

RESTORE **4**Cs

Addressing **climate change**,
biodiversity loss and **habitat degradation**
towards the **sustainable management**
of European wetlands.





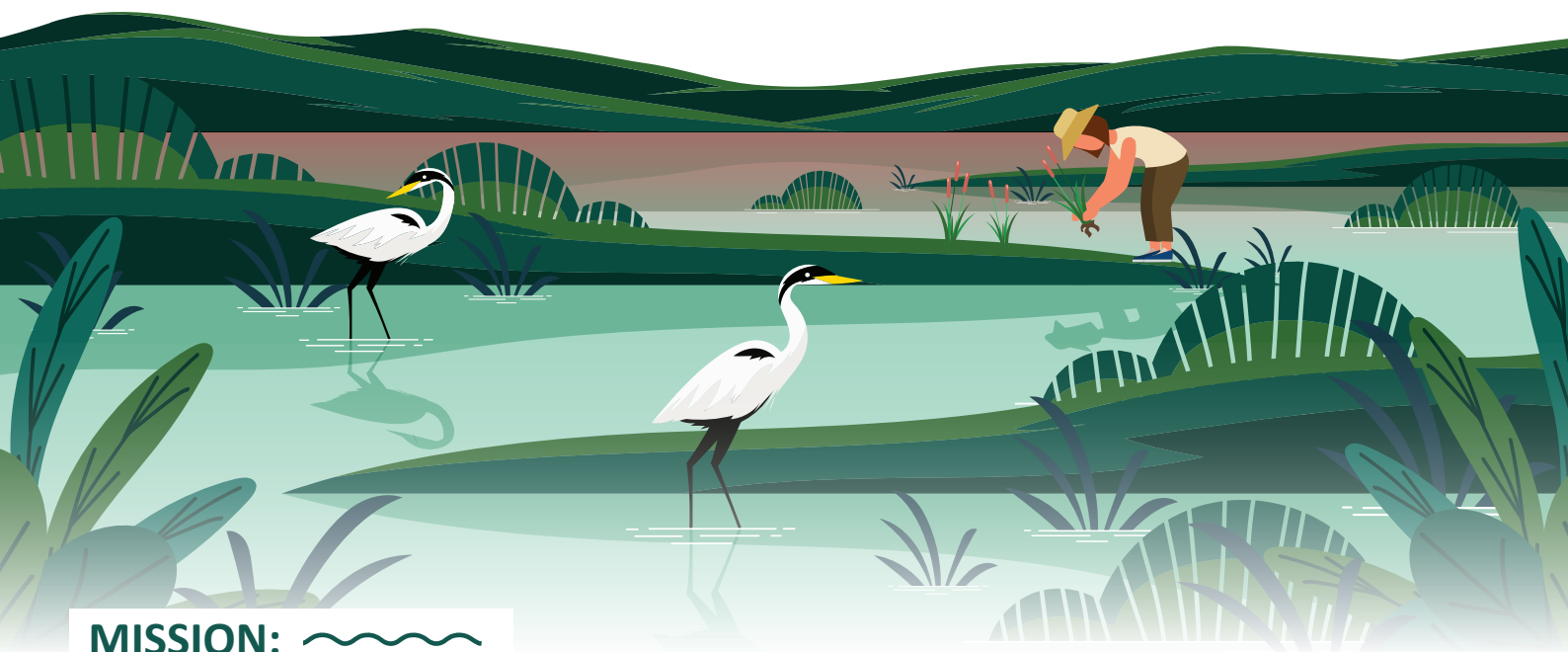
OBJECTIVE:

RESTORE4Cs, a freshly started project led by the University of Aveiro, will address management and restoration actions to maintain and promote the mitigation and adaptation capacity of European wetlands to climate change.

It focuses on coastal wetlands, providing innovative tools and methodologies for decision making and restoration planning and actions, while using an integrative socio-ecological systems approach.



MODELLING RESTORATION OF WETLANDS FOR CARBON PATHWAYS, CLIMATE CHANGE MITIGATION AND ADAPTATION, ECOSYSTEM SERVICES, AND BIODIVERSITY, CO-BENEFITS



MISSION:

Gathering data on the effectiveness of restoration and land use management actions regarding climate services and other ecosystem and socio-economic services. This will be carried out through six case pilot sites across European coastal areas (Ebro Delta, Camargue, Ria de Aveiro, Oosterschelde/Grevelingen Delta, Curonian Lagoon, Danube Delta), including wetlands in different conditions of conservation, and through meta-analysis.

Co-designing a multi-actor approach for the project's stakeholder interaction at EU and local level and increasing the impact of existing cooperation.

Upscaling models and integrative assessment tools to wider geographical and ecological contexts (other wetland types, including floodplains and peatlands), using remote sensing and machine learning methods to develop an integrated status assessment of European wetlands.

Structuring a European Community of Practice (ECoP) by connecting institutions, policymakers, scientists and the general public on wetlands restoration to support the implementation of the EU Biodiversity Strategy 2030 and to foster climate mitigation and adaptation solutions.



CASE STUDIES:

RESTORE4Cs has identified 6 case pilots for its activities. These comprise coastal wetlands ecosystems, with different preservation status (well-preserved vs. altered), with different alterations and offering a variety of restoration measures already in place. The 6 case pilot sites provide a good geographical representation of Europe and its biogeographical regions.

Ebro Delta (ES)

One of the largest Mediterranean deltas (30,000 ha), complemented with southernmost wetland areas in the Valencian Community (30,000 ha). Protection status: Natural Park, Natura 2000 SAC, Ramsar site.

Camargue (FR)

Major wetland on the French Mediterranean coast, including the delta of the Rhône River (130,000 ha). Protection status: Regional Park, National Reserve, UNESCO Biosphere Reserve, Natura 2000 SPA, SIC and IBA, Ramsar site.

Ria de Aveiro (PT)

Coastal lagoon with seagrass meadows, large areas of continuous saltmarsh, including the estuary of the Vouga River, the freshwater wetland Pateira de Fermentelos (36,000 ha). Protection status: Natura 2000 SPA and SIC; Ramsar site (Pateira); S. Jacinto Dunes Natural Reserve. LTSER, ICOS (PT), LW ERIC (PT - PORBIOTA).

Oosterschelde/Grevelingen Delta (NL)

Large area of intertidal waters with mudflats, islets, sand dunes and wet meadows. The marshland plays an important role in flood mitigation (50,731 ha). Protection status: Natura 2000 SPA and SIC; National Park (Oosterschelde, 36,978 ha); Ramsar (Grevelingen, 13,753 ha).

Curonian Lagoon (LT)

The largest European lagoon (total 158,400 ha; 37,895 ha on the Lithuanian side) located in the southern part of the Baltic Sea. Protection status: Natura 2000, Baltic Sea Protected area in HELCOM.

Danube Delta (RO)

The largest continuous marshland in Europe (625,000 ha) with a rich diversity of wetland habitats, numerous lakes, ponds and marshes. Protection status: UNESCO Biosphere Reserve & World Heritage Site; Ramsar site; Natura 2000.

EXPECTED RESULTS:

Project results will be made available through a digital platform to serve as a **Decision Support System (DSS)** for stakeholders, that will steer project efforts as part of the newly created **Community of Practice** around wetland restoration for climate change mitigation, biodiversity, and other services.

This online platform will provide stakeholders and wetland practitioners at all levels with a more reliable estimation of costs and benefits to drive and prioritise wetland restoration actions. Moreover, social acceptability of wetland restoration will be explored; this approach will be paramount to ensure a long-term transdisciplinary approach to wetland management, as restoration offers a positive opportunity to both secure wetlands' inherent ecological, environmental, and social values and increase the local communities' sustainability.



Funded by
the European Union

RESTORE4Cs is funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

PARTNERS:



KEY DATA:

FUNDING:

Horizon 2.5 - Climate, Energy and Mobility (main Programme)
Horizon 2.5.1 - Climate science and solutions

BUDGET: € 6 644 842,50 (EU contribution € 6 644 837)

PARTNERS: 15 partners from 9 EU countries

DURATION: 3 years, January 2023 - December 2025

LEADER: University of Aveiro, Portugal



restore4cs.eu



restore4cs@gmail.com



twitter.com/RESTORE4CS