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Multilevel Local, National, and Regional Education and Training: Building Academic Excellence in Climate Services in Ukraine.

Jon Xavier Olano Pozo^{1,2}, Enric Aguilar^{1,2}, Inna Khomenko³, Sergiy Stepanenko⁴, Anna Boqué-Ciurana^{1,2}, Caterina Cimolai^{1,2}, Yuri Vergeles⁵, Tetyana Diman⁶, Miroslav Malovanyy⁷, Olena Voloshkina⁸, Valeryia Ovcharuk³, and Svyatoslav Tyuryakov^{9,10}

¹Institut Universitari de Recerca en Sostenibilitat, Canvi Climàtic i Transició Energètica (IU-RESCAT), Universitat Rovira i Virgili, Tarragona, Spain (jonxavier.olano@urv.cat)

²Centre for Climate Change, C3, Geography Departament, Universitat Rovira i Virgili, Spain

³Odesa I.I. Mechnikov National University, Odesa, Ukraine

⁴Ukrainian Joint Meteorological and Hydrological Society, Odesa, Ukraine

⁵Bila Tserkva National Agrarian University, Bila Tserkva, Ukraine

⁶Lviv Polytechnic National University, Lviv, Ukraine

⁷O.M. Beketov National University of Urban Economy in Kharkiv, Kharkiv, Ukraine

⁸Kyiv National University of Construction and Architecture, Kyiv, Ukraine

⁹University of Helsinki, Helsinki, Finland

¹⁰Finnish Meteorological Institute, Helsinki, Finland

The Erasmus+ project "Multilevel Local, National, and Regional Education and Training in Climate Services, Climate Change Adaptation, and Mitigation" (ClimED) aims to establish an advanced academic framework dedicated exclusively to climate services education in Ukraine's high education institutions. This project responds to the growing need for highly trained professionals capable of addressing the challenges posed by climate change through innovative and practical solutions.

At the core of this initiative is developing an academic program comprising a PhD and Master's degree explicitly and specifically tailored around climate services. These programs are designed to align with the World Meteorological Organization (WMO) Competency Framework for Climate Services, ensuring that graduates possess the critical skills and knowledge required to excel in the field. The project wants to create a specialised, high-level academic curriculum that meets global standards and addresses local and regional needs.

In this communication, we present the course selection that will form the backbone of these programs. The PhD program is specifically designed to advance research and analytical capabilities in climate services, equipping candidates with the expertise to lead in creating, implementing, and evaluating innovative solutions within this specialised field. Meanwhile, the Master's programs are structured into two distinct areas. The first master's degree is for individuals with backgrounds in climate-related disciplines, such as atmospheric sciences, geography, and related fields. The second master approach is designed for professionals from all

other disciplines, providing foundational knowledge and targeted skills to integrate climate services into their existing expertise. Additionally, the project extends its scope through professional development courses aimed at disciplines beyond the traditional boundaries of climate services. These courses emphasise integrating climate-related knowledge and practices into other fields, highlighting the universal importance of climate services across sectors. This approach ensures that professionals from diverse backgrounds—ranging from urban planning to public health and beyond—are equipped to incorporate climate considerations into their work, fostering interdisciplinary collaboration and resilience.

The programs feature a strong alignment with the competencies outlined by the WMO, establishing a solid foundation for students to create, manage, and apply climate data effectively. Practical application is a central focus, with case studies, projects, and interdisciplinary approaches preparing students to address real-world challenges. The structure of the programs ensures inclusivity and relevance by tailoring educational pathways for climate specialists and professionals from other disciplines, enhancing the accessibility and applicability of climate services education. Finally, the curricula are designed to balance global frameworks with regional priorities, addressing specific challenges in Ukraine while remaining aligned with international standards.

As the project progresses, future communications will detail the development and implementation of these courses, showcasing their impact on building a new generation of climate service professionals. By fostering academic excellence and practical expertise, the ClimEd project aims to contribute significantly to global efforts in climate change adaptation and mitigation.