Green Inland Ports

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Pilot project - Enabling Sustainable Management and Development of inland ports

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Agenda

1. **Background of the project:**
    1. Policy context
    2. Objectives
    3. Scope
2. **Approach and methodology**
    a) **General approach**
    b) **Task 1**: Environmental Impacts and Energy Efficiency and Transition: draft action plan
    c) **Task 2**: Urban mobility and short-range IWT
    d) **Task 3**: Digitalisation
    e) **Task 4**: ESMS and pilot implementation in selected ports: draft action plan
    f) **Task 5**: Outreach activities
3. **Questions and AOB**

Our partners

ECORYS CE Delft Panteia DANUBE Erasmus University Rotterdam EICB

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1. Background of the project

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Policy context

- Pilot project study proposed by the **European Parliament**
- Inland ports play a crucial role in reducing transport emissions and enable a modal shift, by providing access to maritime, rail, inland waterway and last mile road transport

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Policy context

- **Sustainable & Smart Mobility Strategy: Flagship 2 Creating zero-emission airports and ports**

''Ports and airports are key for our international connectivity, for the European economy, and for their regions. In their transition to zero-emission nodes, the best practices followed by the most sustainable airports and ports must become the new normal and enable more sustainable forms of connectivity. Ports and airports should become multimodal mobility and transport hubs, linking all the relevant modes. This will improve air quality locally thereby contributing to improved health of nearby residents. Inland and sea ports have a great potential to become new clean energy hubs for integrated electricity systems, hydrogen and other low-carbon fuels, and testbeds for waste reuse and the circular economy.''

- **NAIADES III (action plan for 2021 – 2027)**

'''The Commission will launch a study on the impacts that the port activities of selected river and sea ports can have on the environment. The study will develop and implement specific tools, such as Environmental Management Systems, as well as port-specific action plans creating a nucleus for wide-scale roll-out of environmentally sustainable port management and operations.''

Objectives, scope and timeline

Objectives

- Identify and evaluate the factors affecting the sustainable development of inland ports
- Propose solutions for the implementation of green objectives paired with their economic development

Geographical scope

- All TEN-T ports
- Connecting seaports where inland waterway transport is concerned

Timeline

- November 2022 – November 2025

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2. Approach and methodology

General methodology and approach

Task 1 – Environmental impacts and Efficiency and Transition

- Document environmental effects, related legislation and which effects are not addressed & the impediments in implementing sustainable management and development

Task 2 – Urban mobility and Short-Range Inland Waterway Transport

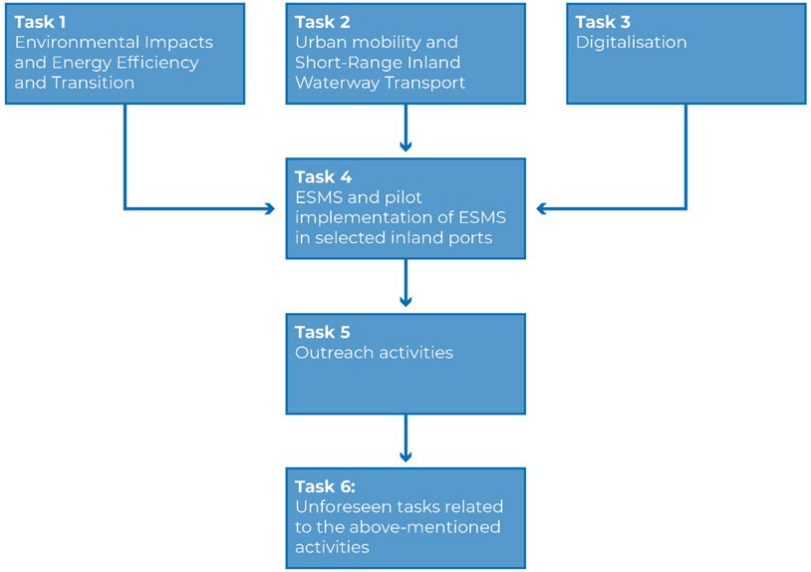
- Identify possibilities of adopting inland waterway transport for urban mobility and short-distance transport

Task 3 – Digitalisation

- Assess the role of digitalisation and propose solutions

Task 4 – ESMS and pilot implementation of ESMS in selected inland ports

- Pilot projects of several inland ports for implementing the Environmental and Sustainable Management Systems (ESMS) tools and implement coordinated actions for sustainable port management and operation



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Task 1 – Environmental Impacts and Energy Efficiency and Transition

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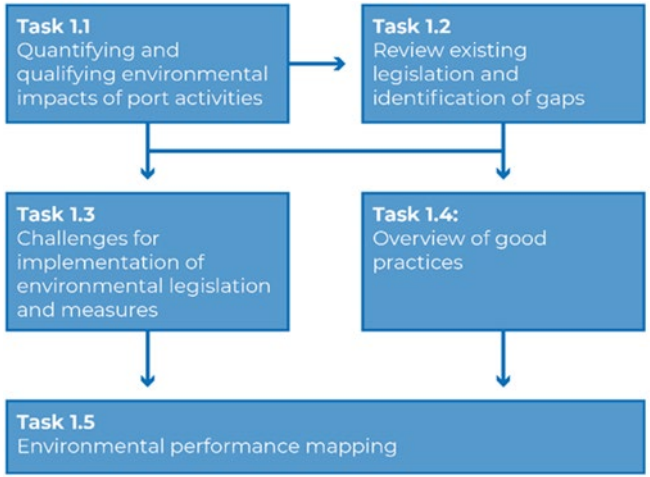
- Selection of **6 – 8 Case Study Ports** to quantify and qualify environmental impacts of port activities
  - Preliminary selection: Contstantza, Dortmund, Duisburg, Gyor-Gönyu, Paris, Rotterdam, Vienna, Zwolle
- Review existing legislation and identify possible gaps
  - EU legislation
  - Regional legislation (e.g., Rhine, Danube)
  - National legislation for selected case study ports
- Identification of **40 good practice examples**



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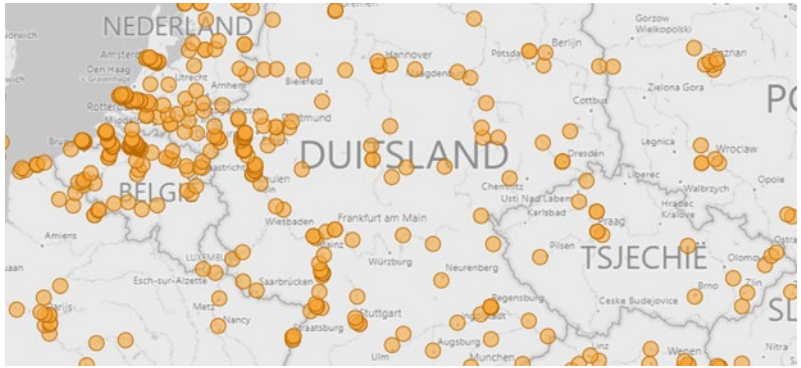
Task 1 - Environmental Impacts and Energy Efficiency and Transition

- **Environmental performance mapping**
  - Step 1 - Definition of assessment criteria
  - Step 2 - Validation of assessment criteria
  - Step 3 - Survey of inland ports
  - Step 4 - Mapping the results



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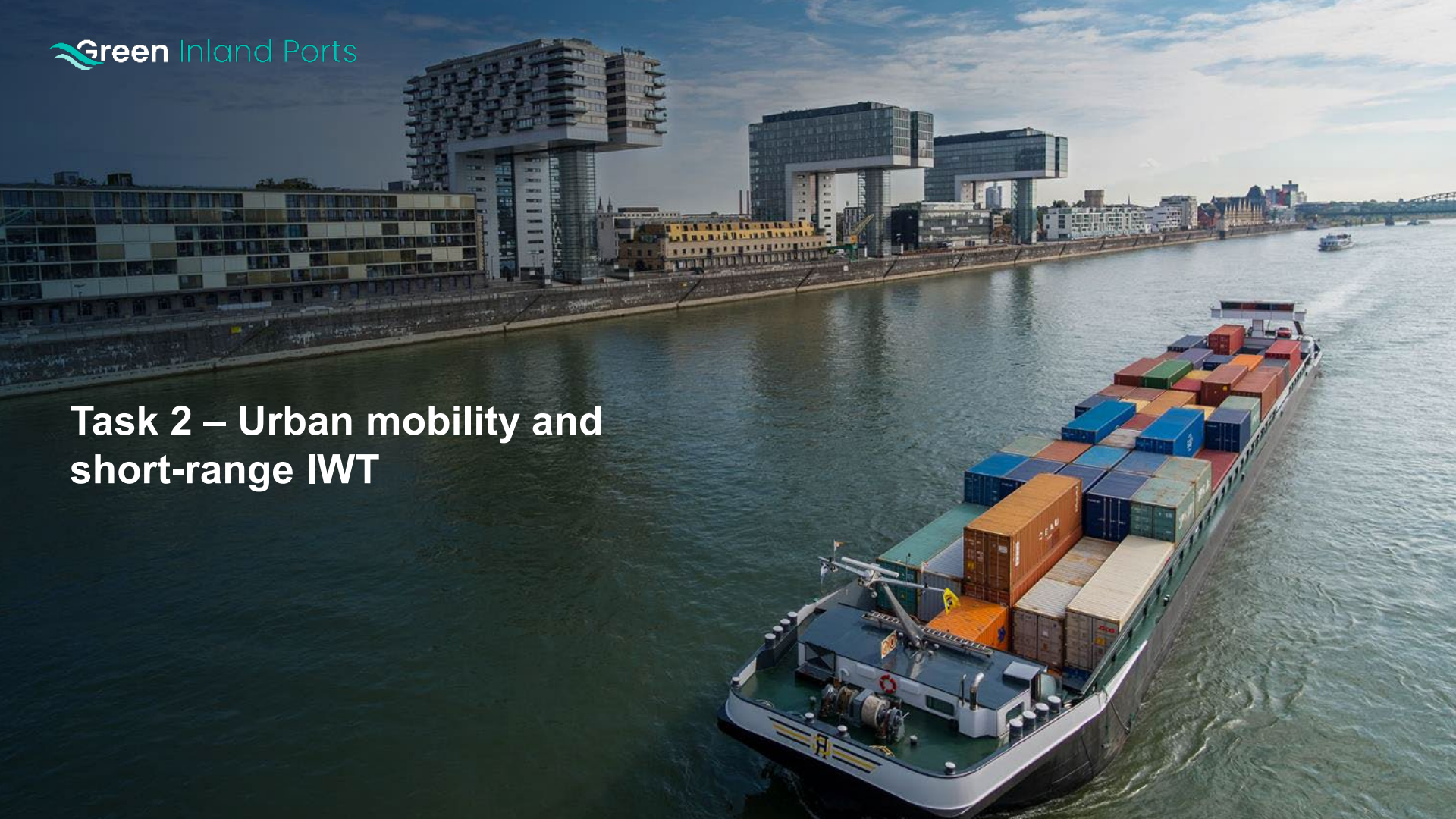
Task 2 – Urban mobility and short-range IWT



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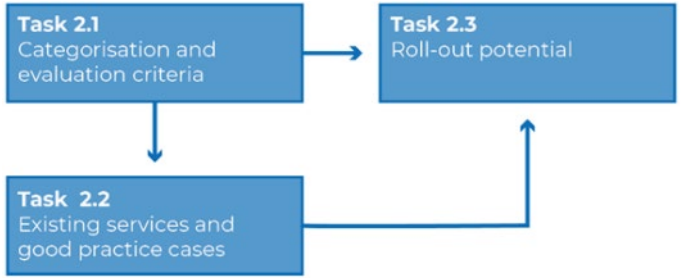
Task 2 - Urban mobility and short-range IWT

- Categorisation framework (first version next slide)
- Identification of existing initiatives over Europe, analysis of challenges and success factors
- Selection of **20 good practices** for in-depth analysis
  - Profiles and lessons learnt
  - Recommendations how to support the set-up of new services
- Assess the **roll-out potential**:
  - Potential new services provided by inland waterways transport
  - Barriers to its development



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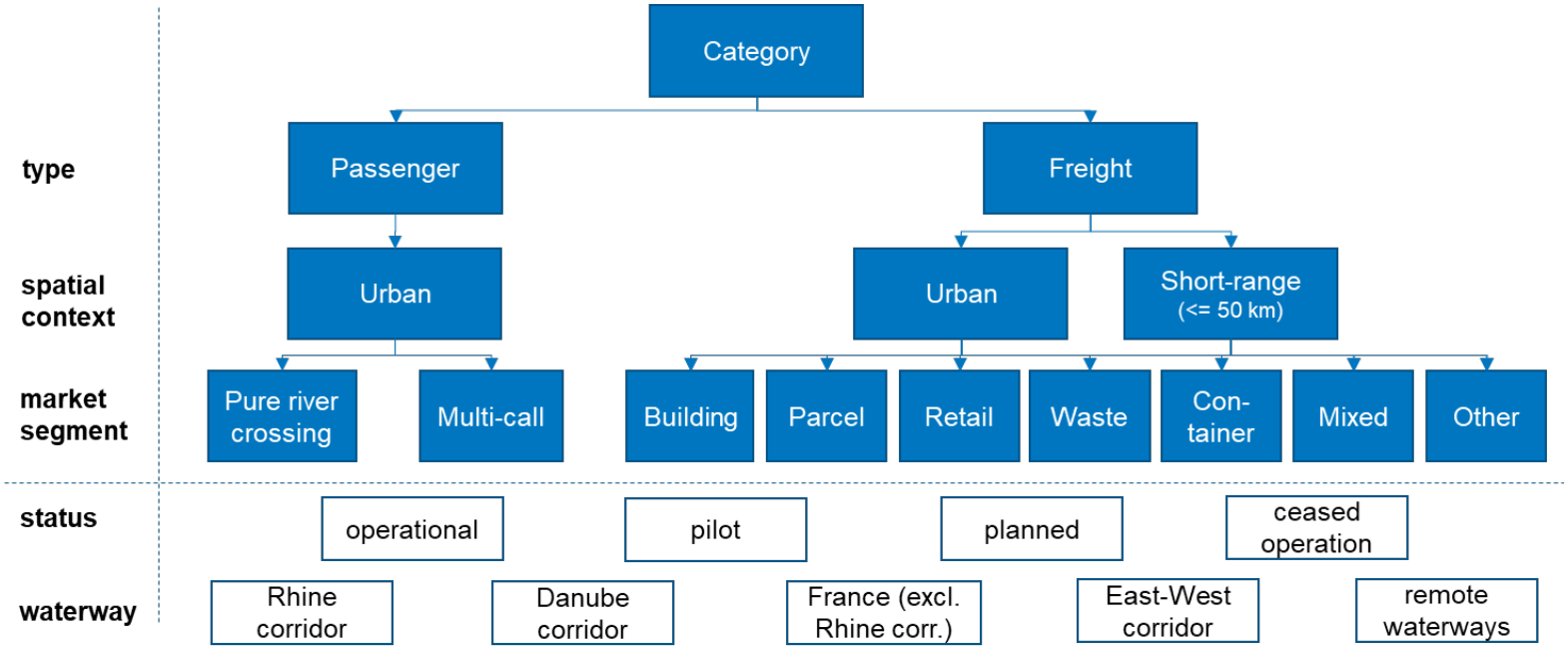
Draft categorisation



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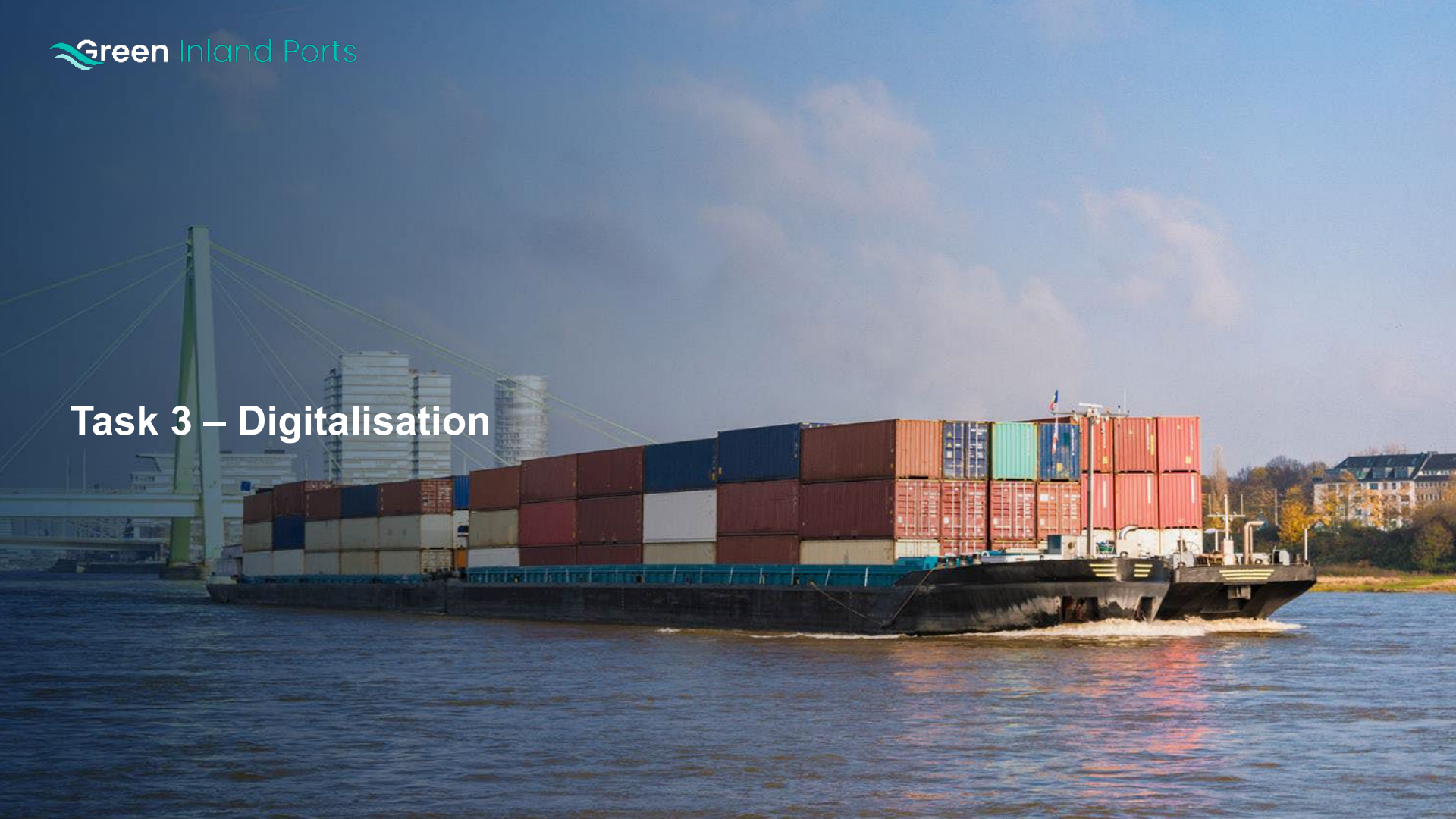
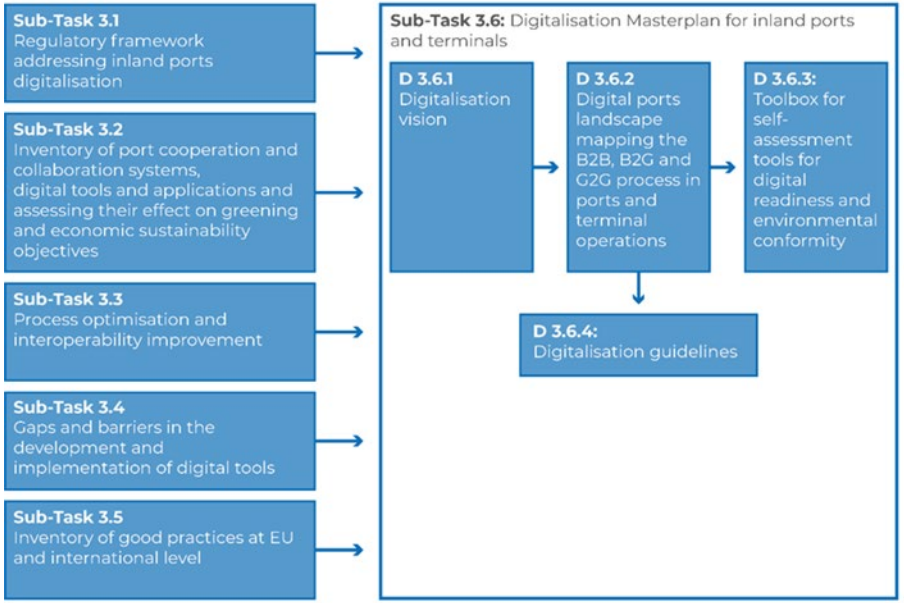
Task 3 – Digitalisation



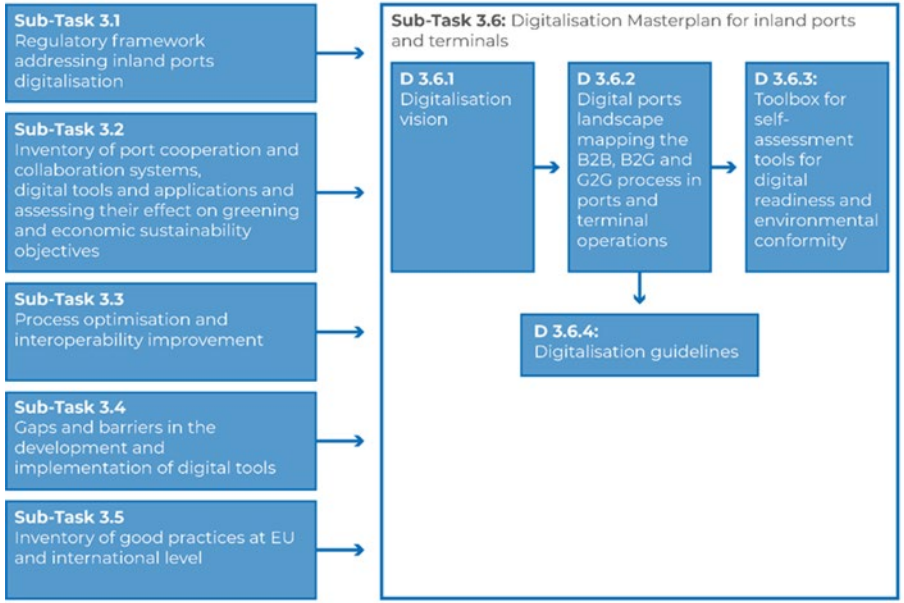
Task 3 - Digitalisation

- **Regulatory framework** addressing inland ports digitalisation
  - EU legislation
  - Regional legislation (e.g., Rhine, Danube)
  - National legislation where relevant
- **Inventory** of port cooperation and collaboration systems, digital tools and applications
- Inventory of **good practices** at EU and international level
  - minimum 10 good practices of EU inland ports
  - minimum 10 good practices at international level (such as in the UK, US, Canada, Asia & Middle East)



Task 3 - Digitalisation

- **Digitalisation masterplan** for inland ports and terminals
  - Digitalisation vision for inland ports and terminals
  - Digital ports landscape mapping
  - Digitalisation guidelines and comprehensive toolbox for inland ports and terminals, including self-assessment tools for digital readiness and environmental conformity
- **Strategy, roadmap and action plan** to realise digitalisation vision
  - Overall digitalisation developments
  - Smart Shipping and Smart Logistics



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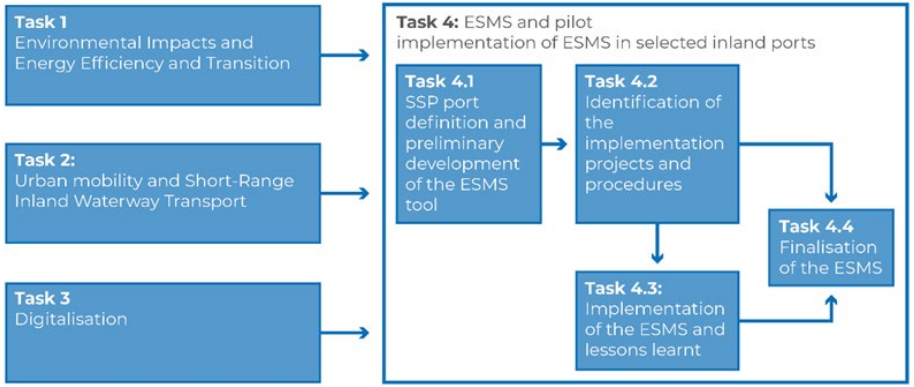
Task 4 – Environmental and Sustainable Management Systems (ESMS) and pilot implementation in selected ports

Task 4 - ESMS and pilot implementation in selected ports

- ESMS = Environmental and Sustainable Management Systems
- Outcomes Task 1 – 3 feed into Task 4
- Task 4 scheduled to start **Mid 2024**
- Identification of the implementation projects and procedures
  - Call for expression of interest
  - **10 pilot ports** where we will apply and test the ESMS tools
- Implementation of the ESMS and lessons learnt in pilot ports
  - Preparation of a toolkit and manuals
  - Webinars
- Finalisation of the ESMS
  - Based upon lessons learnt
  - Self-assessment tool



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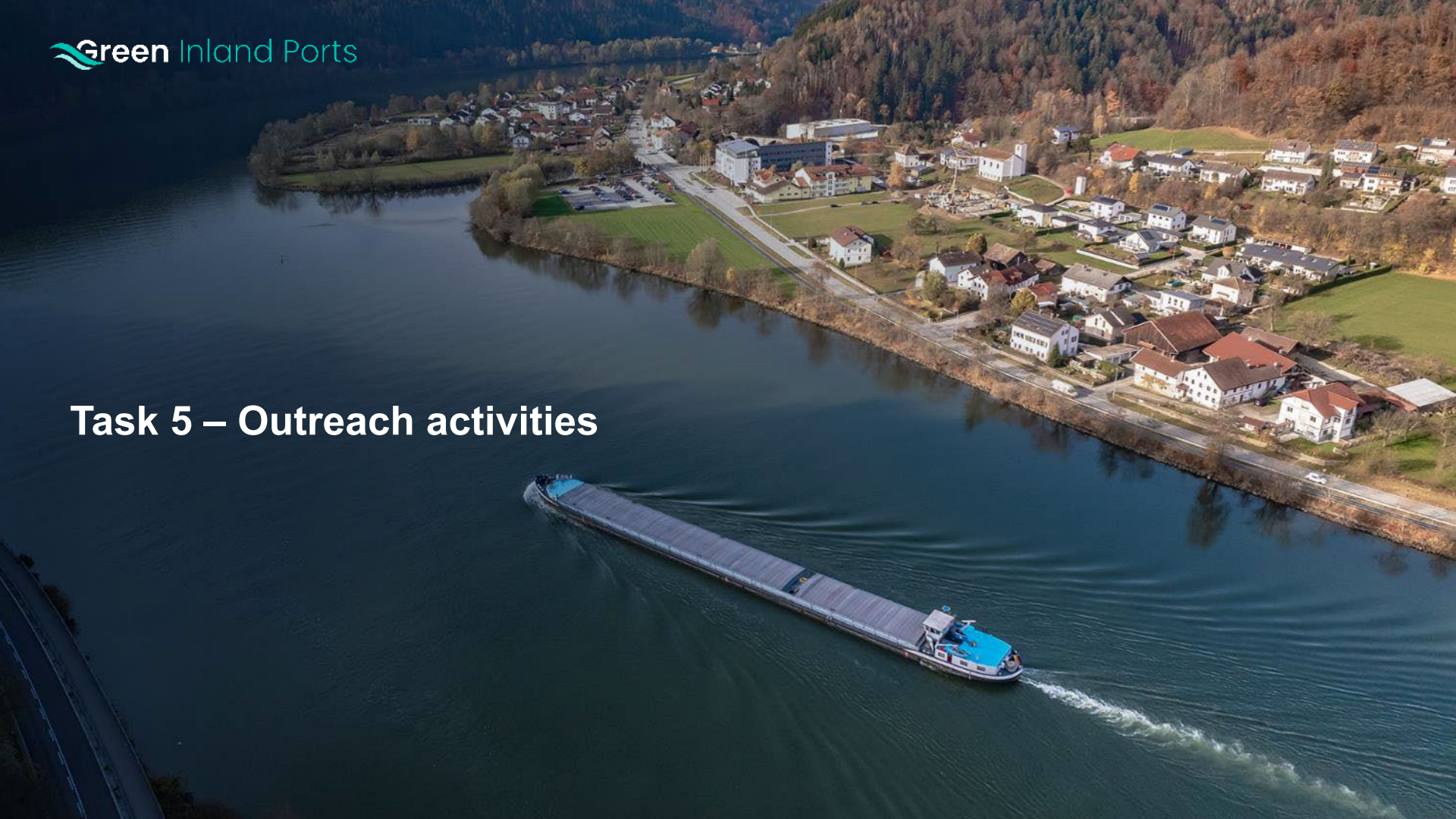
Task 5 – Outreach activities



Task 5 – Outreach activities

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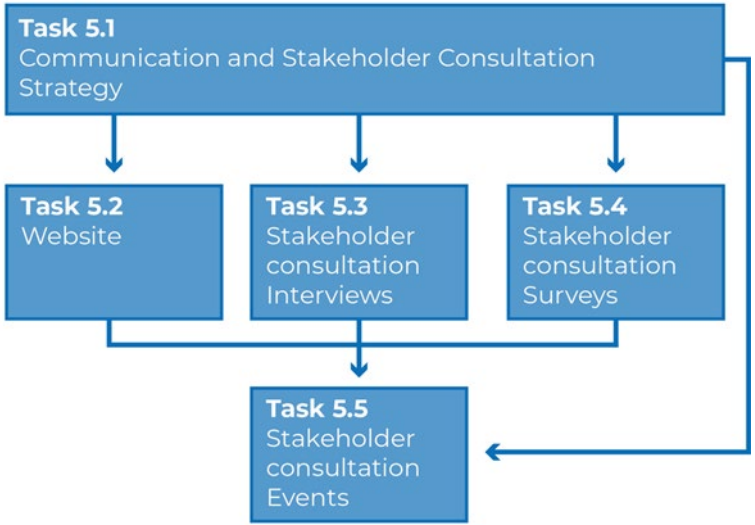
- Knowledge sharing and identification of best practices
- 3 **Survey** rounds in 3 years
  - Upcoming 1st Survey: Launch foreseen end of April
- Multiple **interview** rounds
  - Upcoming: First round of interviews May – early June
- 9 **regional workshops** in 3 years
  - Upcoming (yet to be confirmed definitely):
    - Workshop 1: MAGPIE General Assembly (21/22 September Wesel, Germany)
    - Workshop 2: EFIP Executive Committee (19-20th October 2023 – Belgrade)
- **Website** (to be launched soon)



Website (to be launched soon)

3. Questions and AOB

Contact details

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- Robert Rafael – Pro Danube
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4. Closure