

# Adrion Interreg Sub-Cluster 2.3 “Waste Management and Reduction of Pollution Diffusion”

**Activities and challenges to  
preserve the environment in the  
wider Adriatic area: The case of  
Adrion Interreg Sub Cluster for  
waste management and reduction  
of pollution**

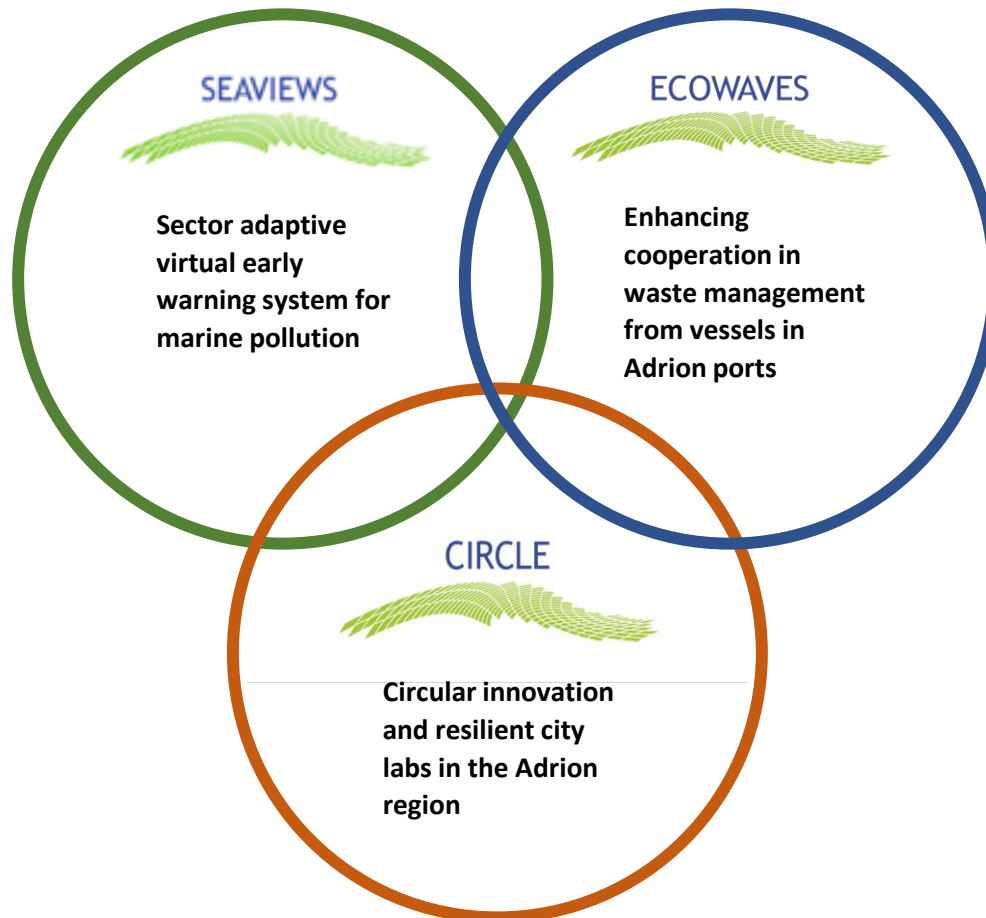


Marco Affronte

# Interreg ADRIION - Sub-Cluster 2.3



Adrion Interreg Sub-Cluster 2.3 “Waste Management and reduction of pollution diffusion” was established in 2021.





# SEAVIEWS Main outputs

## SEAVIEWS PROJECT

SEctor Adaptive Vlrtual Early Warning System for marine pollution

### Output 1.1

A transnational repository network that will receive, store and analyse data from a network of smart sensors installed in critical points in the ADRION area.

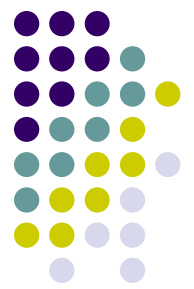
- Sensors
- Mobile App
- Marine Pollution Hubs

### Output 1.2

A strategy and action plan developed in the field of environmental protection

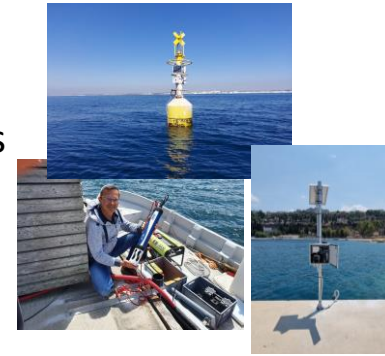
- Big Data Analytics
- Mapping national and regional strategies
- Propose amendments and RCO's (Risk Control Options)

# Output 1: Transnational repository network



## Network of smart-sensors

- Measure water quality parameters
- Installed in key locations in the ADRION



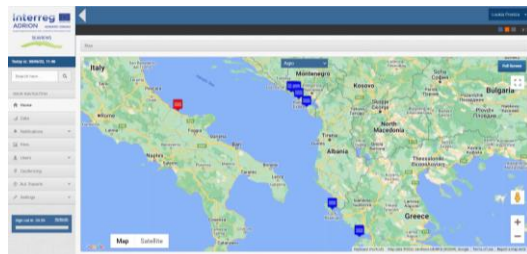
## SEAVIEWERS Application

Citizen science tool to report marine pollution incidents



## Platform

- Collects and hosts all received data (sensors, mobile app)
- Various stakeholders have access to it



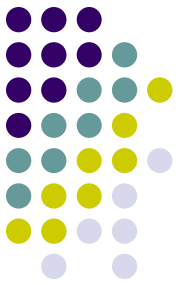
## Marine Pollution Hubs

Focal points to promote marine environment protection, innovation and better governance

## Output 2: Enhancement and amendments of national and regional action plans



- Exploitation of input data applying **big data analytic** tools  
Descriptive statistics and AI algorithms in big data volumes
- These tools will lead to the **early identification of marine pollution** incidents and the mitigation of impact
- Development of a **dynamic decision policy**
- **Mapping of existing strategies** and involved authorities, identify gaps and proposing amendments
- Propose **Risk Control Options (RCOs)** minimizing risk based on the elaboration of collected data



# CIRCLE Main outputs

To promote models of waste management/recycling based on a strongest and diffuse implementation of the circular economy's principles in the Adrion region, thanks to planning and implementation of a collaborative approach

## OUTPUT 1

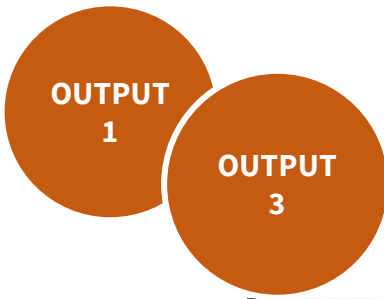
Transnational strategy for the establishment of Circular Innovation Resilient City Lab (CIRCLab)

## OUTPUT 2

Transnational Action Plan to advance in waste management in the four thematic areas

## OUTPUT 3

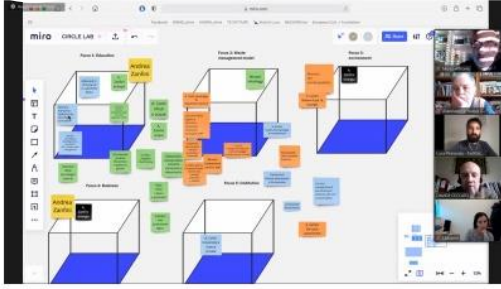
CIRCLabs Network



# The CIRClabs



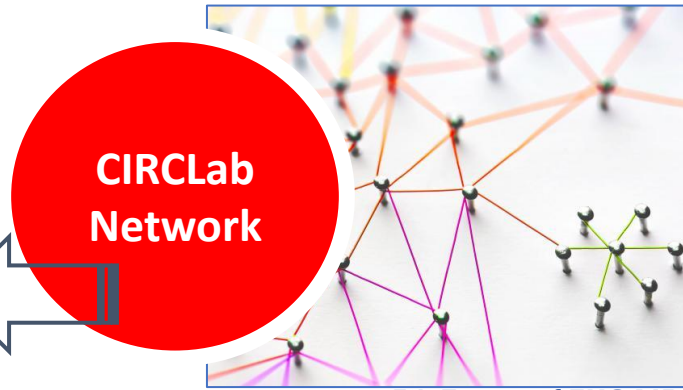
1. CIRCLab Forlì (Italy)
2. CIRCLab Velenje (Slovenia)
3. CIRCLab Goriška region (Slovenia)
4. CIRCLab Međimurje County (Croatia)
5. CIRCLab Croatia (Croatia)
6. CIRCLab Eastern Thessaloniki (Greece)
7. CIRCLab Western Greece (Greece)
8. CIRCLab Bosnia and Herzegovina (Bosnia and Herzegovina)
9. CIRCLab Serbia (Serbia)
10. CIRCLab Ulcinj (Montenegro)
11. CIRCLab Tirana (Albania)



The CIRCLabs are based on the principles and characteristics of Living Labs, which are “physical regions or virtual realities, or interaction spaces, in which stakeholders form public-private-people partnerships (4Ps) of companies, public agencies, universities, users, and other stakeholders, all collaborating for creation, prototyping, validating, and testing of new technologies, services, products, and systems in real-life contexts”



It could be an informal network/cluster, or a formal network (e.g. an association or another legal statement)



# The four thematic pilot actions



**Industrial symbiosis**

Waste matching database  
 Market survey on special waste flows

**Organic waste**

Municipality of Laktaši (Bosnia Herzegovina) bought:  
 a waste truck, 15 containers, 85 composters

**Waste electrical & electronic equipment (WEEE)**

The city of Zrenjanin (Serbia) bought:  
 10 WEEE containers, 1 cargo van for transportation of electronic waste

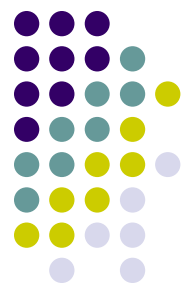
**Construction and demolition waste (CDW)**

Still working on this...



They have already collected almost 9 tonnes of waste, 5 of which in cooperation with some local schools.





# ECOWAVES Main outputs

## Project Objective

- To establish coordinated transnational strategies for port authorities to support waste management and recycling.

## Output 1

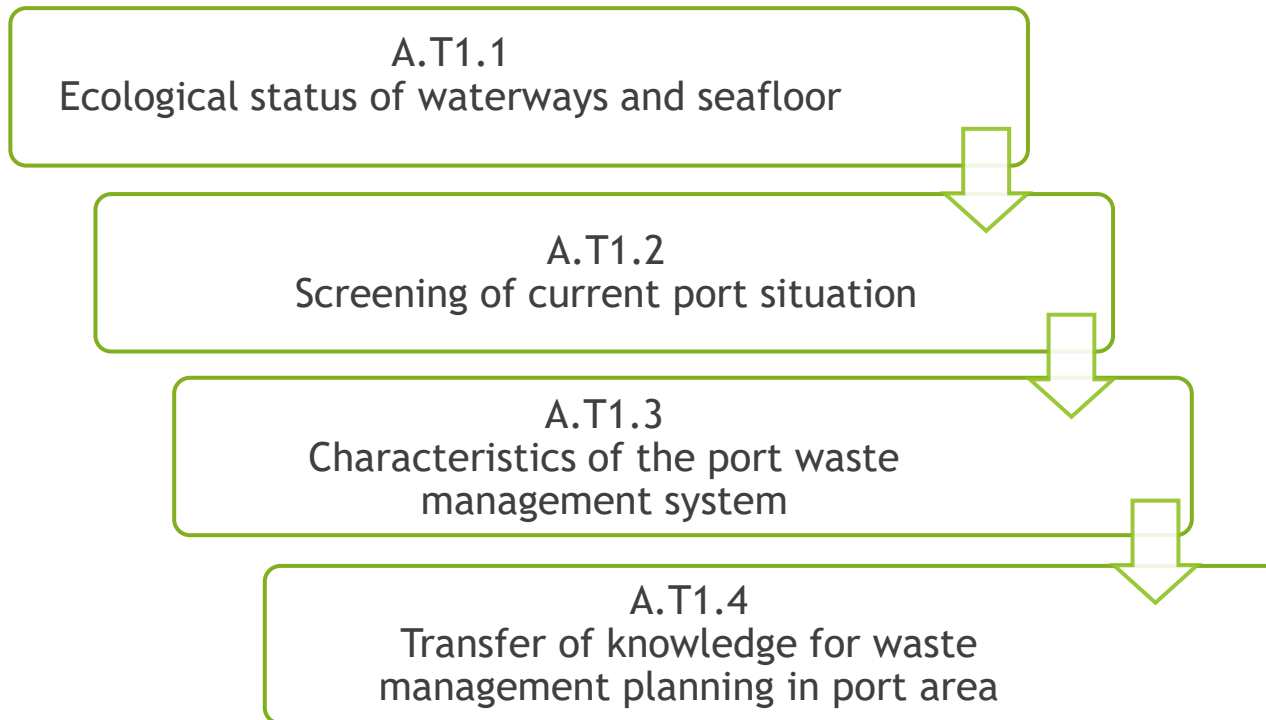
- Transnational strategy on waste management for the protection of port environments

## Output 2

- Creation of a transnational network for the environmental protection of port areas



## Work Package T1: Port Environmental Framework

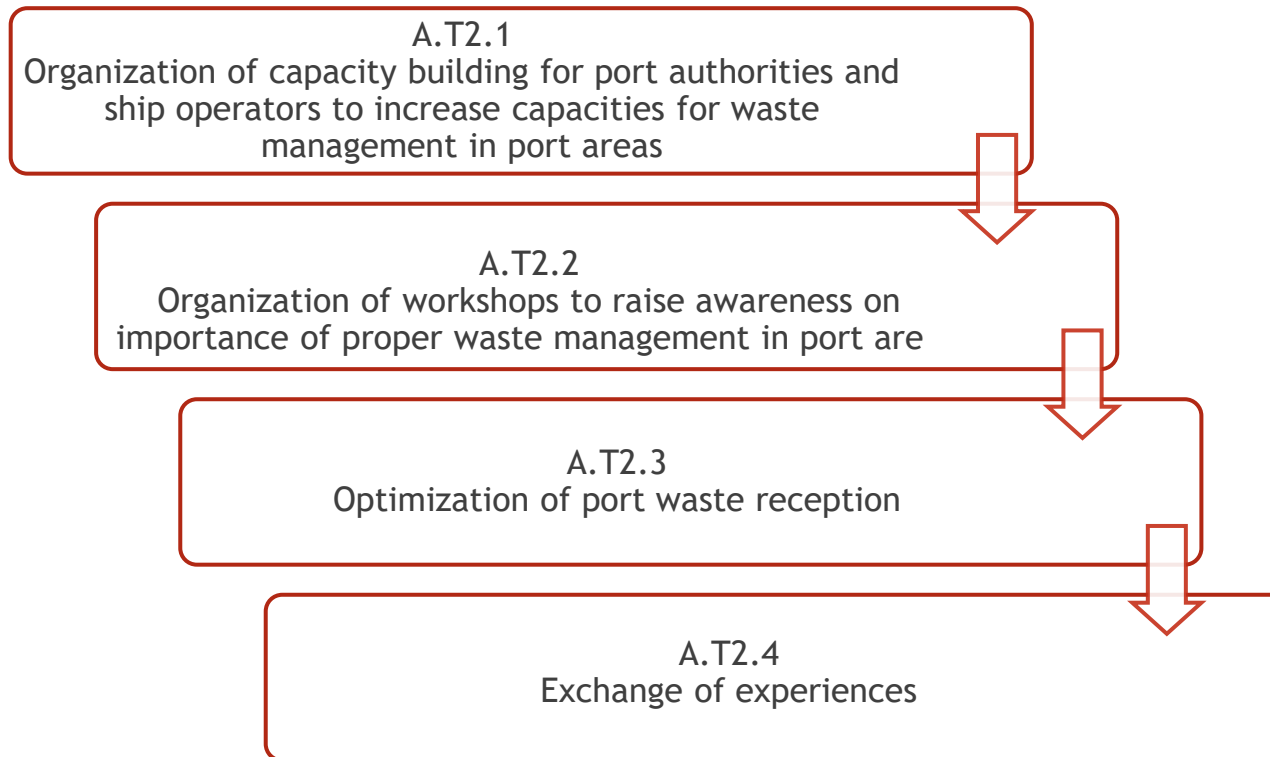


Focus:

- Setting the knowledge framework
- Collecting data regarding the ecological status of waterways and seafloors, vessels flow in ADRION ports and waste generation and characterization.
- Good practices in waste management in port and navigable area
- SWOT analysis of current port regulation on waste management will be also performed.
- Transfer knowledge of waste planning in port area.



## Work Package T2: Enhancing the capacities



Focus on:

- port authorities' capacity building and optimizing port waste reception
- increase awareness about proper waste management in port areas,
- Agreement will be signed to implement transnational policies, creating efficient networks among all Partners.
- Agreement with cruising lines setting environmental obligations on all vessels voyaging to and from ADRION programme countries

# The Sub-Cluster 2.3 activities



Organization and participation to at least 3 cluster meetings with the involvement of all projects of the respective cluster

Participation to the ADRIION Annual Events and/or ADRIION capitalization events to present the outcomes of the capitalization activities and discuss on the potentials of the themes /topics covered

Contribution to the update of the new ADRIION web section on clusters

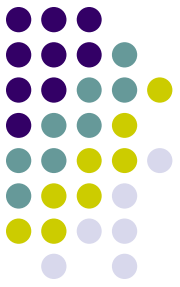
Organization of 1 macro-regional event for the dissemination of TC outcomes and potentials; and 1 joint stakeholders' meeting addressing common interest

Elaboration of specific position (white) paper for influencing the policy debate in the theme of the TC



EU Strategy for the  
Adriatic and Ionian Region  
**EUSAIR**

# Cluster contribution to the EUSAIR strategy



## ECOWAVES



- Improving the capacity of Port areas in the collection and management of several kind of waste is pivotal for protecting the marine environment.
- Raising awareness among public and private stakeholders about the importance of preventing waste to flow to the sea and rivers from the industrial port areas;
- Acquisition and test of new and improved equipment to put in place an effective waste management system;
- Exchange of knowledge about policies and best practices between EU and non-EU decision makers, in order to obtain a transnational improvement in the Adriatic-Ionian region

## SEAVIEWS



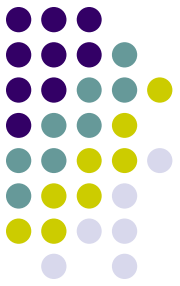
- Enhanced coordination among stakeholders, regions, countries, in emergency issues related to marine pollution.
- Cleaner seas are vital for sustainable tourism, environmental quality and sustainable blue growth.
- Creation of a common data repository enabling compatibility and better coordination and links with other data repositories and platforms for marine waters monitoring (connecting the Region).
- Contribution to the development of common strategies and Risk Control Options to confront marine pollution in ADRION.

## CIRCLE



- Circle aims to improve waste management by reducing waste flows, making waste a resource in a circular economy model. Improving waste management helps to reduce waste flows to the sea.
- The general objective of the EUSAIR is to promote economic and social prosperity and growth in the region, and CIRCLE with the creation of CIRCLabs, CIRCLab Network and the 4 different pilot projects can help develop new business for companies in the area.





# Adrion Interreg Sub-Cluster 2.3

## “Waste Management and Reduction of Pollution Diffusion”

# Thank you

Contacts:

SEAVIEWS: Eirini Stomatopoulou - [eirini\\_stamatopoulou@hotmail.com](mailto:eirini_stamatopoulou@hotmail.com)

CIRCLE: Marco Affronte - [affronte@gmail.com](mailto:affronte@gmail.com)

ECOWAVES: Paolo Lopolito - [paolo.lopolito@programmasviluppo.it](mailto:paolo.lopolito@programmasviluppo.it)