organised to raise awareness of the NBS among neighbours in the schools' catchment area, as well as the educational community in the surrounding towns and/or neighbourhoods. A series of demonstration workshops were also organised to show the work carried out to experts and municipal technicians, with a view to possible future replication in other types of buildings. In order to reach a wider audience, a free online course was also developed on the possible NBS that can be used to adapt buildings to climate change, including a summary of the experience gained in the three pilot buildings in Portugal and Spain and an outline of the monitoring system of indicators that measure the effectiveness of the implemented NBS, where the first results obtained were shown. In addition, numerous meetings were held with different stakeholders involved in the adaptation of buildings to climate change in both countries, from the local to the national level, such as the staff of the Technical Building Code, members of the Spanish Climate Change Office, municipal and regional representatives from Spain and Portugal, etc., to discuss the possibilities of transferring the applied NBS to other contexts. In Porto, the experience of the

LIFE-myBUILDINGisGREEN project inspired the introduction of the NBS in the Porto Environmental Index. This is a new municipal regulation in the making (foreseen in the Municipal Master Plan 2021) that aims to encourage urban developers to incorporate BDS in their projects through fiscal and construction benefits.



# 3. REPORT ON COMMUNICATION AND TRANSFERABILITY ACTIVITIES IN THE AFTER-LIFE PERIOD

The report on communication and transferability activities in the After-LIFE period is one of the deliverables committed by the project partners in the <u>After-LIFE Plan</u>.

This document integrates the progress and achievements of most of the Dissemination (D) and Transferability (T) actions set out in the Plan. The actions whose results are included in this report are:

- Action D7. Maintenance and continuous enrichment of the infrastructure and communication channels established during the implementation of LIFE-mBiG.
- Action D8. Dissemination of training and dissemination materials created by LIFE-mBiG.
- Action D9. Raise awareness and promote greater knowledge of NBS among the school community in the three pilot buildings.
- Action D10. Update of LIFE-mBiG information on the Climate-ADAPT platform.
- Action D11. Holding of an information day on the final results of LIFE-mBiG.
- Action T12. Organisation of on-site demonstration workshops in the 3 pilot buildings with optimal plant development.
- Action T13. Demonstration workshops through the RJB-CSIC Gardening Employment Workshop and the CREALAB PINTO project.
- Action T14. Knowledge transfer to SME'S in the technology, environmental and climate sector.
- Action T15. Training and technical assistance to municipalities, SME'S, local development agents and NGOs in the environment of DIPBA and MP.
- Action T16. Transfer of MP knowledge to the associations of municipalities and regional, national and European networks in which it participates.
- Action T17. Exchange of information with entities identified in the governance (C4) and transferability (C5) actions.
- Action T20. Contact with new LIFE projects approved in 2024, 2025 and 2026.

The presentation of each of the activities included in this report is shown in chronological order, indicating the date of implementation of the activity and the participating partner entity or entities.

#### Year 2024

The LIFE-myBUILDINGisGREEN project involved at the closing meeting of the H2020 URBiNAT project (March 7-9, 2024)



Image 3. Visit to the green roofs of LIFE-myBUILDINGisGREEN © Jorge García (Porto City Council)

In the framework of the last consortium meeting of the URBiNAT project – Healthy corridors as drivers of social housing neighbourhoods for the co-creation of social, environmental and marketable NBS, which took place on 7, 8 and 9 March 2024 in Porto, visits were made to the Alameda de Cartes Park, new healthy corridor in the framework of the URBiNAT project, and to the Green Roofs of the Falcão Primary School, pilot building of the LIFE-myBUILDINGisGREEN project. These are adjacent projects, located in Campanhã and based on the implementation of Nature-Based Solutions (NBS), with funding from the European Union through the Horizon 2020 and LIFE programmes, respectively.

The Falcão School has served as an example with the NBS installed there in the framework of the European LIFE-myBUILDINGisGREEN project, with 700 m<sup>2</sup> of green roofs and façades, as well as photovoltaic panels, which aim to improve the bioclimatic comfort of this building and its users.

The on-site visits and the activities included allowed to experience first-hand the transformative impact of these works, which use NBS in the planning of cities, allowing to improve the quality of life of citizens, mitigate some of the effects of climate change and sustainably manage natural resources.

The visit, which was attended by the school's coordinator, Helena Ribeiro, allowed the delegation to learn about and analyse these solutions on site, recognising and comparing their characteristics, functions and advantages compared to conventional alternatives.



Image 4. Visit to the pond created by LIFE-myBUILDINGisGREEN © Jorge García (Câmara Municipal do Porto)

On the roof of the school, participants were able to see how green roofs work and what they are made of. Green roofs have the advantage of regulating the temperature inside buildings throughout the year and, at the same time, help rainwater to seep more slowly into the ground, preventing flooding.

The initiative brought together members from all over Europe, namely from the leading cities of the URBINAT project (Sofia and Nantes) and the follower cities (Nova Gorica, Brussels and Høje-Taastrup) and represented an opportunity for policy makers, municipal technicians from various areas, as well as researchers and various organisations involved in the project to share experiences and learnings and visits to projects in Porto that integrate NBS in their requalification, such as the Falcão Basic School.

The City Council also organises similar visits throughout the year, aimed at the school' <u>s teaching</u> and non-teaching community, parents and the general public.

For more details on the event, see the news published on the Porto City Council website: <u>https://www.porto.pt/pt/noticia/consorcio-mostra-resultados-de-projeto-europeu-para-corredores-saudaveis-nas-cidades.</u>



Image 5. Working table during URBiNAT event © Jorge García (Câmara Municipal do Porto)

LIFE-myBUILDINGisGREEN interventions at Gabriela Mistral school are shown to EU Missions (March 2024)



Image 6. Banner of the Mission "Adaptation to Climate Change" © European Commission

On 13 March 2024, the webinar "*Adapting now: from planning to action*" took place in the framework of the Community of Practice of the <u>five EU missions</u> to address the grand challenges in health, climate and environment, and to achieve ambitious and inspiring goals in these areas.

The event is part of the Mission Implementation Platform (<u>MIP4Adapt</u>) for the fulfilment of the mission "<u>Adaptation to Climate Change</u>", which focuses on solutions and preparedness for the impact of climate change to protect lives and assets. It includes behavioural changes and social aspects by addressing new communities beyond the usual stakeholders, which helps to lead to social transformation.

The webinar showcased success stories from regions and local authorities on how to implement adaptation measures, and lead other authorities to implement more ambitious and transformative actions. Among the success stories, Miguel Ángel Antón (Diputación de Badajoz) shared the evolution and results of the interventions carried out by the <u>LIFE-myBUILDINGisGREEN</u> project in the Gabriela Mistral school, which is the Spanish pilot building located in Solana de los Barros (Badajoz, Extremadura).



Image 7. Miguel Ángel Antón during his speech © MIP4Adapt

Miguel Ángel shared valuable information about the methodology for the selection of the pilot building, the sources of funding used, the monitoring plan implemented to evaluate the impact of the Nature-Based Solutions tested, the organisation of participatory processes and the costbenefit analysis of the project.

The full recording of this event, available on the MIP4Adapt YouTube channel, can be found <u>here</u>.

Oral presentation "the thermal behaviour of green roofs incorporated in the rehabilitated buildings of the LIFE-myBUILDINGisGREEN project" at the CITE 2024 congress (March 13-15, 2024)



Image 8. Logo CITE 2024 © UPM

From 13 to 15 March 2024, the Universidad Politécnica de Madrid (UPM) organised the IX International Congress on Technological Innovation in Building (CITE2024), held at the Escuela Técnica Superior de Edificación (UPM).

Arturo Martínez was in charge of presenting the study "the thermal behaviour of green roofs incorporated in the rehabilitated buildings of the LIFE-myBUILDINGisGREEN project" based on the learnings obtained in the LIFE-myBUILDINGisGREEN project.

The complete agenda of this congress can be downloaded here

More information about the event at: <u>https://eventos.upm.es/106581.html</u>



Image 9. Arturo Martinez (IETcc-CSIC) during the presentation © IETcc-CSIC

# Más de uno, programme of the radio station Onda Cero, interviews Miguel Vega, General Coordinator of the LIFE-myBUILDINGisGREEN project (March 28, 2024)

The programme *Más de uno* is the news, current affairs and opinion programme of the morning session of Onda Cero, one of Spain's leading national radio stations.

In the programme broadcast on 28 March 2024, Irene Calderón talks about "How do cities adapt to climate change?", conducting a brief telephone interview with Miguel Vega, General Coordinator of the European project LIFE-myBUILDINGisGREEN and current manager of the work being carried out by the Royal Botanic Garden in the national PAULIA project, on the reduction of the heat island effect in cities.

During the interview, Miguel Vega talked about what the current climate change strategies should be and what they should aim to achieve. He also described the typology of buildings on which action should be taken and how to prioritise some buildings over others. He presented some arguments why it is necessary to adapt cities to climate change, showing the main consequences for Spanish cities if no action is taken. Finally, Miguel explained other elements of the city that need to change and some guidelines on how a climate resilient city should evolve.

The full broadcast of the Más de Uno programme of 28 March is available at <u>this link</u>. Irene Calderón's intervention, which includes the interview with Miguel Vega, is available from minute 52:37 onwards.



Image 10. Banner of the programme Más de uno © Onda Cero

The LIFE-myBUILDINGisGREEN project is presented as an inspiring initiative to the Hungarian LIFE Delegation (May 7, 2024)



Image 11. Intervention of Miguel Vega (LIFE-mBiG) during one of the scheduled meetings © IDAE

From 6 to 9 May 2024, the Hungarian Delegation of the National Contact Points (<u>NCPs</u>) of the LIFE Programme visited various institutions in Spain to learn about how this country is organised in relation to the management of the LIFE programme.

During the visit, various infrastructures, initiatives and projects in the framework of the conventional LIFE sub-programmes, as well as the new *LIFE – Clean Energy Transition* programme, were shown.

Of particular interest for the Hungarian Delegation are the projects related to the New European Bauhaus (<u>NEB</u>). Due to the close relationship between this new trend and the LIFE-myBUILDINGisGREEN project, the latter was presented during the meeting organised by the Institute for Energy Diversification and Saving (<u>IDAE</u>) on 7 May at its headquarters. IDAE belongs to the Spanish Ministry of Ecological Transition and Demographic Challenge (<u>MITECO</u>).

Miguel Vega, General Coordinator of the project, was in charge of the virtual presentation of the work carried out by LIFE-myBUILDINGisGREEN, the results obtained, the importance of the After-LIFE plan, as well as several tips on how to manage a project of this kind in a transnational context. The members of the Hungarian Delegation were particularly interested in how the LIFEmyBUILDINGisGREEN team approached the search and establishment of contacts and new allies with local, regional and national public administrations to facilitate the transferability of the Nature-Based Solutions designed and tested by the project. More information on the governance tools used by this LIFE project can be found in the <u>deliverables of LIFE-myBUILIDNGisGREEN action</u>



Image 12. Group photo of the attendees at the IDAE meeting.  $\ensuremath{\mathbb{C}}$  IDAE

The Badajoz Provincial Council hosts a workshop on NBS at Gabriela Mistral school addressed to students of the INTROMAC Training Centre (May 9, 2024)



Image 13. Visit to the mBiGCUVE2 and mBiGFAVE solutions © Badajoz Provincial Council

El 9 de mayo de 2024 tuvo lugar el primer taller demostrativo de los dos comprometidos por la Diputación de Badajoz para el período After LIFE del proyecto LIFE-myBUILDINGisGREEN. On 9 May 2024 took place the first demonstration workshop of the two committed by the Diputación of Badajoz for the After LIFE period of the LIFE-myBUILDINGisGREEN project. The workshop, which was organised by the Ecological Transition Area of the Diputación of Badajoz, was attended by 15 students from the PIT Programme of the INTROMAC Training Centre – Technological Institute of Ornamental Rocks and Construction Materials.

Miguel Ángel Antón, architect of the Ecological Transition Area, was in charge of showing the Nature-Based Solutions (NBS) implemented at the Gabriela Mistral school during the project. During the workshop, the materials used, the methodology employed, the NBS effectiveness indicators measured, etc. were explained. This workshop facilitates the transferability of results and expert discussion around the NBS and prototypes installed in a way that promotes the replication and scaling of these solutions to other similar buildings.

The full programme of the visit, available only in Spanish, can be consulted through this link.

The profile of the participating students is related to university education in architecture, engineering and professional training in building, and is aimed at professionals in the world of building in order to demonstrate the advantages of the NBS implemented to adapt the centre to climate change, improve energy efficiency and thermal comfort of the educational community, as well as to promote biodiversity.



Image 14. Preliminary explanation of the technical aspects of the workshop © Badajoz Provincial Council

CIMAC promotes environmental education actions in EB1 Horta das Figueiras (May 22,

2024)



Image 15. Explanation of the content of the workshop © CIMAC

On 10 April, the Horta das Figueiras Primary School, in partnership with the LIFEmyBUILDINGisGREEN project, CIMAC, the Municipality of Évora and the contractor responsible for carrying out the works, organised an environmental awareness-raising workshop as part of the Curriculum Enrichment Activities (CEA). This event focused on the green roof recently installed at the school, promoting environmental education and the active participation of the whole school community.

The workshop involved all grades of the school in a collective project called "Horta das Figueiras Sensory Garden". During this activity, pupils were invited to build and care for two bags identical to those used on the roof of the school building. A specialised technician from the company responsible for the implementation of the green roof solutions explained in detail the functioning and benefits of each bag, allowing the pupils to understand in depth the process and its ecological characteristics.



Image 16. Sensory garden built by the students of the Horta das Figueiras school © CIMAC

In addition to the theoretical component, the students had the opportunity to plant various plant species, including varieties similar to those used on the school's roof, as well as aromatic and edible plants such as strawberries. This effort culminated on 22 May with the inauguration of the sensory garden, a green space that will serve as an educational and awareness-raising tool on the importance of sustainability and biodiversity.

The travelling exhibition 'Porto, a city inspired by nature' opens at the first edition of NBS Summit Urban Edition (May 24, 2024)



Image 17. LIFE-mBiG Exhibition during NBS Summit Urban Edition © Câmara Municipal do Porto

On 23 and 24 May, the city of Porto presented the travelling exhibition 'Porto, a city inspired by nature', conceived by the City Council in the framework of the LIFE-myBUILDINGisGREEN project, to an audience of more than 500 people at the first edition of the 'NBS Summit Urban Edition'. The exhibition challenges visitors to see nature as an extremely effective and resilient 4.5-billion-year old technology that has developed strategies to overcome adversity.

It reveals how this natural technology can be applied in cities through innovative solutions to address climate challenges.

The sun provides free energy; trees are advanced cooling technologies; permeable soils replenish water reserves; green roofs control flooding, sequester carbon and purify the air; insects act as pollinating 'micro-robots', encouraging agricultural diversity; natural water highways prevent flooding and recover rainwater.

It highlights how Porto, combining innovation, knowledge and creativity, is integrating nature into the urban environment to combat climate change, identifying projects that have been carried out in the city.

A tool for training, awareness and dissemination of natural innovation at the service of the city, ecosystems, biodiversity and the well-being of citizens.

The interdisciplinary event NBS Summit Urban Edition, organised by the National Association of Green Roofs (ANCV), with the Porto City Council, through Águas e Energia do Porto, is dedicated to sharing knowledge on Nature-Based Solutions applied to urban territories.



Image 18. Panels of the travelling exhibition © Câmara Municipal do Porto

The LIFE-myBUILDINGisGREEN project is presented as a success story at the LIFE Programme Conference organised by CSIC (May 28, 2024)



Image 19. Intervention of Miguel Vega (LIFE-mBiG) during the event © CSIC

On 28 May 2024, the CSIC's International Programmes Area organised an information event on the new LIFE Programme call for proposals. The event, which was mainly aimed at CSIC research and management staff, took place at the headquarters of the CSIC Delegation of Andalusia and Extremadura, located in the Casa de la Ciencia in Seville.

In addition to those attending in person, the event was well received online, as it was broadcast live via streaming.

The conference was opened by Margarita Paneque, Head of the CSIC Delegation in Andalusia and Extremadura. It was also attended by the National Contact Points (NCPs) of the LIFE Programme in Spain and two CSIC colleagues whose projects are success stories for CSIC.



Image 20. Marisa Écija (left) and Margarita Paneque (right) during the inauguration of the event © CSIC

On the one hand, Carlos Camacho, researcher at the Doñana Biological Station (EBD-CSIC), shared his experience in the development of a project proposal (LIFE-AWOM) that has been selected to receive funding from the LIFE Programme in its 2023 call.

On the other hand, Miguel Vega, project manager of the Royal Botanical Garden (RJB-CSIC) and General Coordinator of the LIFE-myBUILDINGisGREEN project, presented a brief summary of the project and shared a series of recommendations when coordinating a LIFE project of this type, from the planning and preparation of the proposal to the justification phase of the project.

Finally, Marisa Écija, Aída Herranz and Carmen Godoy, colleagues from European Programmes of the CSIC Vice-Presidency of International Relations, explained certain aspects to take into account when preparing a project proposal for this European funding programme, showing a brief summary of the historical presence of CSIC in the LIFE Programme.



Image 21. Group photo of speakers at the conference organised by CSIC © CSIC

# EFE Verde publishes an article on LIFE-mBiG project: Greening schools to lower classroom temperatures by 6 degrees Celsius (Mayo 29, 2024)

Ana Tuñas Matilla, editor of EFE Verde, publishes the article 'Greening schools to lower classrooms temperature by 6 degrees Celsius' based on the results of the LIFEmBiG project.

The article has the following headline: "Many of Spain's schools lack adequate insulation, forcing pupils and teachers to use classrooms with high temperatures, especially in the hottest months, which even forces classes to be suspended. To avoid this, one solution that is being successfully tested is to 'cover' them with vegetation".



Cubrir de vegetación los colegios para bajar la temperatura en las aulas 6 grados

29 de mayo, 2024

Publicado por: Ana Tuñas Matilla

The full article is available via <u>this link</u> on the EFE Verde website.

Travelling exhibition 'Porto, a city inspired by nature' in the Intelligent Cities Challenge (June 24, 2024)



Image 22. LIFE-mBiG exhibition during the Intelligent Cities Challenge © Câmara Municipal do Porto

On 18-19 June, the Nature-Based Solutions Exhibition, designed by the City of Porto in the framework of the LIFE-myBUILDINGisGREEN project, was exhibited at the Intelligent Cities Challenge (ICC) event in Porto.

Over two days, the exhibition challenged the 300 or so visitors present at the event – local business representatives, municipal authorities, representatives from several European countries and EU leaders – to see nature as a 4.5-billion-year-old, efficient and resilient technology that can be used in cities with innovative solutions to address the challenges of climate change.

A nature-inspired revolution that propels the city towards a sustainable, safe and healthy future. The ICC is a European Commission initiative that supports European cities in the green and digital transition of their local economies, through Green Local Agreements, with the aim of helping them harness the power of cutting-edge technologies while improving their economic competitiveness, social resilience and the quality of life of their citizens. The Diputación de Badajoz contributes to the testing of the NaturBuild training platform after the learning from LIFE-myBUILDINGisGREEN (June 28, 2024)



Image 23. Homepage of the online course organised by the NaturBuild project © NaturBuild project

The <u>Fundación Laboral de la Construcción</u>, through the <u>Naturbuild Project</u>, is creating a specialised training platform on green roofs for workers in the construction sector.

Green roofs are currently considered as one of the most attractive solutions to achieve urban and building sustainability, and where the construction sector needs specific training.

The LIFE-myBUILDINGisGREEN project, through the Ecological Transition Area of the Diputación de Badajoz – as project partner -, taking into account its experience in the design and implementation of prototype solutions for adaptation to climate change in buildings based on nature – such as green roofs – has contributed to test the <u>training platform</u> of the NaturBuild project. Specifically, the Module dealing with the maintenance of green roofs has been tested, carrying out the training simulation, and detecting the successes and possible aspects for improvement of the platform in terms of the most suitable training for workers in the construction sector.



Image 24. Module 3: Maintenance of green roofs © NaturBuild project

Initiatives such as the Naturbuild project and the LIFE-myBUILDINGISGREEN project help to ensure that the implementation of green roofs as a measure to adapt to climate change is accompanied by adequate training in the construction sector.

# The LIFE-myBUILDINGisGREEN project is invited to participate in the UNI CLIMÁTICA 2024 organised by Climática magazine (July 15, 2024)



Image 25. UNI CLIMÁTICA 2024 Banner © Climática

On 15 July, a new edition of <u>La Uni Climática</u>, the Spanish-language online reference space for learning about the climate crisis and biodiversity loss, kicked off. This year's edition focuses on

adaptation to the events accentuated by climate change that are particularly harmful to people, animals, flora and ecosystems.

Miguel Vega, General Coordinator of the LIFE-myBUILDINGisGREEN project, will give a brief presentation of the project, its main results and a set of recommendations on the management of this type of project based on the lessons learned during its implementation.

Uni Climática is an initiative of <u>Climática Magazine</u>, a media specialised in informing and educating about global warming, its causes and consequences.

Poster presentation 'Incorporating NbS in schools: Evaluation of student learning, climate adaptation and environmental awareness' at the XX International Botanical Congress (July 22, 2024)



Image 26. Welcome session of the congress © CARTIF

From 21 to 27 July 2024, the XX International Botanical Congress (XXIBC) organised by the Spanish Botanical Society (SEBOT) and the Royal Botanical Garden (RJB-CSIC) is being held in Madrid. On Monday 22 July, Raquel Marijuan (CARTIF Foundation) presented the poster '*Incorporating NbS in schools: Evaluation of student learning, climate adaptation and environmental awareness*', explaining the Nature-based Solutions (NbS) implemented in the Gabriela Mistral school, in Solana de los Barros (Badajoz, Spain), within the framework of the LIFE-myBUILDINGisGREEN project, and the impact they have had on the students' perception, the reduction of temperatures and the improvement of biodiversity.



Image 27. Raquel Marijuán during the poster presentation © CARTIF

The poster used can be found at <u>this link</u>.

The Andalusian Association of Mothers of Heat Schools is interested in the NBS of the Gabriela Mistral school (Badajoz, Spain) (July 23, 2024)



Image 28. Screenshot during the online meeting © Badajoz Provincial Council

Miguel Ángel Antón (Ecological Transition Department, Diputación of Badajoz) met on 23 July 2024 with mothers from the Andalusian Association of Mothers of Heat Schools to present the

Nature-Based Solutions (NBS) implemented by the LIFE-myBUILDINGisGREEN project at the Gabriela Mistral school.

The interest of this association lies in knowing the best solutions to lobby the relevant authorities with a view to improving climate comfort in schools in Andalusia, one of the regions that is experiencing the greatest increase in temperatures in Spain due to the effects of climate change.

The 'My School is Green' Educational Programme on Nature-Based Solutions (NBS) continues in Falcão school (August 28, 2024)



Image 29. Activity during one of the workshops © Câmara Municipal do Porto

In the 2022-2023 school year, Porto City Council developed an educational programme for the pupils of the Falcão School, focusing on the Nature-Based Solutions (NBS) implemented in the school in the framework of the LIFE-myBUILDINGisGREEN project. The NBS included green roofs, a green façade and photovoltaic panels.

The aim of this programme was to promote pupils' appreciation and ownership of these solutions as part of the local natural heritage in which they live every day and as a response to the challenges of climate change.

The 152 pre-school and primary school students were shown the NBS installed in the school. In the case of the primary classes, the functionality and importance of each solution was explained and demonstrated, integrating these explanations with classroom learning.

A children's story written from scratch, an interpretive visit to the NBS, demonstrative science experiments and the representation of the solutions in a 3D model were the main strategies used, with approaches that induced questioning, critical thinking, deduction and creativity.

The commitment and support of school coordinators, teachers and non-teaching staff facilitated the integration of the programme in the classroom.

The municipality intends to continue this programme in the next school year, optimising and enriching it as a model programme to explore Nature-Based Solutions that could be installed in other public school buildings in the city.



Image 30. Visit to one of Falcão's NBS during one of the workshops © Câmara Municipal do Porto

The transferability of the material produced by LIFE-myBUILDINGisGREEN reaches the classrooms of the Lycée International de Valbonne (France) (September 2, 2024)



Image 31. Cover of the presentation of Manuel Niccolini's work © Manuel Niccolini Suárez

The content of the material produced by LIFE-myBUILDINGisGREEN goes beyond the boundaries of the project and serves as an example in the elaboration of a high school project in the Alpes-Maritimes region in France.

This is the <u>work carried out by Manuel Niccolini</u>, a student of the *Lycée International de Valbonne*, in which he takes as a reference the information contained in deliverable <u>C5.7</u>. <u>Design of 15</u> <u>Nature-Based Solutions projects</u>. Based on this deliverable and the advice offered by the LIFEmyBUILDINGisGREEN coordinator, Manuel proposes a series of solutions for his school, in order to improve the well-being of its users while reducing its environmental impact. The project carries out a preliminary analysis of the situation of the school and its climatology, analyses the heat sensation and the comfort of the students in different classrooms and proposes a series of LIFEmyBUILDINGisGREEN solutions, including their possible benefits in this case study and the estimated costs of their implementation.



Image 32. Average temperature in Valbonne in 2023 © infoclimat.fr

The work, which has obtained a score of 20/20 in the presentation, is an example of transferability of the solutions tested by LIFE-myBUILDINGisGREEN, being known among the educational community of this French high school and opening the possibility to study its feasibility for a possible future implementation.

LIFE-myBUILDINGisGREEN would like to thank Manuel Niccolini for his interest in the project and his motivation for his school to improve the quality of life of its users in a sustainable way.



Image 33. Photo of the outside of the A200 classrooms of the Lycée International de Valbonne © Manuel Niccolini

At the beginning of the After-LIFE period, the Badajoz Provincial Council concluded the BEGREEN educational programme with pupils from the Gabriela Mistral school (September 16, 2024)



Image 34. Cover of the BEGREEN Education Programme Dossier © Badajoz Provincial Council

In 2023, the Badajoz Provincial Council, through the Ecological Transition Area, developed an educational programme within the framework of the LIFE-myBUILDINGisGREEN project, so that, together with the educational community, the students of the Gabriela Mistral school could be made aware of the fight against climate change. Various workshops were held on topics such as sustainability, pollinators, biodiversity, recycling, citizen science, etc., with the aim of attracting and involving each student in the area that most interested them in order to arouse their curiosity and make them part of the process and the project itself as protagonists.

The first day of this training programme took place on 15 June 2023, taking data on biodiversity and environmental variables of the plant façades implemented in the Gabriela Mistral school, pilot building of the LIFE-myBUILDINGisGREEN project.



Image 35. First day of the BEGREEN programme © Badajoz Provincial Council

The training programme, which has been developed in a total of 12 days and/or educational workshops with students from different courses, concluded on 17 April 2024, during the initial phase of the After-LIFE period of this project. On this last day, an experiment was carried out to clean seeds and raise awareness of the importance of forests, seed dispersal to create vegetation cover and fauna as a living means of dispersing these seeds.



Image 36. Seed cleaning experiment in the framework of the BEGREEN programme © Diputación de Badajoz

To learn more about the BEGREEN educational programme, you can consult the complete dossier on the programme (available at <u>this link</u>) which includes the phases of its implementation, a work diary with the content of the workshops held and different proposals for improvement for the Nature-Based Solutions implemented at the Gabriela Mistral school. Travelling exhibition 'Porto, a city inspired by nature', at the Serralves Autumn Festival (September 29, 2024)



Image 37. Exhibition tent during the Autumn Festival © Câmara Municipal do Porto

The exhibition 'A city inspired by nature', one of the results of the LIFE-myBUILDINGisGREEN project, was part of the Serralves Autumn Festival in Porto on 28 and 29 September, attracting hundreds of visitors. Families in groups, students and adults actively participated in the interpretative visits, showing great curiosity and enthusiasm.

Cases such as that of Maria Inês, a curious 12-year-old girl who brought two friends and her mother to listen to the visit, or that of a couple from Porto who shared their experience of sustainable living with a vegetable garden and chickens in their house in the centre of Porto, or that of young Salva, an aspiring chef, very interested in urban gardens and even in the possibility of green roof gardens, demonstrated the involvement of the visitors.



Image 38. Panoramic view of the Autumn Festival © Câmara Municipal do Porto

Some of them live in other cities, like Natália, from Mirandela, who proudly told us about her project to install a green roof on her house 'to set an example' in her community. Or twin brothers from Santo Tirso, with their wives and children, who shared their knowledge and experiences of rural life in an intrinsic relationship with nature.

Visitors were very interested in the innovative projects that Porto is carrying out to adapt the city to climate change, such as the 'sponge' parks, the renaturation of rivers and streams, the green solutions and intermodality of the Campanhã Intermodal Terminal or the Nature-based Solutions installed in the Falcão Primary School, among others.

The importance of this exhibition lies in its potential to raise awareness and educate the general public, which is likely to boost their involvement and generate attitudes in line with today's climate challenges.



Images 39 and 40. Left: Explanation of panels to visitors © Câmara Municipal do Porto Right: Activity with children during the exhibition © Câmara Municipal do Porto

# Porto City Council publishes the 2024/2025 environmental education programme on NBS of LIFE-myBUILDINGisGREEN in Falcão (October 16, 2024)

In 2024/2025, Porto City Council is continuing the programme of activities at the Falcão school (Campanha), a pilot school where Nature-Based Solutions (NBS) for climate change adaptation and energy sustainability were implemented as part of the LIFE-myBUILDINGisGREEN project, co-funded by the European Union's LIFE programme.

Following on from the lessons learned in the previous school year about NBS in schools, how they work and how they help to make the school more resilient to climate change, during this school year the primary school pupils will have the opportunity to explore how these solutions help to maintain the environmental balance in the school and around it, improving the well-being of the educational community of this pilot building.



Image 41. Introduction of the educational programme 'Our School is Green' © Câmara Municipal do Porto

The green roofs, green facades, the Horta da Oliveira pond and different ecosystems of the Alameda de Cartes Park will be the study area where pupils will be able to observe, identify and study local biodiversity and the environmental balance of soil, air and water, using bio-indicator species.

The programme includes a field trip for each class and three sessions of research, production and communication of results in conjunction with the Essential Learnings, the Profile of the School Leaver and the Education for Sustainability Framework. Presentation of research results is also foreseen.

The 2024/2025 education programme is only available in Portuguese via <u>this link</u> and contains information that may be useful for teachers in other schools.

LIFE-myBUILDINGisGREEN is included in the on-site phase of AECID's Sustainable Construction course in Montevideo (Uruguay) (October 18, 2024)



Image 42. Workshop participants during the LIFE-myBUILDINGisGREEN session © IETcc-CSIC

From 14 to 18 October 2024, the on-site phase of the course <u>Sustainable Construction: general</u> <u>aspects</u>, organised by the Spanish Agency for International Development Cooperation (AECID) in the framework of a joint project with the Spanish National Research Council (CSIC), took place in Montevideo.

The aim of the activity was to encourage the transfer of knowledge and advanced technologies that promote the application of new 'sustainable' technologies in construction.

The course was divided into four workshops: 1) Life cycle analysis and development of new cement-based materials; 2) Durability of structures: intervention and conservation; 3) Habitability, health and energy efficiency in building; 4) Photocatalysis and indoor environment quality.

On 15 October, Arturo Martínez (IETcc-CSIC) gave the third workshop, including contents of the LIFE-myBUILDINGisGREEN project in which he presented the complete project cycle and the most relevant results obtained during its implementation.

The full presentation used during his lecture can be found <u>here</u>.



Image 43. Arturo Martínez during his session at the course © IETcc-CSIC

The Badajoz Provincial Council and the RJB-CSIC analyse the slowed growth of the Solana vines and explore new ways of collaboration (December 4, 2024)



Image 44. Photo of attendees at the meeting at the Royal Botanic Garden © Badajoz Provincial Council

On 4 December 2024 a meeting took place at the Royal Botanical Garden (RJB-CSIC) between the teams of the Ecological Transition Area of the Badajoz Provincial Council and the RJB-CSIC, both participating in the LIFE-myBUILDINGisGREEN project.

The meeting, which was attended by Alejandro Peña, Miguel Ángel Antón, Sara Tena, Jaime Fuentes and Álvaro Jiménez (Ecological Transition Area – Badajoz Provincial Council) together with Jesús Muñoz, Silvia Villegas and Miguel Vega (RJB-CSIC), addressed two main objectives: to analyse the problem of slowed growth that the vines planted in the Nature-Based Solutions (NBS) of the Solana de los Barros school are experiencing and to explore new ways of collaboration that reuse the lessons learned in LIFE-myBUILDINGisGREEN or that are related to this project.

In order to carry out a more effective evaluation of the vines, the RJB-CSIC team will visit the Gabriela Mistral school again next January. In this way, it will try to identify the problem and propose a maintenance system adapted to the problems currently experienced by the NBS on the façades of this school.

The visit will also be used as an opportunity to organise a new meeting that will allow progress to be made on the ways of collaboration identified during this first meeting.

Project website: www.lifemybuildingisgreen.eu/en X/Twitter: buildingisgreen (#After\_LIFEmBiG) LinkedIn: https://www.linkedin.com/company/28944174 YouTube: https://www.youtube.com/@lifemybuildingisgreen6359

