

PROJECT TRANSH2 TRANSITION TO HYDROGEN FUELLED CROSS-BORDER SEA- MOBILITY

TransH2 | University of Rijeka, Faculty of Maritime
Studies

Hybrid Workshop | via Garibaldi 64c, Monfalcone, Italy |
20th June 2024

OUTLINE

1. Basic information
2. Work plan
3. Project partners and roles
4. Project Activities
5. Activities undertaken so far



1. TRANSH2 – BASIC INFORMATION

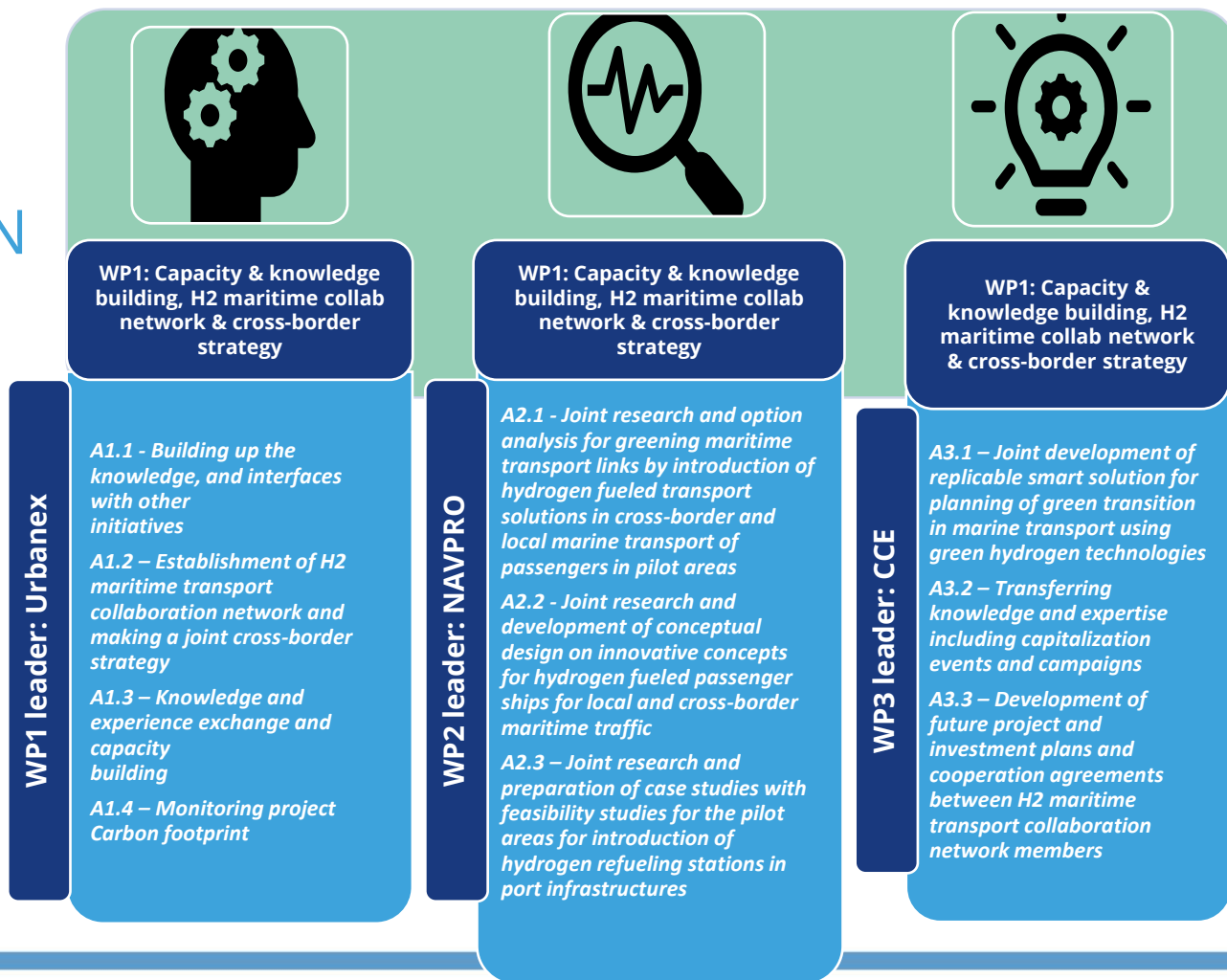
Project title	TransH2 (Transition to Hydrogen Fuelled Cross-border Sea-mobility)
Project duration	30 months
Start date	1st February 2024
End date	31st July 2026
Programme priority axis	Sustainable maritime and multimodal transport
Programme specific objective	3.1: Developing and enhancing sustainable, climate resilient, intelligent and intermodal national, regional and local mobility, including improved access to TEN-T and cross-border mobility

1. TRANSH2 – PROJECT'S OVERALL OBJECTIVE

➡ to enhance **sustainable cross-border sea-mobility** by demonstrating feasible solutions for application and usage of **zero emission fuels** (green hydrogen) in **cross-border and regional maritime transport routes** and transferring **innovative solutions** to port authorities, transport operators and other stakeholders **across the programme area**.



2. PROJECT WORK PLAN



3. PROJECT PARTNERS AND ROLES



PFRI – P1/LP



WP3
lead

CCE – P2



Agencija za razvoj Zadarske županije ZADRA NOVA
Zadar County Development Agency ZADRA NOVA

ZADRA NOVA – P3



WP1
lead

URBANEX – P4



MAREFVG – P5



WP2
lead

NAVPRO – P6



START – P7



UNITS – P8

4. PROJECT ACTIVITIES

WP1

Capacity & knowledge building, H2 maritime collab network & cross-border strategy

- **Output 1.1.**
Joint cross-border strategy for greening maritime transport routes in programme area
- **WP1 leader: URBANEX**


WP2

Greening maritime transport links, joint research, option analysis, conceptual design, case studies

- **Output 2.1**
Joint pilot actions for greening maritime transport routes in programme area
- **WP2 leader: NAVALPROGETTI**

WP3

Joint smart solution development & training schemes

- **Output 3.1**
Transnational training and educational schemes
 - **WP3 leader: CROATIAN CHAMBER OF ECONOMY**
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4. PROJECT ACTIVITIES

Responsible
Partner:
P3 - ZADRA
NOVA

Duration: 01.02. – 31.07.2024.

Activity 1.1 – Building up the knowledge, and interfaces with other initiatives

Foreseen deliverables:

- D.1.1.1 Joint report on policies, regulations, initiatives, financial mechanisms and best practices (TV: 1)
- D.1.1.2 Report on Joint communication campaign (TV: 1)

4. PROJECT ACTIVITIES

Responsible
Partner:

P2 - CCE

Activity 1.2 – Establishment of H2 maritime transport network and making a joint cross-border strategy

Foreseen deliverables:

- D.1.2.1 Joint stakeholders and beneficiaries' database (TV: 1)
- D.1.2.2 Joint report on questionnaire results (TV: 1)
- D.1.2.3 Stakeholders' matrix (TV: 1)
- D.1.2.4. Joint cross-border strategy (TV: 1)

Duration: 01.02.2024. – 31.01.2025.

4. PROJECT ACTIVITIES

Responsible
Partner:

P5 - mareFVG

Activity 1.3 – Knowledge and experience exchange and capacity building

Duration: 01.02.2024. – 31.01.2025.

Foreseen deliverable:

- D.1.3.1 Joint report on good practices collection (study visit to Norway) (TV: 1)
- D.1.3.2 Hybrid workshop conducted (TV: 1)

4. PROJECT ACTIVITIES

Responsible
Partner:
P7 - START
ROMAGNA

Activity 1.4 – Monitoring project Carbon footprint

Duration: 01.02.2024. – 31.07.2026.

Foreseen deliverable:

- D.1.4.1 Joint report on collaborative calculation of project carbon footprint and offsetting (TV: 1)

4. PROJECT ACTIVITIES

Responsible
Partner:

P8 – UNITS

Duration: 01.08.2024. – 31.01.2025.

Activity 2.1 – Joint research and option analysis for greening maritime transport links by introduction of hydrogen fueled transport solutions in cross-border and local marine transport of passengers in pilot areas

Foreseen deliverables:

- D.2.1.1 Joint report on analysis of maritime passenger routes for case-studies (TV: 1)
- D.2.1.2 Follow-up report from online workshop for use-case development (TV: 1)
- D.2.1.3 In-depth analysis and transport models for 3 use-cases (TV: 1)
- D.2.1.4 Option analysis for introduction of hydrogen fueled solutions in 3 use-cases (TV: 1)

4. PROJECT ACTIVITIES

WP2

Responsible
Partner:

P6 – NAVPRO

Duration: 01.02.2025. – 31.01.2026.

Activity 2.2 – Joint research and development of conceptual design on innovative concepts for hydrogen fueled passenger ships for local and cross-border maritime traffic

Foreseen deliverables:

- D.2.2.1 Mid-term external review (TV: 1)
- D.2.2.2 Report on optimal configuration for 2 different hydrogen fueled passenger vessels (TV: 1)
- D.2.2.3 Two small passenger vessel conceptual design for regional/cross-border connection (TV: 1)

4. PROJECT ACTIVITIES

Responsible
Partner:

P5 - mareFVG

Duration: 01.02.2025. – 31.01.2026.

Activity 2.3 – Joint research and preparation of case studies with feasibility studies for the pilot areas for introduction of hydrogen refueling stations in port infrastructures

Foreseen deliverables:

- D.2.3.1 Technical report on analysis of hydrogen fueling stations in existing port infrastructures (TV: 1)
- D.2.3.2 Cross-border port hydrogen refueling feasibility study (TV: 1)

4. PROJECT ACTIVITIES

Responsible
Partner:

LP - PFRI

Activity 3.1 – Joint development of replicable smart solution for planning of green transition in marine transport using green hydrogen technologies

Duration: 01.02. – 31.07.2026.

Foreseen deliverables:

- D.3.1.1 1 1 Joint report (handbook) of an intelligent solution for planning and replication of green transition (TV: 1)
- D.3.1.2 Presentation material for TransH2 solution and use-cases (TV: 1)

4. PROJECT ACTIVITIES

Responsible
Partner:

P2 - CCE

Activity 3.2 – Transferring knowledge and expertise including capitalization events and campaigns

Foreseen deliverables

- D.3.2.1 Training course material for TTE activities and joint educational scheme (TV: 1)

Duration: 01.02. – 31.07.2026.

4. PROJECT ACTIVITIES

Responsible
Partner:

P4 – Urbanex

Activity 3.3 – Development of future project and investment plans and cooperation agreements between H2 maritime transport collaboration network members

Duration: 01.02. – 31.07.2026.

Forseen deliverables:

- D.3.3.1 Pre-final external review (TV: 1)
- D.3.3.2 Investment data collection report (TV: 1)
- D.3.3.3 Investment catalogue and 1 Action plan (TV: 1)
- D.3.3.4 Follow-up joint report (presentation of investment plan to EU and national authorities) (TV: 1)
- D.3.3.5 Cooperation agreements (TV: 3)
- D.3.3.6 Follow-up joint report (presentation of investment plan to green hydrogen production promoters) (TV: 1)
- D.3.3.7 Follow up report for final high-level dissemination event (TV: 1)

5. ACTIVITIES UNDERTAKEN SO FAR...

PFRI

Project management handbook - finalized

Signing of Subsidy Contract – in progress!

ZADRA
NOVA

Communication activities - ongoing

CCE

D1.2.1. Database - finalized, uploaded to drive

D1.2.2. Report on the questionnaire - ongoing; data collection concluded on 16th June 2024, report will be finalized by 31st July 2024

mare
FVG

D.1.3.2 Hybrid workshop conducted



University of Rijeka, Faculty of Maritime Studies

Prof. Edvard Tijan, PhD – Project Manager
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Borana Vlastelić, MSc - Administrator



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