Co-funded by the Erasmus+ Programme of the European Union

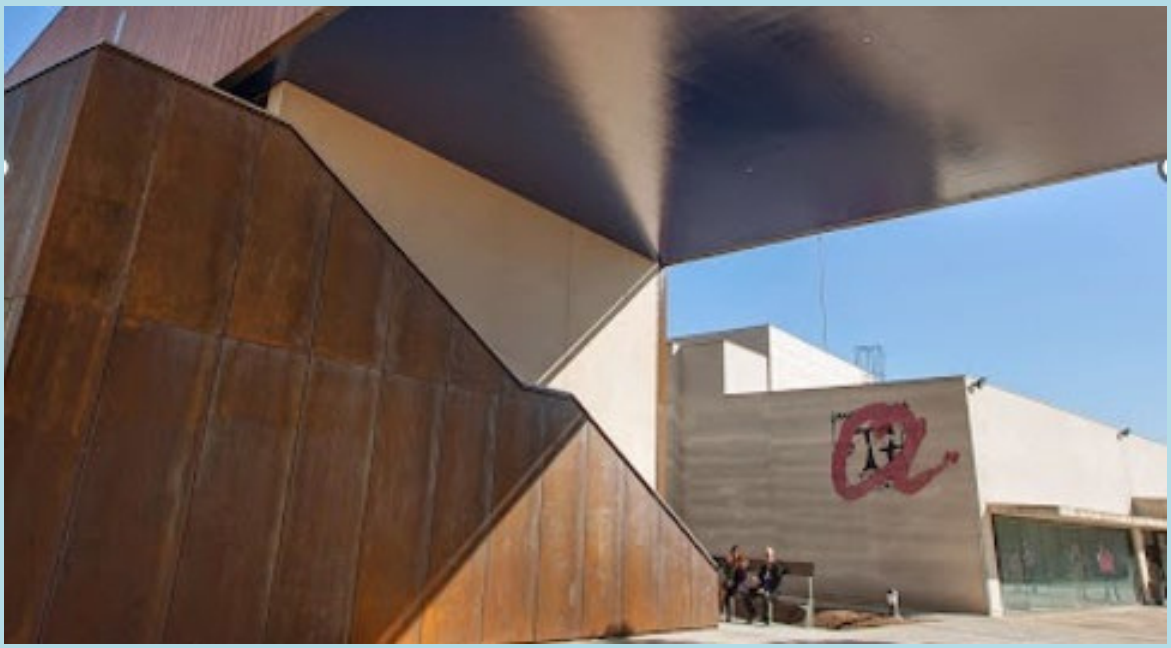
ClimEd

C E R T I F I C A T E

This is to confirm that

Tetiana Tkachenko

has attended and successfully completed
the Erasmus+ ClimEd Training (onsite/online)
Developing Skills to Use Climatic Information and Services
for Various Climate-Dependent Branches of Economy
7-25 April 2025



Erasmus+ ClimEd Project

"Multilevel Local, Nation- and Regionwide Education and Training in Climate Services, Climate Change Adaptation and Mitigation"
(619285-EPP-1-2020-1-FI-EPPKA2-CBHE-JP) http://climed.network

Hanna K. Lappalainen
University of Helsinki

Enric Aguilar
University Rovira i Virgili

Tetiana Tkachenko

has been awarded three (3) credits according to the European Credit Transfer and Accumulation System (ECTS)
ClimEd Training included:

Lectures :
Lecture I. Climate Indices. Enric Aguilar
Lecture II. Developing climate indices: The Climpact App. Enric Aguilar, Anna Boqué, Jon Olano
Lecture III. GIS Applications in Climate Services. Dmytro Diadin
Lecture IV. User friendly Climate Data. Anna Boqué, Jon Olano
Lecture V. Workgroup Presentation. Anna Boqué. Jon Olano
Lecture VI. Defining Climate Needs // Recovering indices of training IV. Jon Olano, Anna Boqué
Lecture VII. Introduction to RSTUDIO. Jon Olano, Anna Boqué
Lecture VIII. Introduction to Shiny. Jon Olano, Anna Boqué

Practice I. Download Climate Data and Apply Climpact Software. Anna Boqué. Jon Olano
Practice II. Definition and operationalization of sectorial indices. Jon Olano, Anna Boqué
Practice III. Download Data and Computation of sectorial indices. Jon Olano, Anna Boqué
Practice IV. Work in groups. Functions to compute sectorial indices. Jon Olano, Anna Boqué
Practice V. Workgroup. Creating a Shiny App (supported by IA if necessary)

Obtained Competencies/ Training Learning Outcomes:

Obtained competencies, learning outcomes and skills in:
(1) Identifying and selecting the most appropriate online sources of climate related data
(2) Downloading, quality checking and preparing climate related data in required formats
(3) Computing core climate indices, interpreting results in context of specific location
(4) Understanding sectorial climate information needs and defining sectorial indicators
(5) Identifying key climate-sensitive decisions within a selected sector of economy
(6) Selecting climate variables and thresholds to sector's decision-making processes
(7) Formulating and justifying climate indicators tailored to support decisions
(8) Building basic functionalities (incl. input/ visualization/ output) of Shiny App to show climate information and sectorial indices.
(9) Integrating climate relevant information and indicators into Shiny App to explore and interpret data for supporting informed decision-making.