

GREENO₂ OPERATIONAL GUIDE REPORT

A practical guide to the project's digital tools



Your Guide to Greener Campuses



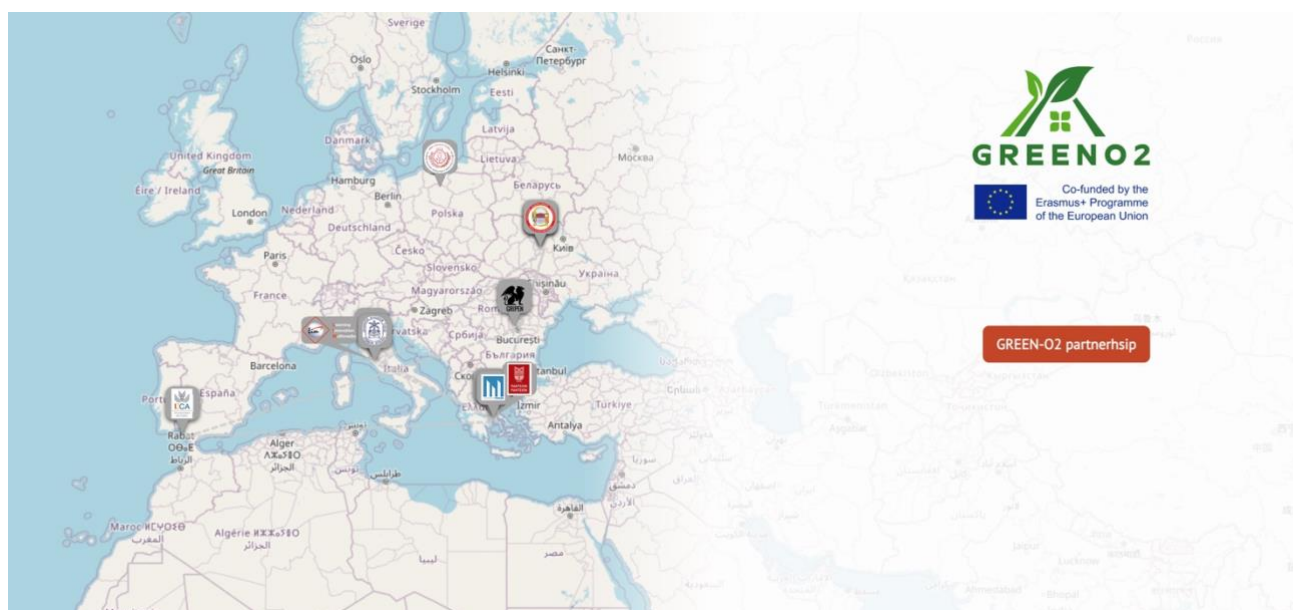
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GREENO2 OPERATIONAL GUIDE REPORT

A practical guide to the project's digital tools

Your Guide to Greener Campuses

Project	GREENO2 — Green Roofs in higher education institutions as sustainable cEnters for research, participation, ENvironmental consciousness and O2 generation
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1. Introduction

This Operational Guide Report provides a practical and user-oriented overview of the digital and learning resources developed within the GREENO2 project. Its purpose is to support end users in discovering, accessing and effectively using the tools produced to promote knowledge, skills and innovation related to green roofs and nature-based solutions in Higher Education Institutions.

The GREENO2 toolkit brings together four complementary resources: the **Handbook**, which provides a structured knowledge base and practical guidance; the **MOOC (Massive Open Online Course)**, which offers flexible and accessible learning opportunities; the **Mobile Application**, designed to support learning and engagement through a digital and interactive environment; and the **AI-PANC digital support centre**, which provides an innovative digital environment to assist users in exploring and applying knowledge related to green roof design, assessment and management.

Rather than presenting these resources as stand-alone products, the Operational Guide highlights how they can be used individually or in combination, according to the different needs, profiles and levels of expertise of users. The tools are intended to support a broad community, including **students, academics, trainers, technical and administrative staff, professionals and practitioners working in the green sector**, as well as other stakeholders interested in integrating green infrastructure and nature-based approaches into educational and professional contexts.

The Guide complements the **GREENO2 Functional & Technical Report**, which focuses on the development process, technical architecture, testing activities and performance of the digital tools. While the Functional & Technical Report addresses primarily the *how* of the tools from a technical and development perspective, this document focuses on the *how to use them* from the end user's perspective. It therefore translates the technical and functional characteristics of the GREENO2 resources into practical instructions that facilitate their adoption and everyday use.

Particular attention is given to the accessibility and usability of the resources. For each tool, the Guide explains **what the resource is, what purpose it serves, who can benefit from it, which languages are available, how it can be accessed, and how users can navigate and make effective use of its main functions and contents**. Where relevant, the Guide also indicates how a resource connects with the other GREENO2 tools, helping users identify the most appropriate learning pathway or combination of resources for their needs.

Each of the following chapters is therefore dedicated to one GREENO2 tool and follows a common structure to make the Guide easy to navigate and consult. Together, the chapters provide a practical entry point to the GREENO2 digital ecosystem and are intended to facilitate the **uptake, reuse and continued exploitation of the project results beyond the project lifetime**.

The Guide can consequently be used both as a reference document for first-time users discovering the GREENO2 resources and as a practical support document for users who are already familiar with the project tools and wish to integrate them into teaching, learning, training or professional activities.

2. The GREENO2 Handbook

What it is

The GREENO2 Handbook is the project's core reference document on green roofs. It gives higher education institutions and their communities the essential context and practical support needed to design, implement and make the most of green roofs as centres for research, participation and environmental consciousness. The Handbook is intended to be used broadly, in both urban and peri-urban settings, and by a wide range of readers — not only those directly involved in the GREENO2 partnership.

What it covers

- Urban environment and sustainable development
- Biodiversity and its exploitation for societal well-being
- Green roof construction, and its environmental, social, health and personal benefits for university campuses
- Taxonomy of green roofs according to climate and environmental conditions
- Building elements, design scenarios and real-case examples, from low-cost to more complex installations
- Budgeting, construction and implementation limitations
- Costs and methods of maintenance
- Specific characteristics of urban universities and CO₂ impacts

Who it is for

Higher education students, academics, trainers and tutors, administrative staff, and professionals (architects, engineers, urban planners, gardeners) interested in introducing or improving green roofs within a university setting.

Available languages

Language	Status	Link	QRCode
English	Available	https://greeno2.eu/handbook/	
Italian	Available		
Spanish	Available		
Greek	Available		
Romanian	Available		
Ukrainian	Available		
Polish	Available		

How to access it

All language versions are available as free PDF downloads directly from the Handbook page. No registration is required.

How to use it:

- As a stand-alone reference - read the sections relevant to your role or interest (e.g. design and budgeting for professionals; benefits and case studies for students and academics).
- As a companion to the MOOC - each thematic area in the Handbook corresponds to a module in the online course, for readers who want to go deeper with videos and self-assessment quizzes.
- As teaching material - academic staff can draw on the Handbook to design or update university courses on sustainability and green infrastructure.

3. The GREENO2 MOOC

What it is

“Green roofs in Higher Education: hubs for research, participation, sustainability and O2 generation” is the project's Massive Open Online Course (MOOC): a free, self-paced online course of approximately 20 hours, open to students, professionals and academics, with no advanced technical background required. It is the result of international collaboration between universities, research bodies and companies from Italy, Greece, Spain, Romania, Poland and Ukraine.

Course structure

The MOOC is organised into an introduction and eight modules:

- **Introduction** - course overview, structure and evaluation
- **Module 1** - Global vision of energy; introduction to green roofs in HEIs
- **Module 2** - Holistic benefits of green roofs: social, economic and environmental benefits, urban heat island mitigation, integrated impact
- **Module 3** - Types of green roof systems, practical applications, trends and innovation
- **Module 4** - Green roof design, implementation, budgeting, constraints, and the role of AI in green roofs
- **Module 5** - Maintenance practices and building energy performance, with worked examples
- **Module 6** - Case studies of higher education institutions that have successfully implemented green roofs
- **Module 7** - Community engagement and environmental awareness
- **Module 8** - Final quiz and certificate

Certificate and cost

Enrolment, attendance and the Certificate of Participation are all **free of charge**. The course is self-paced (“self-learning”), so learners can progress through the modules according to their own schedule.

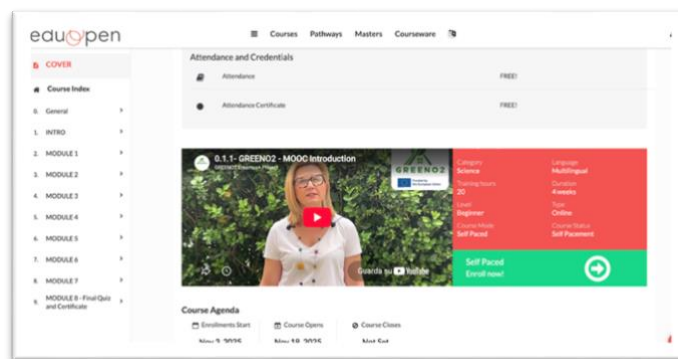
Languages and where to access each one

Language	Platform	Link	QR-Code
English	EduOpen	https://learn.eduopen.org/eduopenv2/course_details.php?courseid=652	
Greek, Spanish, Romanian, Polish, Ukrainian	University of Cádiz (UCA) MOOC platform	link to be shared by UCA	

How to enrol - EduOpen platform (English / Italian)

Course page: https://learn.eduopen.org/eduopenv2/course_details.php?courseid=652

- Open the course page and click "Enrol now".
- Log in or create a free EduOpen account if you do not already have one.
- Once on the course page, look for the language-switch icon (next to "Courseware" in the top menu) - clicking it lets you choose your preferred language. Selecting English allows you to complete registration and follow the entire course — lessons, quizzes and certificate — in English from start to finish.
- Once enrolled, work through the Introduction and the eight modules at your own pace; each module includes short videos and a quiz.
- Complete Module 8 (Final quiz) to receive your free Certificate of Participation.



How to enrol - University of Cádiz (UCA) MOOC platform (ALL languages)

To access the University of Cádiz MOOC courses, learners sign in using their Gmail account:

- Click the “Google” button on the sign-in screen.
- Select the Google account you wish to use.
- Authorise access when prompted.

This allows learners to log in to the platform quickly, without creating a new password, using a secure sign-in protocol. After enrolling, learners can choose the language in which to take the course (Greek, Spanish, Romanian, Polish or Ukrainian) and will receive a Certificate of Participation upon completion.



4. GREENO2 Mobile Application

What it is

The GREENO2 application form envisaged two mobile applications as part of the project's digital toolset: a general project application, giving mobile access to the project website/platform and its contents, and a specialised AI module - the AI-PANC app (see Chapter 5) - offering AI-powered guidance on green roofs directly from a mobile device.

Current status

At the time of writing, the app that is live and downloadable from the website is the AI-PANC Android application. It is distributed as a direct APK download (not through the Google Play Store) and is currently available for Android devices only.

Mobile Application page (APK download): <https://greeno2.eu/mobile-application/>

Who it is for

Students, academics, professionals and institutions who prefer a mobile-native experience over a browser, and want quick, on-the-go access to GREENO2's digital resources and to AI-PANC's guidance while visiting or planning a green roof installation.

5. GREENO2 AI-PANC

What it is

GREENO2 AI-PANC (Artificial Intelligence Proficiency Assistant and Networking Centre) is the project's AI-powered support hub for green roofs in higher education. It offers personalised guidance, good-practice examples, and networking with universities and institutions building or exploring green roofs on their campuses.

What it offers

- Environmental awareness and education content on green roofing.
- Practical guidance through good-practice examples of successful green roof installations.
- Networking with people and institutions already running, or planning, green roofs in a university environment.
- Personalised matching of each user's needs (e.g. type of roof, budget, goals) with relevant resources and contacts.

How to access it

AI-PANC page: <https://greeno2.eu/greeno2-ai-panc-2/>

Try it out and get involved

Users are encouraged to try AI-PANC, interact with it, and get connected with the wider GREENO2 community. Anyone who would like to propose new content, or contribute their own green roof experience to AI-PANC, is invited to contact the GREENO2 Project Coordinator (Università degli Studi della Tuscia, UNITUS).

6. Quick-Reference summary

Tool	Purpose	Languages	Access
Handbook	Core reference document on green roofs — design, benefits, budgeting, maintenance	EN, IT, ES, EL, RO, UK PL	greeno2.eu/handbook
MOOC	Free, self-paced 20-hour online course with certificate	EN, (EduOpen) · IT, EL, ES, RO, PL, UK (UCA)	learn.eduopen.org (course 652) / UCA platform
Mobile Application	Mobile-native access to the AI-PANC module (Android APK); general project app status to be confirmed	EN, IT, EL, ES, RO, PL, UK (UCA)	greeno2.eu/mobile-application
AI-PANC	AI-powered support hub and networking centre	Multilingual via website)	Web: greeno2.eu/greeno2-ai-panc-2 · Android app: greeno2.eu/mobile-application

Support and Feedback

For any question about these tools, or to propose new content, additional languages, or updates, please contact the GREENO2 Project Coordinator at Università degli Studi della Tuscia (UNITUS). All three tools are designed to remain freely accessible and, where possible, updatable beyond the end of the project.



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Website



Instagram



YouTube



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