

Deliverable 7.2

Developed Distance Learning Portal

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Table of Contents

Summary	3
1 Introduction	4
2 Development and Maintenance of ClimEd Distance Learning Portal	5
3 Upload of Distance e-learning Courses and Modules	6
4 Educational and Technical Impact	14
5 Sustainability and Long Term Value	15
6 Conclusions	16

Summary

The ClimEd Distance Learning Portal was successfully established as a dedicated Moodle-based digital learning platform for hosting, delivering and disseminating educational content developed within the project. Created and technically maintained by Partner P05, the portal became a central tool for online learning, blended education and long-term sustainability of ClimEd academic outputs. It provides structured access to study programmes, professional development courses, training modules and Massive Open Online Courses aligned with project objectives. The portal significantly strengthened digital capacity within partner institutions and ensured broad access to project results for learners and stakeholders.

1 Introduction

Digital learning infrastructure constituted an essential component of the ClimEd project, particularly in the context of modern higher education transformation, flexible learning pathways and increased demand for accessible climate-related education. In response to these needs, Deliverable D.7.2 envisaged the creation of a dedicated Distance Learning Portal serving as the main repository and delivery environment for educational materials developed under the project.

The Distance Learning Portal was developed on the basis of Moodle, one of the world's leading open-source learning management systems, providing a robust, scalable and user-friendly environment for course delivery, learner management, assessment and content administration. The portal was designed to host newly created e-learning courses and modules developed under Work Package 3, ensuring their accessibility, structured organisation and long-term usability.

This report summarises the development, technical structure, educational content and strategic significance of the ClimEd Distance Learning Portal.

2 Development and Maintenance of the ClimEd Distance Learning Portal

The ClimEd Distance Learning Portal was developed by Partner P05 and subsequently maintained, updated and expanded throughout the project implementation period. The portal is publicly accessible at:

<https://re.climed.network/>

Built on the Moodle platform, the portal provides a stable and internationally recognised learning management environment supporting enrolment, course categorisation, user authentication, content upload, learner progress tracking, assignments, assessments and communication between instructors and participants.

Throughout the project lifecycle, regular technical administration, content updates, course moderation and user support were ensured. The Moodle architecture also provides scalability for future expansion and integration of additional educational resources.

As of the reporting period, the ClimEd Distance Learning Portal demonstrates active use and engagement: a total of 10475 visitors accessed the platform, 102 courses were created, and 1884 subscriptions (see detailed distribution below at Chapter 3) to courses were recorded. These indicators confirm the operational functionality of the portal and its uptake by the target audience.

3 Upload of E-learning Courses and Modules

In accordance with the deliverable objectives, e-learning courses and modules developed under WP3 were uploaded to the Distance Learning Portal and further expanded thereafter. The available content includes programmes compatible with World Meteorological Organization standards and adapted to the Competency Framework for Provision of Climate Services, while also reflecting climate service user needs in Ukraine.

The Moodle-based portal hosts the following categories of courses:

Third Cycle / Doctoral Level:

- Doctoral Programme in Climate Services

Second Cycle / Master's Level:

- Master's Programme in Climate Services
- Master's Programme in Climate Change Adaptation and Mitigation

Professional Development Programmes:

- Climate Services
- Climate Change
- Sectoral Professional Development Programmes (Climate-Oriented Agriculture; Adaptation of Healthcare to Climate Change; Climate-Oriented Construction and Architecture; Climate-Oriented Urban Management; Climate-Oriented Energy; Climate-Oriented Water Resources Management; Climate-Oriented Policy and Natural Resource Management)

Additional Categories:

- Capacity Building Training Activities within the ClimEd Project
- Advanced Training Courses
- Massive Open Online Courses.

The number of subscriptions divided among courses is represented below:

Climate Change Mitigation and Adaptation Master Programme Courses (in Ukrainian)

Course Name	Subscriptions
Climate System: Theoretical Foundations and Key Concepts	7
Climate Change: Causes and Consequences	10
Climate Projections and Scenarios	13

Impacts and Risks: Vulnerability Assessment to Climate Change	10
Climate Change: Communication and Public Engagement	1
International Agreements and National Climate Legislation	7
Climate Change Mitigation and Adaptation (General Part)	9
Climate Change Mitigation and Adaptation: Case Studies and Best Practices in Construction	13
Climate Change Mitigation and Adaptation: Case Studies and Best Practices in Water Management	4
Climate Change Mitigation and Adaptation: Case Studies and Best Practices in Energy	15
Climate Change Mitigation and Adaptation: Case Studies and Best Practices in Urban Management	16
Climate Change Mitigation and Adaptation: Case Studies and Best Practices in Healthcare	25
Climate Change Mitigation and Adaptation: Case Studies and Best Practices in Agriculture	90
Economics of Climate Change (General Part)	4
Economics of Climate Change: Case Studies and Best Practices in Construction	19
Economics of Climate Change: Case Studies and Best Practices in Water Management	8
Economics of Climate Change: Case Studies and Best Practices in Energy	33
Economics of Climate Change: Case Studies and Best Practices in Urban Management	17
Economics of Climate Change: Case Studies and Best Practices in Healthcare	68
Economics of Climate Change: Case Studies and Best Practices in Agriculture	65
In total	434

Climate Services Master Programme Courses (in Ukrainian)

Course Name	Subscriptions
Communication Skills Development in Climate Services	1
Climate Change Mitigation and Adaptation Strategies in Healthcare	39

Climate Change Mitigation and Adaptation Strategies in Urban Management

23

Climate Change Mitigation and Adaptation Strategies in Energy

24

Climate Change Mitigation and Adaptation Strategies in Water Management

2

Climate Change Mitigation and Adaptation Strategies in Agriculture

41

Climate Change Mitigation and Adaptation Strategies in Construction

21

Fundamentals of Climate Policy (International and National Aspects)

7

Communication and Interaction in Climate Services

7

Climate Justice: Impacts of Climate Change on Vulnerable Social Groups

2

Vulnerability to Climate Change and Climate Risks

3

Climate Products (Climate and Socio-Economic Indicators for Climate Services)

7

Data and Information for Climate Services	7
Fundamentals of Climate System Dynamics and Modeling	10
Fundamentals of Global Climate Dynamics and Modeling	2
In total	196

Climate Service Doctoral Programme Courses (in Ukrainian)

Course Name	Subscriptions
Climate Database Management	4
Generation of Climate Products	4
Forecasting Models	3
UN Sustainable Development Goals and Goal 13	18
UN Sustainable Development Goals and Goal 13 in Healthcare	19
UN Sustainable Development Goals and Goal 13 in Energy	26

UN Sustainable Development Goals and Goal 13 in Agriculture	11
UN Sustainable Development Goals and Goal 13 in Urban Management	17
UN Sustainable Development Goals and Goal 13 in Water Management	2
UN Sustainable Development Goals and Goal 13 in Construction	28
Management of Climate Services in Ukraine	2
Climate Policy in Ukraine	3
Economics of Climate Change in Urban Management	4
In total	141

Courses taught in English

Course Name	Subscriptions
UN Sustainable Development Goals and Goal 13	2
UN Sustainable Development Goals and Goal 13 in Agriculture	1
UN Sustainable Development Goals and Goal 13 in City Management	5
UN Sustainable Development Goals and Goal 13 in Construction	2
UN Sustainable Development Goals and Goal 13 in Energy	4
UN Sustainable Development Goals and Goal 13 in Health Care	5
Mitigation and Adaptation Strategies in Ukraine	2
Mitigation and Adaptation Strategies in Ukraine for agriculture	1
Mitigation and Adaptation Strategies in Ukraine for city management	5
Mitigation and Adaptation Strategies in Ukraine for construction	2
Mitigation and Adaptation Strategies in Ukraine for energy	4

Mitigation and Adaptation Strategies in Ukraine for health care	5
In total	38

Climate Services Professional Development Program (in Ukrainian)

Course Name	Subscriptions
Climate Data and Products for Climate Services	3
Climate Risk Assessment for Climate-Sensitive Economic Sectors (General Module)	3
Climate Risk Assessment in Construction and Architecture	8
Climate Risk Assessment in Water Management	14
Climate Risk Assessment in Energy	4
Climate Risk Assessment in Urban Management	3
Climate Risk Assessment in Healthcare	30
Climate Risk Assessment in Agriculture	1
Communication Skills for Climate Services	1
Management of Climate Services in Ukraine	2

In total	69

Climate Change Professional Development Program (in Ukrainian)

Course Name	Subscriptions
Fundamentals of Global Climate Dynamics and Modeling	12
Climate Change Adaptation and Mitigation (General Module)	8
Climate Change Adaptation and Mitigation in Construction and Architecture	3
Climate Change Adaptation and Mitigation in Water Management	3
Climate Change Adaptation and Mitigation in Energy	30
Climate Change Adaptation and Mitigation in Healthcare	4
Climate Change Adaptation and Mitigation in Urban Management	2
Climate Change Adaptation and Mitigation in Agriculture	12
Economics of Climate Change (General Module)	8
Economics of Climate Change in Construction and Architecture	3
Economics of Climate Change in Water Management	30
Economics of Climate Change in Healthcare	5
Economics of Climate Change in Urban Management	4
In total	124

Sectoral Professional Development Program (in Ukrainian)

Course Name	Subscriptions
Climate Risk Assessment in the Energy Sector (case of a specific sub-sector or geographic region)	7
Climate Products for Climate Risk Assessment in the Energy Sector	120
Climate Change: Causes and Consequences	12
Climate Services	12
Climate Policy, Energy Transition, and Socio-economic Aspects of the “Green” Transformation	42
Implementation of State Policy in Water Management, Governance and Control of Water Use and Protection, Rational Use and Restoration of Water Resources (surface and groundwater)	48

Climate Risk Assessment in Urban Management (case of a specific sub-sector or geographic region)	7
Climate Products for Climate Risk Assessment in Urban Management	7
Fundamentals of Climate Change	3
Climate Risk Assessment in Agriculture (case of a specific agricultural sector or geographic region)	6
Climate Products for Climate Risk Assessment in Agriculture	20
Climate Risk Assessment in Water Management (case of a specific sub-sector or geographic region)	5
Climate Products for Climate Risk Assessment in Water Management	16
Climate Risk Assessment in Construction and Architecture (case of a specific sub-sector or geographic region)	11
Climate Products for Climate Risk Assessment in Construction and Architecture	10
Climate Risk Assessment in Healthcare (case of a specific sub-sector or geographic region)	33
Climate Products for Climate Risk Assessment in Healthcare	32
In total	391

Massive Open Online Courses (in Ukrainian)

Course Name	Subscriptions
Climate Change: Causes, Impacts, Adaptation	162
In total	162

ClimEd Capacity Building Training Activities

Course Name	Subscriptions
ClimEd 2nd Training	72
ClimEd 3rd Training	56
In total	128

Advanced Training Courses within 2nd Training

Course Name	Subscriptions
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Group B01. Workspace	17
Group B02. Workspace	16
Group B03. Workspace	17
Group B04. Workspace	16
Group B05. Workspace	15
Group B06. Workspace	15
Group B07. Workspace	16
Group B08. Workspace	15
Group B09. Workspace	19
Group B10. Workspace	21
Group B11. Workspace	17
Group B12. Workspace	17
In total	201

Below one can see the first page of all courses list at the Distance Learning Portal indicating the total number of pages in the bottom:

The screenshot displays the 'All courses' page on the re.climed.network portal. The page features a dark blue header with the 're.climed' logo, navigation links (Bookmarks, Search, FR), and a sidebar menu on the left. The main content area shows a grid of course cards, each with a thumbnail image, title, author, and a small icon indicating the number of pages.

Course List:

Course Title	Author	Pages
Керування базами кліматичних даних	Yelyzaveta Halych (+2)	1
Отримання кліматичної продукції	Halyna Borovska (+3)	0
Прогностичні моделі	Halyna Borovska (+2)	0
Цілі сталого розвитку ООН і ціль 13	Inna Khomenko (+3)	14



Цілі сталого розвитку ООН і ціль 13 в галузі охорони здоров'я

Tetyana Chernova (+7)

👁 4 🕒 10 Apr 2026



Цілі сталого розвитку ООН та Ціль 13 в енергетиці

Oksana Liuta (+6)

👁 11 🕒 10 Apr 2026



Цілі сталого розвитку ООН і ціль 13 у сільському господарстві

Tetyana Dyman (+1)

👁 0 🕒 10 Apr 2026



Цілі сталого розвитку ООН і ціль 13 у міському господарстві

Olena Drozd (+4)

👁 4 🕒 5 May 2026



Цілі сталого розвитку ООН і ціль 13 у водному господарстві

Liliia Kushchenko (+1)

👁 0 🕒 4 May 2026



Цілі сталого розвитку ООН і ціль 13 у будівництві

Yuliia Bereznytska (+5)

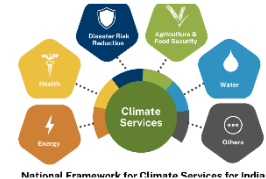
👁 14 🕒 10 Apr 2026



Розвиток навичок комунікації у сфері кліматичного обслуговування

Olena Nazhmudinova

👁 0 🕒 10 Apr 2026



Управління кліматичними сервісами в Україні

Inna Khomenko (+1)

👁 0 🕒 18 Apr 2026



Кліматична політика в Україні

Halyna Borovska (+1)

👁 1 🕒 10 Apr 2026



UN Sustainable Development Goals and Goal 13

Inna Khomenko (+1)

👁 0 🕒 18 Apr 2026



UN Sustainable Development Goals and Goal 13 in Agriculture

Tetyana Dyman

👁 0 🕒 27 Apr 2026



UN Sustainable Development Goals and Goal 13 in City Management

Olena Drozd (+4)

👁 0 🕒 5 May 2026



UN Sustainable Development Goals and Goal 13 in Construction

Viktor Mileikovskiy (+1)

👁 0 🕒 15 Apr 2026



UN Sustainable Development Goals and Goal 13 in Energy

Oksana Liuta (+3)

👁 0 🕒 27 Apr 2026



UN Sustainable Development Goals and Goal 13 in Health Care

Anastasilia Pyrogorova (+4)

👁 0 🕒 15 Apr 2026



Стратегії пом'якшення наслідків зміни клімату і адаптації до неї

Olena Barsukova (+1)

👁 2 🕒 16 Apr 2026

4 Educational and Technical Impact

The ClimEd Distance Learning Portal substantially increased the accessibility and usability of educational products developed within the project, ensuring that learning materials are available to a wide range of users, including students, researchers, academic staff, professionals and external learners. By providing a centralised digital environment, the portal enabled structured access to courses across different educational levels, from doctoral programmes to professional development and open online learning.

The Moodle-based architecture of the platform ensured a high level of functionality and user experience. It supported structured course navigation, asynchronous and self-paced learning, remote participation, online assessment and feedback mechanisms, as well as systematic learner support. These features made it possible to deliver high-quality education regardless of geographical location, institutional affiliation or time constraints, thus significantly enhancing the inclusiveness and flexibility of ClimEd educational offerings.

From an institutional perspective, the portal contributed to strengthening digital pedagogical capacity within partner universities. Academic staff gained practical experience in developing and delivering online courses, applying modern instructional design approaches and using digital tools for teaching, assessment and learner engagement. This, in turn, facilitated the harmonisation of curricula across partner institutions and supported the alignment of educational content with international standards, including WMO requirements and the Competency Framework for Provision of Climate Services.

Furthermore, the Distance Learning Portal enabled efficient reuse and adaptation of teaching materials, promoting interdisciplinary learning and supporting cross-institutional cooperation. By making courses and modules accessible in a structured and scalable format, the platform also contributed to the wider recognition of climate services education in Ukraine and beyond, positioning partner institutions as active contributors to the development of this emerging field.

As a sustainable post-project asset, the platform remains capable of supporting future educational initiatives, including Erasmus+, Horizon Europe and national programmes. Its modular and scalable design allows for continuous expansion, integration of new courses and adaptation to evolving educational and technological requirements.

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5 Sustainability and Long-Term Value

The ClimEd Distance Learning Portal complements and reinforces the dissemination ecosystem established under Deliverable D.7.1. While the project website primarily served as a communication and visibility tool, providing information about the project and its outputs, the Moodle-based Distance Learning Portal functions as the core operational educational infrastructure of ClimEd, enabling direct delivery and continuous use of project-developed learning resources.

The long-term value of the portal lies in its ability to ensure sustained access to educational content and to support ongoing learning activities beyond the formal duration of the project. Its continued availability guarantees permanent access to project-developed courses, long-term usability and preservation of digital teaching materials, and the possibility for continuous enrolment of learners from different target groups. In addition, the platform serves as an institutional repository of ClimEd outputs, preserving the knowledge base and educational achievements generated within the project.

The portal also provides a foundation for further development and modernisation of educational programmes. Its scalability allows for the integration of new courses, expansion of existing modules and incorporation of innovative teaching approaches and digital tools. This ensures that the platform remains relevant and adaptable to future educational needs and technological developments.

Moreover, the Distance Learning Portal supports the institutionalisation of project results within partner universities by embedding developed courses into regular teaching activities and professional training programmes. It also facilitates the establishment of new collaborations and the continuation of joint initiatives, thereby contributing to the long-term sustainability and impact of ClimEd at both national and international levels.

6 Conclusions

The ClimEd Moodle-based Distance Learning Portal was developed, populated with educational content and maintained as a core digital result of the project. It hosts a comprehensive range of doctoral, master's, professional development and open online courses reflecting international standards and national stakeholder needs.

The platform significantly enhanced the digital dimension of ClimEd, broadened access to project outputs, strengthened institutional capacities for online education and created a sustainable legacy extending beyond the formal duration of the project. As such, D.7.2 represents one of the key long-term exploitable and scalable results of ClimEd.