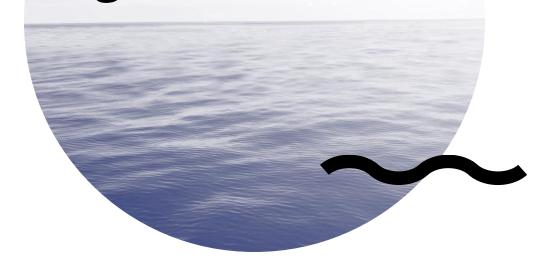
# INNO2MARE: Strengthening the capacity for excellence of Slovenian and Croatian innovation ecosystems to support the digital and green transitions of maritime regions









# **INNO2MARE** at a glance

- Horizon Europe: Excellence Hubs call 2022
- Evaluation score: 13/15
- Number of submitted proposals: 102
- Number of projects to be funded: 10
- Funding: EUR 5 million
- **Duration**: 4 years
- 19 project partners
- 3 innovation ecosystems
- Coordinator: University of Ljubljana, Slovenia
- **Status:** Grant Agreement preparation in progress
- Expected start date: 1 January 2023



# **INNO2MARE:** motivation



# Finding new ways to stimulate innovations in EU maritime industries

- EU maritime sector generates a €70 billion GVA and directly employs more than a million people
- fierce international competition
- challenges & opportunities related to regulation and environmental issues
- contribution to the green and digital transition of Europe

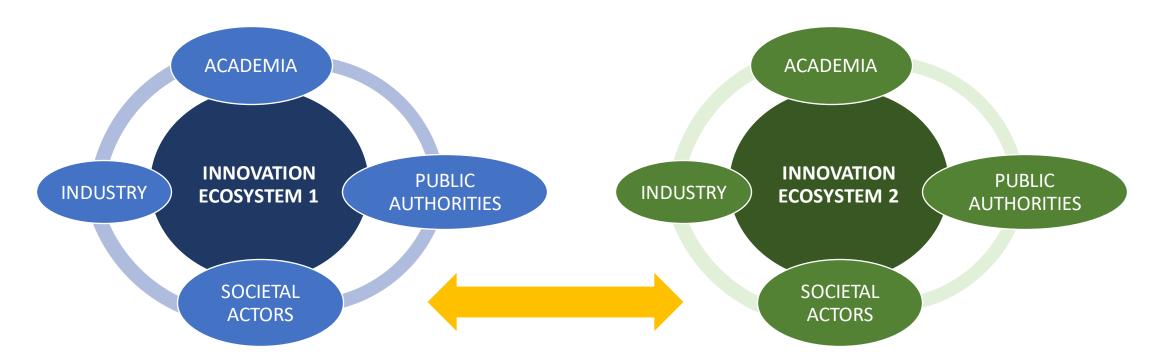
# Strengthening the role of placebased ecosystems as EU's innovation engines

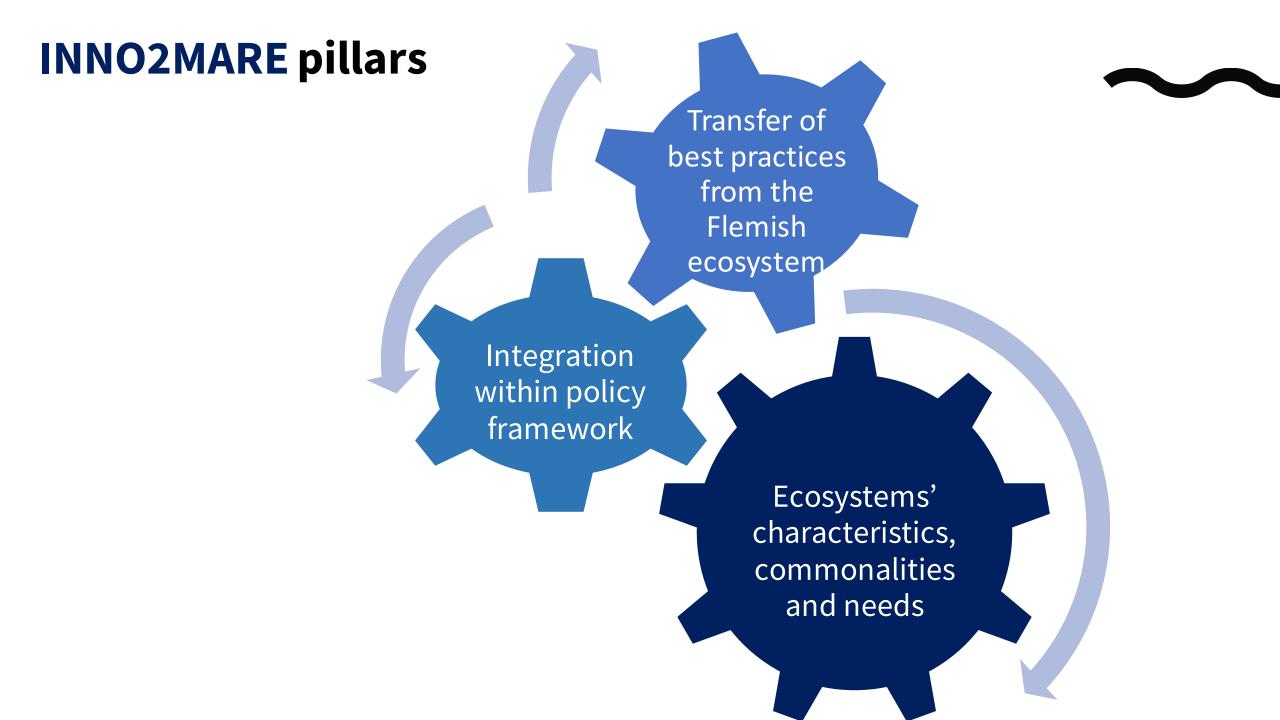
- Western Slovenia: a moderate innovator focused on digitalisation in manufacturing, logistics and smart cities
- Adriatic Croatia: an emerging innovator competitive in marine engineering
- urgent need for a strategic and coordinated approach in the governance of the two ecosystems

# Why the Excellence Hubs call?



- **Focus**: cross-border collaboration of place-based innovation ecosystems in Widening territories on a common strategy
- Expected impact:
  - ✓ greater involvement of regional actors in R&I process
  - ✓ stronger linkages between academia and business









# RESEARCH & EDUCATION INSTITUTIONS

### University of Ljubljana (UL)

- Faculty of Mechanical Engineering
- Faculty of Electrical Engineering
- Faculty of Computer and Information science
- Faculty of Maritime Studies and Transport

University of Primorska, Koper

### GOVERNMENT BODIES

# Western Slovenia region Business Support Centre Kranj – Regional Development Agency of Gorenjska

Gorenjska Region Primorska Region with the City of Koper City of Ljubljana

### **Central government**

Ministries of Science, Education and Sport; Economic Development and Technology; SPIRIT (Slovenian Agency for Entrepreneurship)

# 4-HELIX INTERMEDIARIES

Digital Innovation Hub Slovenia Competence Centre for Advanced Control Technologies KC STV, Ljubljana LUI - Ljubljana University Incubator Technology park Ljubljana Ltd. ABC Accelerator

# WESTERN SLOVENIA

# SOCIETAL ACTORS

# Association for Technical Culture of Slovenia - ZOTKS

Association of societies for technical culture Kranj

### **INDUSTRY**

# Smart industrial solutions ISKRA Ltd.

Elektro Gorenjska, Inc. Elektro Primorska, Inc.

### ICT for maritime

BeeIN Ltd. **Digitech Ltd.**QLECTOR Ltd.

Sentinel Marine solutions Ltd.

### Marine engineering

Adriaing Ltd. IAM Engineering Ltd.

Marinas and ports management Port of Koper, Inc.

### **Business associations**

Chamber of Commerce and Industry of Slovenia (GZS -Gospodarska zbornica Slovenije)



# jekti

MA



# an otok Unije

kog projekta su i postizanje njegove ekološke, energetske i...



# **H2020 projekt INSULAE**

U okviru europskog projekta INSULAE -Maksimiziranje utjecaja inovativnih energetskih pristupa na otocima EU razvijamo nova inovativna...





# RESEARCH & EDUCATION INSTITUTIONS

### University of Rijeka (UNIRI)

- EDIH Adria headquarters
- Faculty of Maritime Studies
- Faculty of Engineering
- Faculty of Informatics and Digital Technologies
- Center for Artificial Intelligence and Cybersecurity

Universities of Pula, Zadar, Split and Dubrovnik

### GOVERNMENT BODIES

### **Adriatic Croatia region**

Primorsko-Goranska County; Prigoda - Regional

**Development Agency** 

Regional Energy Agency Kvarner - REA

Cities of Rijeka, Pula, Zadar, Split, Dubrovnik

### **Central government**

HAMAG - BICRO - Croatian Agency for SMEs,

Innovations and Investments

Ministries of Economy and Sustainable Development; Maritime Affairs, Transport and Infrastructure; Regional

Development and EU Funds; Science and Education

# 4-HELIX INTERMEDIARIES

# STEP RI Science and Technology Park of the University of Rijeka Ltd.

STARTUP Incubator of the City of Rijeka PORIN Rijeka Development Agency MarInn - Maritime Innovation Cluster Croatian Private Equity and Venture Capital Association (CVCA)

# ADRIATIC CROATIA

### SOCIETAL ACTORS

# Centre of technical culture Rijeka (CTK) Urbanex, Split

SMART - Association for the Development of Civil Society, Rijeka Croatian Hydrogen Association, Split

### **INDUSTRY**

# Marine engineering MS Tech Ltd. (affiliated with Maritime Center of Excellence Ltd. and Lürssen Design Center Kvarner), AITAC Ltd., TSI Ltd., Navis Consult Ltd., IHC Engineering Croatia Ltd.,

Brodoplan, P.B.S. Ltd., Vard Design Liburna Ltd., Vertex B.S. Ltd., DE NAVAL Ltd., PROPLAN Ltd.

# Shipbuilding & repair services ISKRA brodogradilište 1 Ltd., VIKTOR LENAC Inc., 3. MAJ Inc., PMB Group Ltd., SCAM Marine Ltd., MKM Yachts Ltd.

### Marinas and ports management Adriatic Croatia International Club,

Inc., Port of Rijeka, Inc., Ports of Ploče, Zadar, Šibenik, Split, Dubrovnik

### **ICT** for maritime

BrightDock, Adricom, Modest Tree

### **Business associations**

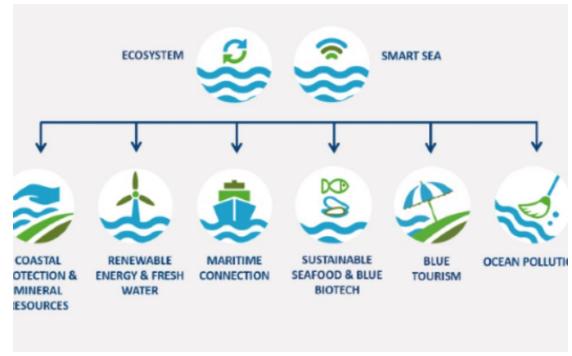
Association of Croatian Employers, Croatian Chamber of Economy





## **Blue Innovation Awards 2021 Winners**





# Transfer of best practices from a top innovation ecosystem

ACADEMIA
University of Antwerp
Antwerp Maritime
Academy

INDUSTRY
Port of Antwerp
VOKA

Flemish maritime innovation ecosystem

Blue Cluster the Beacon Maritime Campus Antwerpen

**INTERMEDIARIES** 

### **PUBLIC AUTHORITIES**

City of Antwerp
Flanders Innovation &
Entrepreneurship (VLAIO)

# Ecosystems' characteristics, commonalities and needs

Ecosystems characteristics, commonanties and needs		
Ecosystem Dimensions of analysis	Western Slovenia Total population (2021): 1 million	Adriatic Croatia Total population (2021): 1,3 million
Innovation Ecosystem orchestrator(s)	<b>No single orchestrator</b> is identified; University of Ljubljana (UL), ISKRA and BSC acting as important contributors	No single orchestrator is identified; University of Rijeka (UNIRI), Prigoda and MarInn Cluster-associated companies acting as important contributors
Quadruple Helix Model: level of implementation	Long tradition of university-industry- government collaboration, with government initiatives; engagement of societal actors at rudimentary level	Links between individual actors, but <b>modest</b> level of knowledge transfer; systematic ecosystem governance in early stage of development
Formal and non-formal key enabling factors and initiatives	High concentration of research and higher education institutions; Ljubljana's <b>start-up ecosystem</b> with various co-created bottom-up and public policy initiatives; Start:up Slovenia; Strategic Research and Innovation Partnerships (SRIPs); EIT partnership	Strategic and political interest of the national and regional authorities; human capital in maritime sectors  Regional innovation matchmaking platform (https://rimap.uniri.hr/), initiated by Prigoda and co-created with UNIRI and STEP RI; MarInn, the maritime innovation cluster (http://marinn.co/), initiated by

Lürssen Design Center Kvarner

### WESTERN SLOVENIA

### National level

Slovenian Development Strategy 2030

National digital and green vision

National Recovery and Resilience Plan

Digital transition, green mobility

Smart Specialisation Strategy (S4)

Digital, Circular Economy and Industry 4.0 as priority pillars applied to smart cities, mobility and factories

### Smart Specialisation Strategy (S5)

Upgrade of S4 with the focus on green transition through Strategic R&I Partnerships

Research and Innovation Strategy of Slovenia (RISS) 2021-2030

R&I system management, capacities and knowledge transfer

Digital Slovenia 2020 / 2030

Digital society development

Slovenian Industrial Strategy (SIS)

Green and smart economy

## Regional level

Coastal–Karst, Upper Carniola County Development Programmes 2021-2027

Priorities for smart and green regions

# EU level

2030 Digital General EU vision towards digital transformation

General EU vision towards

sustainable and smart

The European Green Deal

Recovery and Strong and resilient EU
Resilience through green and digital transitions

EDIHs in Digital
Europe Programme

4P DIH (Slovenia) and EDIH Adria (Croatia) - national EDIH candidates

EIT Strategy 2021-2027

Increasing the regional impact for sustainable innovation ecosystems

# **INNO2MARE**

## Cross-border level

The North Adriatic Ports Association (NAPA) Joint Declaration 2021

Cooperation in implementation of "green port" and "smart port" policies and projects

INTERREG Slovenia-Croatia 2021-2027

Green, adaptive, sustainable, resilient and connected region

### ADRIATIC CROATIA

### National level

Croatian Development Strategy 2030

Digital transition, sustainable mobility

National Recovery and Resilience Plan

Sustainable green and digital economy

Smart Specialisation Strategy (S3)

Transport and mobility as a thematic priority area; ICT as a horizontal area

Strategy for Innovation Encouragement of Croatia

Triple Helix, access to finance, innovation value chains

Croatian Industrial Strategy

Strategic business-science-technology cooperation

Croatian Strategies for Energy, Low Carbon and Hydrogen

R&I and use of alternative fuels

# Regional level

Industrial Transition Planning for Adriatic Croatia 2021-2027

Smart industry, green and blue growth

Primorje-Gorski Kotar County Development Plan 2022-2027

Smart and green region with the focus on innovation ecosystems



# **INNO2MARE** activities

room management systems

Decision support system for automatic detection of obstacles in autonomous navigation

VR model of a ship engine room for enhanced safety on vessels

Cross-border joint R&I strategy

R&I pilot projects (TRL 3-7) Action and investment plans

Pilots and demonstrators design and roadmaps

Accompanying measures

Community engagement

Knowledge transfer

Training and talent attraction

1.000 participants

# Joint action and investment plan

Crossipoider joint 2.21 strateon & cost sens characteristics Three ration within EU, hational and regional policy framework eorganalities and needs **INNO2MARE** concept Visibility raising & exploitation

Transfer of best practices from the worldclass maritime innovation ecosystem

Community engagement, knowledge transfer, training and talent attraction Roadmans for pilot projects

R&I Dilor Drojects

# **INNO2MARE** impact

Stronger academiaindustry links

Developed true innovation culture

Higher participation success in Horizon Europe

Upgraded

capacities for

collaborative,

competitive R&I

Coordinated mobilisation of public and private funding

Improved international outreach of ecosystems