

# RIVIERADE

## Kick-off meeting

**Trieste 16-18 Feb 2026**

**WP2:** Co-design of demonstrators of basin scale to coastal ocean climate service

**[Work Package Leader, Organization: ENEA]**

**[Work Package Co-leader, Organization: SMHI]**



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# WP2 contributors

**SMHI**

 **OGS**

**ENEA**

 ORTA DOĞU TEKNİK ÜNİVERSİTESİ  
MIDDLE EAST TECHNICAL UNIVERSITY

**IHE**  **Institute for Water Education**  
**DELFT** under the auspices of UNESCO

 LEIBNIZ-INSTITUT FÜR  
OSTSEEFORSCHUNG  
WARNEMÜNDE  
**iow**

**UNIVERSITÉ  
TOULOUSE  
CAPITOLE**

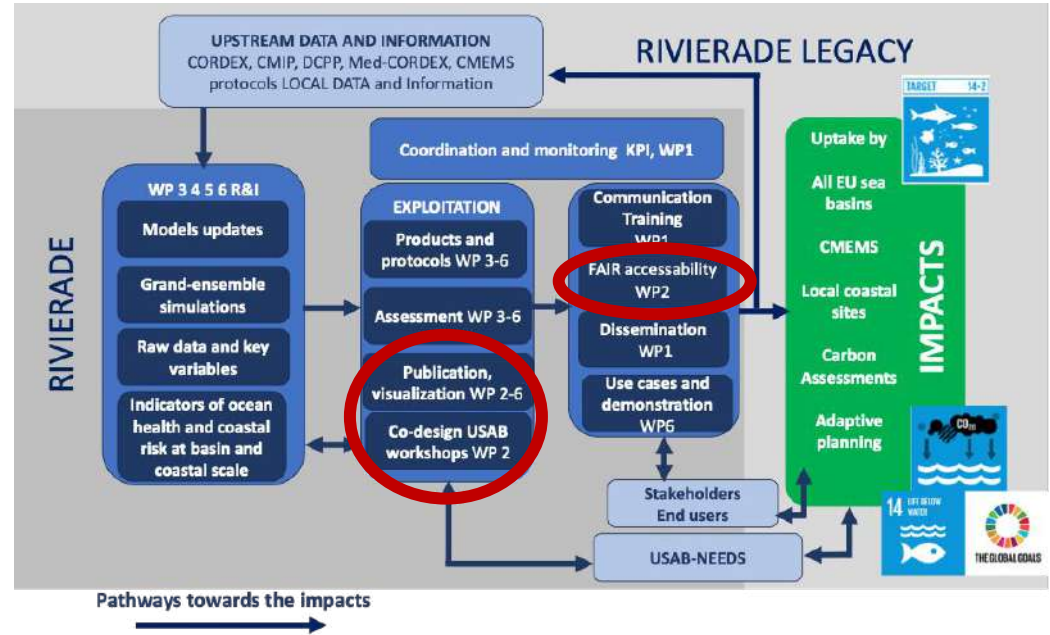


# Contributions to RIVIERADE SOs

**Table 1.1. RIVIERADE specific objectives.**

SO#	Specific Objective [means of verification] and WPs
SO1	Improve ocean and regional climate modelling capabilities to produce climate change impact assessment in European seas (BAL, BLK, MED) and their coastal area by: i) sharing, integrating and merging existing capabilities to improve the representation of ocean and marine ecosystem processes and dynamic into climate models, and ii) developing a common framework and protocol for multi-model multi-sea evaluation to assess the representativeness of the model ensemble against available observations and to quantify its uncertainties [number of coupled atmosphere-ocean-biogeochemical modelling systems used in the ensemble; number of coupled model simulation runs; reports on protocols and on model evaluation; and open peer-review publications ] (WP3, WP4, WP5)
SO2	Delivering a coherent ocean dataset of a first-of-its-kind coordinated ensemble of high-resolution, multi-model, multi-sea, decadal to multi-decadal climate simulations for quality assessed indicators on ocean status and health at basin scale for the three <i>target seas</i> , including uncertainty quantification [reports on protocols, on model development, production of ESGF-ready datasets (raw data)] (WP3, WP4, WP5)
SO3	Delivering coherent ocean data sets of dynamically downscaled very-high-resolution, multi-model, multi-sea, climate simulations for indicators on extreme sea level and coastal risk along all coasts and of relevant physical and biogeochemical indicators at selected <i>coastal regions</i> [Adriatic Sea, Swedish Coast, Marmara Sea, Southern Black Sea] at the decadal to multi-decadal temporal scale. [scientific publications; FAIR data and information (key variables and indicators), open documents (e.g. protocols, reports on Zenodo, peer-review publications) and codes (models, codes, tools on GitHub repository)] (WP6)
SO4	Delivery of regional ocean climate impact/risk services and of regional ocean climate services supporting blue economy (aquaculture, fishery, tourism) in 4 <i>local selected coastal sites</i> to be chosen and co-designed with end-users and stakeholders board. [use cases documentation, fact sheets] (WP1, WP2, WP5, WP6)
SO5	Delivery of a RIVIERADE catalogue produced in compliance with Open Science recommendation and FAIR principles, including key variables data sets, indicators, documents and codes, to support future studies and further climate services, and in order to favour the integration of project products and results into the digital perspective and the Digital Twin Ocean activities [digital catalogue] (WP2, WP3, WP4, WP5, WP6)

# WP2 in the project context and overall architecture



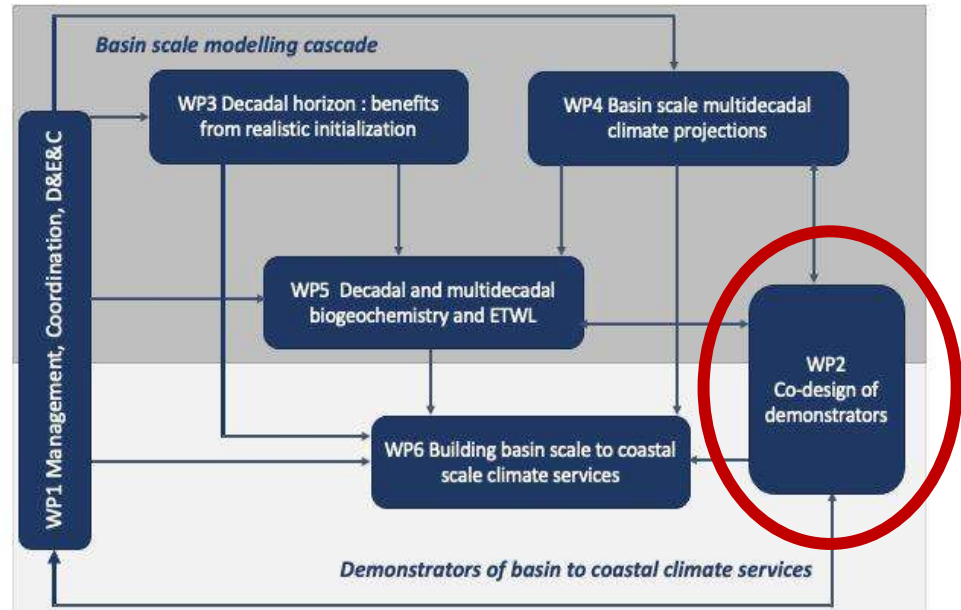
# WP2 in the project workflow

## Inputs:

Scientific inputs from WP3-WP4-WP5

## Outputs:

Requirements to WP6



## Core activities:

User engagement; Collecting users needs; elaboration of a common protocol to evaluate and test demonstrators

## Users:

- WP6 → requirements
- WP3-4-5 □ Users needs and feedback
- USAB; end-users,

# WP2 interactions with other WPs (1)

## Interactions with WP3-WP4-WP5

**Exchange of:** feedback and needs from users

**Key challenge:** meets users needs and scientific output and tools

**Input:** scientific outcomes to be presented to users

**Joint definition of:** indicators, metrics

## Interactions with WP6

**Output to WP6** Users requirements

**Joint design of:** indicators, coastal hazard product, risk metrics

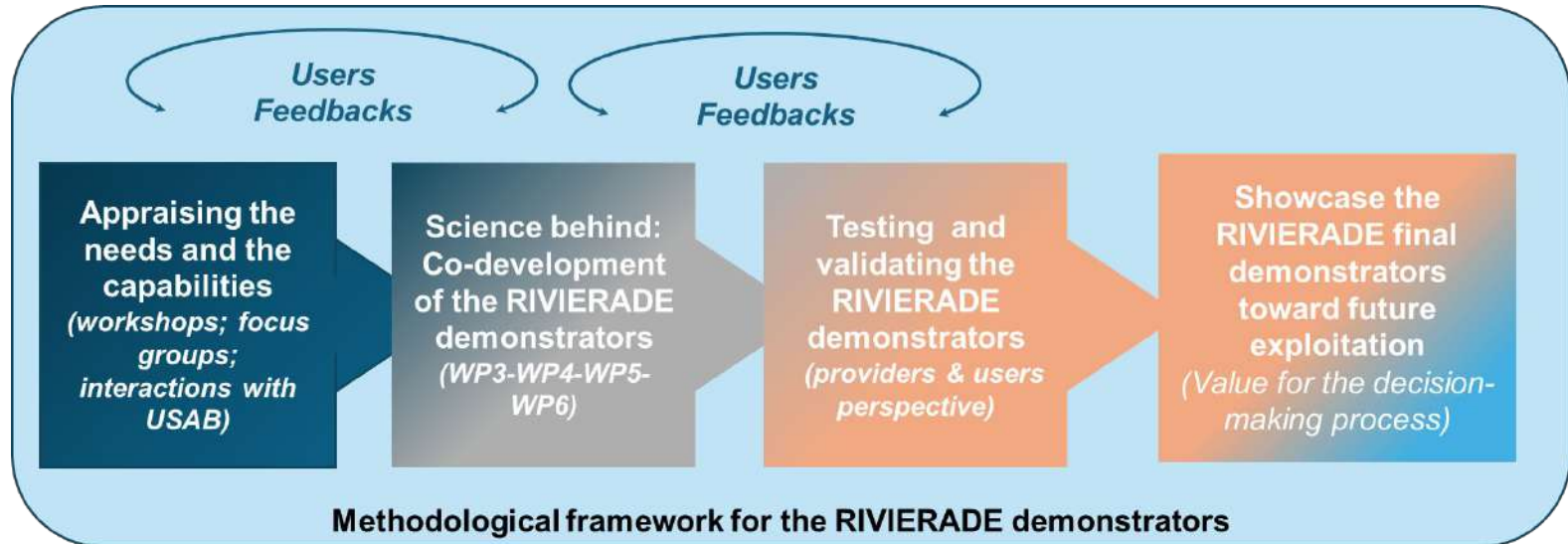
**Iterative development:** tuning outputs to services needs, test and validation

# WP2 Objectives

- 1) **Co-design climate and risk services demonstrators** at EU basin to coastal scale for the three target seas, providing data and information on ocean status and health, coastal risks and supporting policy, adaptation strategies, and a carbon neutral blue economy.
- 2) **Engaging with the RIVIERADE user community** across these seas, existing networks will serve as entry points. The iterative co-design process involves early engagement with stakeholders and end-users, demonstrating the added value of the co-design procedure. Interaction with end-users will be crucial for assessing the services feasibility based on the outcomes of WP3, WP4, WP5, WP6 further showcasing replicability

# WP2 Methodology

Continuous **interaction between end-users and scientists** to identify and prioritise societal needs, and to codesign and test demonstrators of climate services at basin, coastal region, and local scales



*Please list each task and the activities to be undertaken under each task. One slide per task.*

## **Tasks in detail: TASK WP.2**

- Task 2.1 Setting the Scene
- Task 2.2 Workshops for demonstrators co-design
- Task 2.3 Test and validate the demonstrators
- Task 2.4 Showcase the value of the demonstrators

*Please list each task and the activities to be undertaken under each task. One slide per task.*

## Tasks in detail: TASK WP.2

- **Task 2.1 Setting the Scene (M1-M4; Ongoing)**
  - Review previous & ongoing initiatives, relationship with CMEMS and C3S
  - USAB
    - ✓ D2.1 Report on the landscape of ongoing Initiatives OGS R — Document, report PU - Public M4 (Live Document?)

# Tasks in detail: TASK WP.2

Institutional and Support Entities	USAB	SUPPORT
Blue Italian Growth Cluster Technology (BIG)	✓	✓
CORILA	✓	✓
Eastern Black Sea Development Agency (DOKA)		
Turkish Marine Research Foundation (TÜDAV)		
The Swedish University of Agricultural Sciences (SLU).		
Mercator Ocean International		
HELCOM	✗	✓
NECCTON project		
Marmara Municipalities Union	✓	✓

## Preliminary questions

Could you indicate which adaptation plans and strategies on coastal and marine areas have been already designed in your area or competence?

Could you identify, within your network, potential end users of climate services for **coastal flooding, erosion, ocean health, or the blue economy** ?

Are there other ongoing/past research projects on these sectors with your involvement?

# End-users vs USAB

## Potential specific end-users

- **Adriatic Sea: Arpa FVG** (environmental regional authorities), the **Port Authorities of Trieste**, **fishermen cooperatives**, and **aquaculture companies** in the Gulf of Trieste and Sacca di Goro.
- **Southern Black Sea:** Stakeholders from the **BRIDGE-BS living labs**, including public institutions, local development agencies, and private sector representatives from the **fisheries, aquaculture, heritage, and tourism** sectors.
- **Marmara Sea:** Users identified through the national **MARMOD project**, including **chambers of commerce, fisheries associations**, and the **Marmara Municipalities Union**.
- **Swedish Coast:** The **Swedish Agency for Marine and Water Management**, **Swedish water authorities, county boards**, and research institutions like the **Swedish Agricultural University**.

# Ask to Users

## Preliminary questions

- Are there adaptation plans and strategies on coastal and marine areas already adopted in your institution/company?
- Which climate data and information are already used in your own activities?
- Which barriers and limitations have you already experienced that can prevent you by using climate data?
- Describe key decisions/investments where the availability of climate data and information are critical

*Please list each task and the activities to be undertaken under each task. One slide per task.*

## Tasks in detail: TASK WP.2

- **Task 2.2 Workshops for demonstrators co-design (M4-M16; Coming Soon!)**
  - Local Workshops (MED □ ENEA; BAL □ SMHI; BLK □ METU)
  - Define questions, decisions, temporal and spatial scales
  - A common terminology (RIVIERADE Jargon) will be established to facilitate co-design and future testing
    - ✓ D2.2 Report on the regional workshops toward codesigned pilot services  
ENEA R — Document, report PU - Public M15

Please list each task and the activities to be undertaken under each task. One slide per task.

## Tasks in detail: TASK WP.2

- Task 2.3 Test and validate the demonstrators (M16-M36; see *you next year*)
  - Interaction with WP6
  - Assessing effectiveness and uncertainty of pilot (User perspective!)
  - Testing phase
    - ✓ D2.3 Report on the methodology adopted to test and validate the services in users perspective ENEA R — Document, report PU - Public M24

Please list each task and the activities to be undertaken under each task. One slide per task.

## Tasks in detail: TASK WP.2

- Task 2.4 Showcase the value of the demonstrators (M36-M48; *see you in a couple of years!*)
  - Final showcase event
  - Final recommendations and legacy

# Deliverables and Milestones

## Deliverables

- D2.1 Report on the landscape of ongoing Initiatives OGS R — Document, report PU - Public M4
- D2.2 Report on the regional workshops toward codesigned pilot services ENEA R — Document, report PU - Public M15
- D2.3 Report on the methodology adopted to test and validate the services in users perspective ENEA R — Document, report PU - Public M24

## Milestones

- #4 USAB set up (OGS) Minutes of the meeting for the appointment of the USAB during the event available on Zenodo **M4**
- #5 Scoping workshops in the three basins conclude (ENEA) Minutes of the workshops and photos available on project website **M14**
- #6 Design of RIVIERADE demonstrators (SMHI) Factsheet on first version of the demonstrators available on project website **M16**
- #7 Final version of demonstrators tested and Validated (SMHI) Factsheet on the final version of the demonstrators available on project website **M36**
- #8 Final Showcase Event concluded and demonstrators factsheet published on the project website (ENEA) Minutes including agenda and photos of the event available on project website **M48**

## Risks



Users and Where to Find Them



# Work plan for the first year

- Meeting and engaging end-users to co-design and (in future) validate the demonstrators
  - Contacts from USAB (hopefully) and from all Partners!
- Organization of local workshops, to set a (hopefully) continuous interaction with users
  - Open points: English vs local languages; online vs in person;...
- Define a common format for the local events, to obtain comparable feedbacks

# Coming soon!



- *Dell'Aquila, A., Calmanti, S., Salon, S., Canu, D., Solidoro, C., Ulses, C., Ranasinghe, R., Meier, M., Magnus, H., Fach, B., and Salihoglu, B.:* **Co-developing and co-designing climate services for the Baltic, Black, and Mediterranean Seas: the contribution of RIVIERADE project** , EGU General Assembly 2026, Vienna, Austria, 3–8 May 2026, EGU26-12554, 202

**Questions?**

# RIVIERADE

## Partners

