



# Maritime Green Financing – Meeting of experts

---

MOVE/D1/2022-297

14/05/2024

Introduction to the study and the meeting of experts

---

Session 1: Identifying and addressing market gaps

---

Methodology

---

Results and discussion (part I)

---

Results and discussion (part II)

---

Session 2: Development of the database and the digital toolbox

---

Methodology

---

Results and discussion

---

Next steps

---

Closure of sessions 1 and 2

# CONTENTS

## Introduction to the study

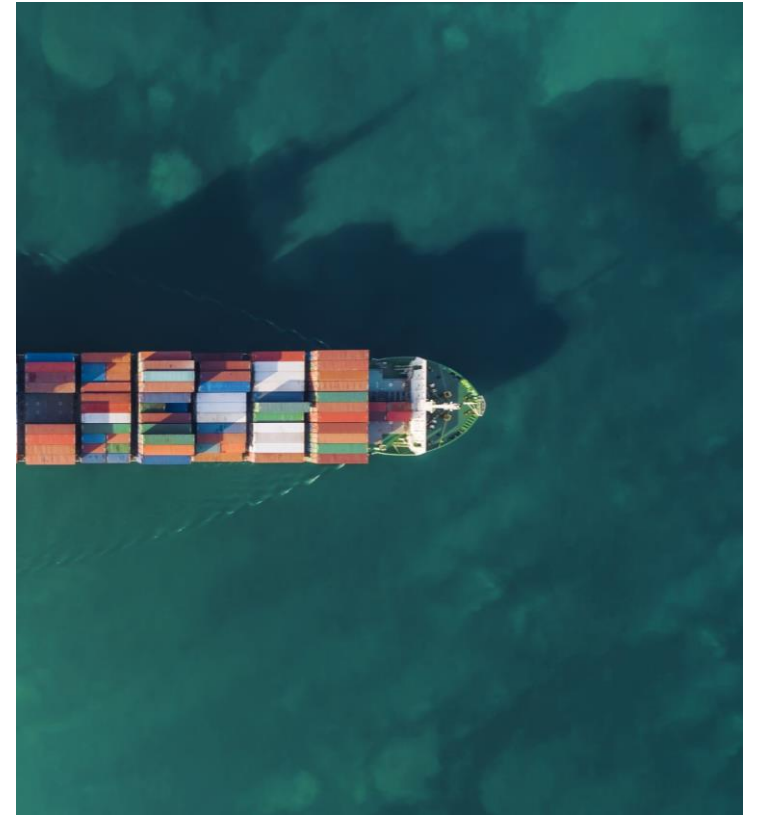
### Objectives

Improve the visibility and communicate the **availability of green financing options and opportunities** to shipping sector stakeholders

**Reduce the administrative burden** related to securing green financing for shipping projects

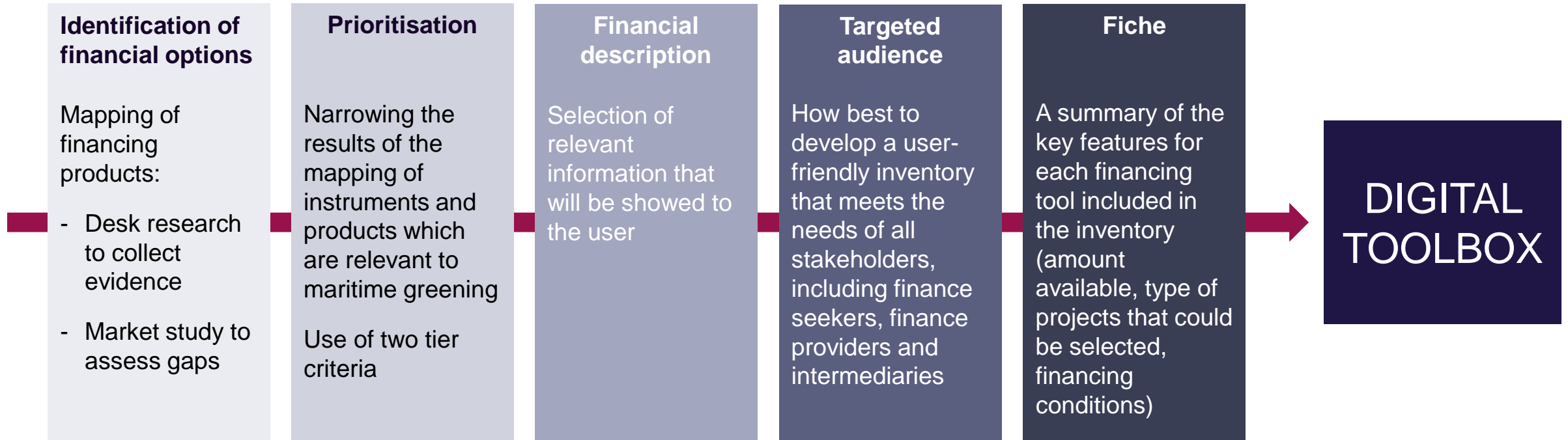
**Identify gaps in the availability and relevance of existing options** to finance investments in technological improvements, particularly for midcaps.

Define concrete options for shipbuilding and maritime equipment industry stakeholders to **access EU financing instruments**



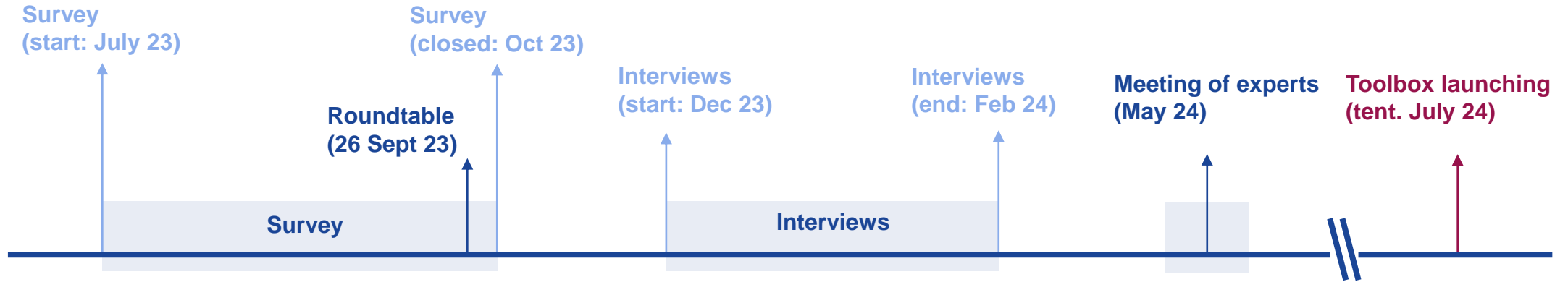
## Introduction to the study

### Approach



## Introduction to the study: stakeholder consultation activities

### Timeline of stakeholder consultation activities for this study



The consultation aimed to gather information around **three key topics**:

- Requirements and/or needs of the maritime sector concerning decarbonisation and access to finance
- Financing products to cover the needs and/or requirements from the maritime industry
- Application procedure and technical advisory support

In total, **62 complete responses** were received for the **survey**. However, not all respondents answered all questions. Thus, when discussing results, the number of respondents per question has been used to analyse findings.

Also, **12 interviews** have performed within the study with different stakeholders.

## Introduction to the meeting of experts: agenda

Section	Objective	Timing
<b>Session 1: Identifying and addressing market gaps</b>		
Introduction	Introduction to the study and to the objective of the session	10:00
Methodology	Introduction to the identification of market gaps and the development of the recommendations.	10:10
Results and discussion (part I)	Presentation of market gaps and recommendations, and discussion on these, structured as follows: <ul style="list-style-type: none"> <li>- Financial recommendations</li> <li>- Regulation, post-application procedures and capacity building</li> <li>- Communication and streamline</li> </ul>	10:15
<b>Lunch break</b>		12:00
Results and discussion (part II)		13:00
<b>Session 2: Development of the database and the digital toolbox</b>		
Introduction	Introduction to the objective of the session	13:50
Methodology	Introduction to the development of the database, the toolbox and the fiches	14:00
Results and discussion	Presentation of results and discussion focusing on the following: <ul style="list-style-type: none"> <li>- Mapping of financing products (database)</li> <li>- Structure of the toolbox (living inventory), particularly focusing on the fiches, their format and content.</li> </ul>	14:10
Next steps	Including information on the publication of the results and the launch of the toolbox.	14:20

Introduction to the study and the meeting of experts

---

**Session 1: Identifying and addressing market gaps**

---

Methodology

---

Results and discussion (part I)

---

Results and discussion (part II)

---

**Session 2: Development of the database and the digital toolbox**

---

Methodology

---

Results and discussion

---

Next steps

---

Closure of sessions 1 and 2

# CONTENTS

# Agenda

Section	Objective	Timing
<b>Session 1: Identifying and addressing market gaps</b>		
Introduction	Introduction to the study and to the objective of the session	10:00
Methodology	Introduction to the identification of market gaps and the development of the recommendations.	10:10
Results and discussion (part I)	Presentation of market gaps and recommendations, and discussion on these, structured as follows: <ul style="list-style-type: none"> <li>- Financial recommendations</li> <li>- Regulation, post-application procedures and capacity building</li> <li>- Communication and streamline</li> </ul>	10:15
<b>Lunch break</b>		12:00
Results and discussion (part II)		13:00



## Outline of the session

### Session 1: Identifying and addressing market gaps

01

#### Introduction

Setting the scene. Give context to the session and understand the focus of the discussion

02

#### Methodology

Explanation on how the recommendations were developed

03

#### Results and discussion (parts I and II)

Presentation and discussion on market gaps and recommendations



## Introduction to the objectives and scope of the session

---

### Session 1: Identifying and addressing market gaps

#### Background

Information gathered across the stakeholder engagement activities already held in this study was used to develop **targeted recommendations for ship financing and/or EU wide scrapping/renewal schemes**, ultimately aiming to improve the accessibility and availability of capital for decarbonisation of the maritime sector.

#### Objective

Present preliminary results and **gather feedback on the key market gaps** that have been identified in shipping financing and the **preliminary policy recommendations** formulated to address the identified gaps.

#### Focus of the discussion

- Gathering further **inputs on the relevance of the gaps identified**. Alternative approaches will be explored, including any nuances or additional factors that may impact the solutions put forward.
- Have a **better understanding** of the various aspects related to the market gaps and recommendations.

Introduction to the study and the meeting of experts

---

Session 1: Identifying and addressing market gaps

---

**Methodology**

---

Results and discussion (part I)

---

Results and discussion (part II)

---

Session 2: Development of the database and the digital toolbox

---

Methodology

---

Results and discussion

---

Next steps

---

Closure of sessions 1 and 2

# CONTENTS

## Approach to the development of the recommendations

1

### Mapping and characterisation of gaps and needs

#### Objective

Identification of areas necessitating intervention and gaps that may be addressed through recommendations

#### Steps

1. Process and review of information previously gathered
2. Characterisation of barriers and needs



2

### Formulation of recommendations

#### Objective

Formulate recommendations and targeted programmes to address the needs of different stakeholder groups in the maritime sector

#### Steps

1. Shortlisting of barriers and needs (*Pathway to recommendations*)
2. Formulation of detailed recommendations

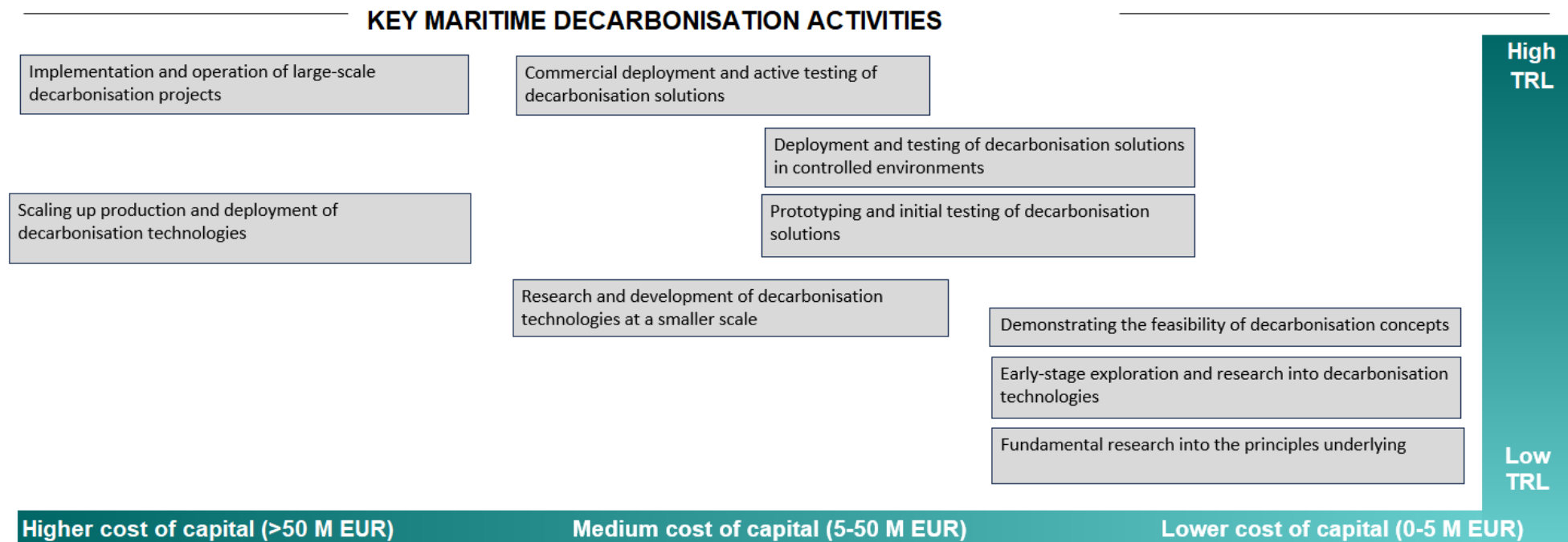
### Grouping of market gaps and recommendations

- **Financial:** This group encompasses challenges and recommendations related to financial aspects within the shipping sector and the ability of stakeholder to participate in financial markets.
- **Regulation, post-application and capacity building:** This category addresses obstacles and recommendations associated with administrative processes, regulatory frameworks, and the enhancement of skills and capabilities in the shipping industry.
- **Communication and streamline:** This group focuses on issues related to the dissemination of information and the optimisation of processes within the shipping industry.

# Approach to the development of the recommendations: financial recommendations

## Formulation of recommendations: financial recommendations

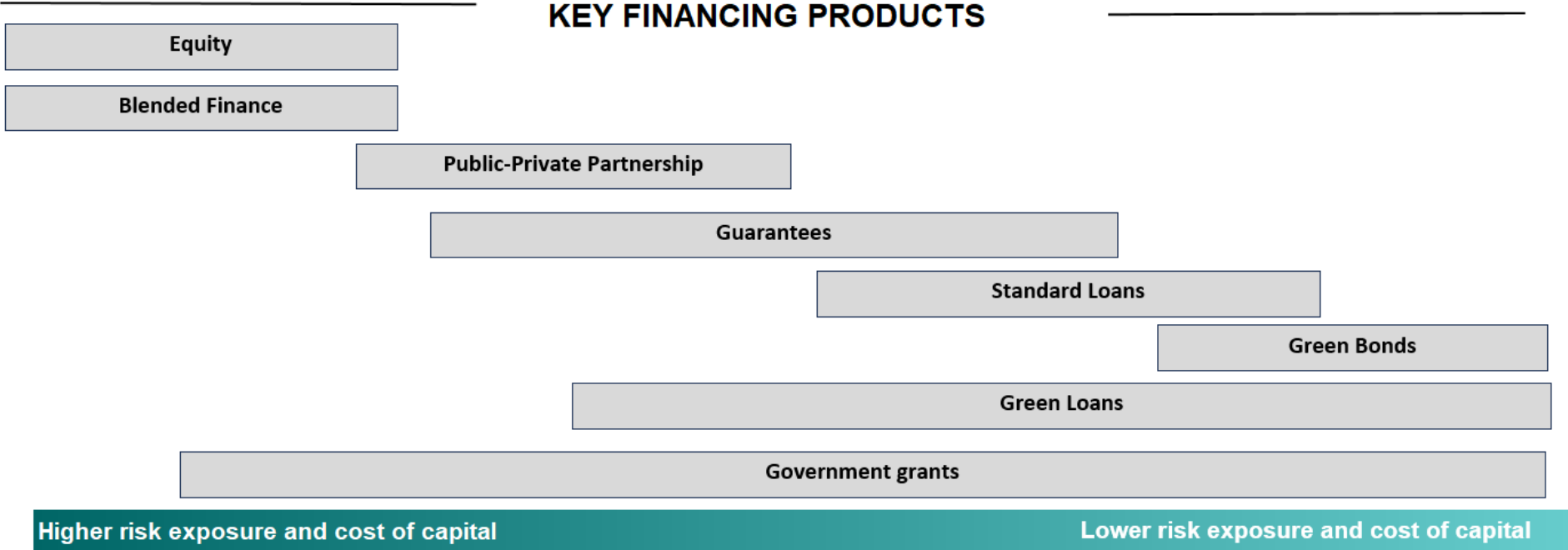
### Categorisation of decarbonisation investment activities



# Approach to the development of the recommendations: financial recommendations

## Formulation of recommendations: financial recommendations

Categorisation of financing instruments according to TRL level (High/Medium/Low) and level of capital investment (High/Medium/Low)



Introduction to the study and the meeting of experts

---

Session 1: Identifying and addressing market gaps

---

Methodology

---

**Results and discussion (part I)**

---

Results and discussion (part II)

---

Session 2: Development of the database and the digital toolbox

---

Methodology

---

Results and discussion

---

Next steps

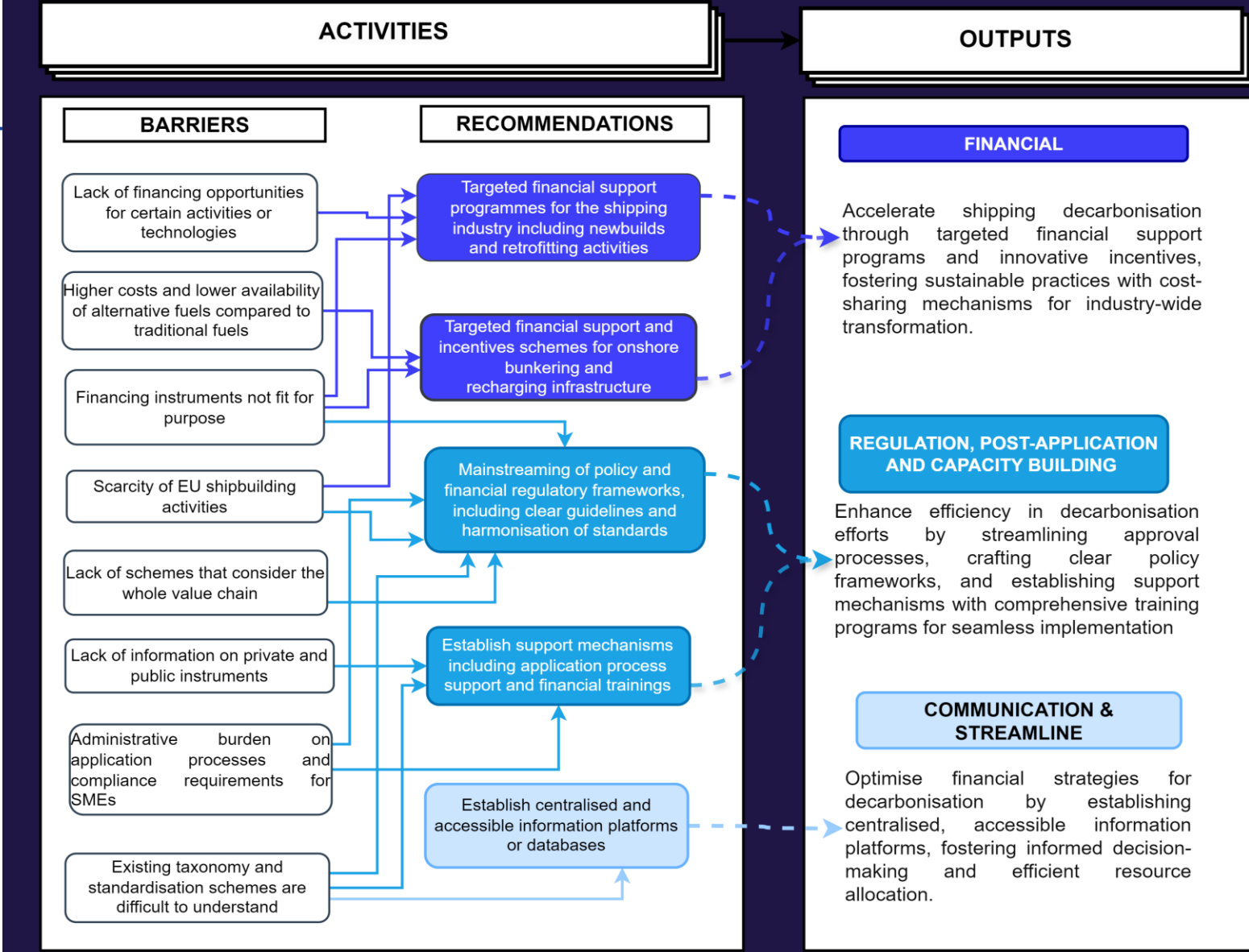
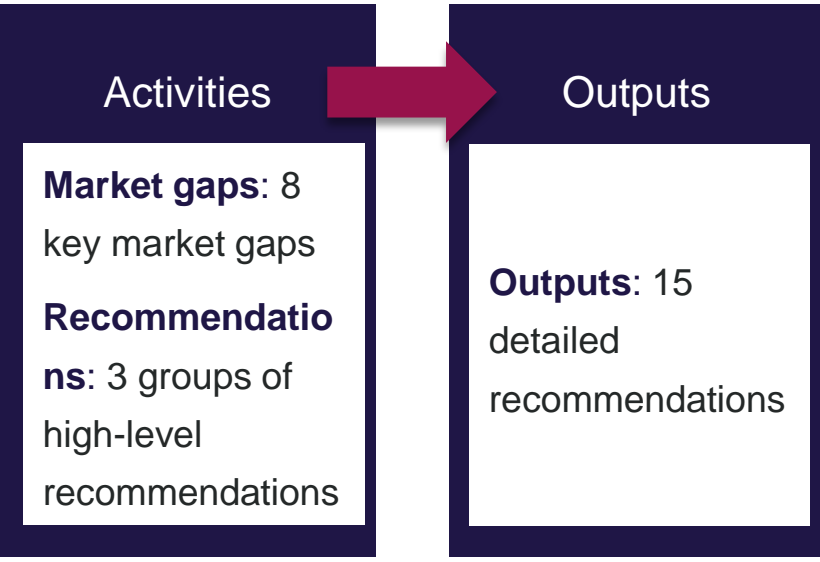
---

Closure of sessions 1 and 2

# CONTENTS

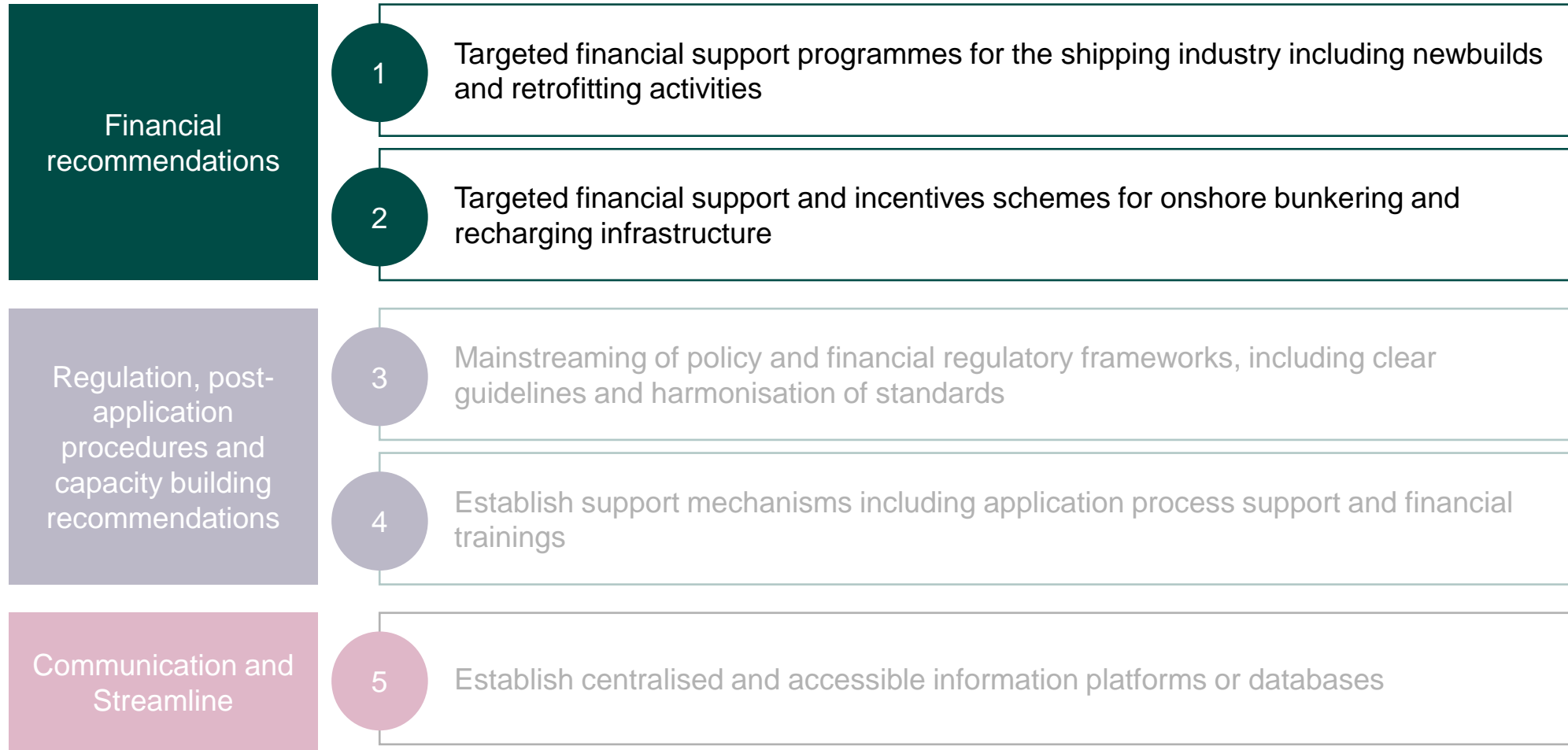


# Pathway to recommendations





## Pathway to recommendations



## Financial recommendations: (1) targeted financial support programmes

### Financial recommendations

1

Targeted financial support programmes for the shipping industry including newbuilds and retrofitting activities

### Identified market gaps

a

Lack of financing instruments for certain activities and/or technologies

**Lack of dedicated financial programmes** specifically targeted at addressing the financing gaps in R&D, emissions reduction, retrofit projects, and sector diversification within the maritime industry, offering grants, subsidies, or low-interest loans to incentivise investment and innovation in these areas.

b

Scarcity of EU-shipbuilding activities

There exists a **gap in financing and guaranteeing construction periods** within the maritime industry, particularly in shipbuilding. This gap poses a significant challenge for companies involved in these sectors, as it hinders their ability to secure finance and ensure timely completion of construction projects.

c

Financing products not fit for purpose

**Current financing tools often adopt a one-size-fits-all approach**, failing to accommodate the diverse needs of the shipping industry. Given the multidimensional nature of transport, including a flexible approach to technology criteria for finance is essential, recognising that 'one size does not fit all' in this sector.

## Financial recommendations: (1) targeted financial support programmes

### Financial recommendations

1

Targeted financial support programmes for the shipping industry including newbuilds and retrofitting activities

## 01 Bridging the innovation financing gap

This programme will offer **grants** to innovative maritime projects, prioritising **mid-level TRL innovative systems** such as wind propulsion, which have the potential to substantially reduce emissions but face challenges in attracting investment due to their experimental nature.

It will also introduce a **quasi-equity approach**, providing **finance in exchange for ownership stakes** linked to project success, aiming to support prototyping and testing of decarbonisation solutions.

## 02 Early-stage demonstration and testing

This programme will offer a **blended finance approach** that combines concessional **government funding with private sector capital** to support scaling up emission reduction measures in the maritime sector, filling financial gaps for established companies and mitigating risks associated with **deploying decarbonisation technologies**.

This approach aims to facilitate the successful scaling up and long-term sustainability of projects by providing both financial resources and expertise from private investors.

## Financial recommendations: (1) targeted financial support programmes

### Financial recommendations

1

Targeted financial support programmes for the shipping industry including newbuilds and retrofitting activities

### 03 Retrofitting existing vessels

The programme will provide **grants** to maritime companies for **retrofitting projects** aimed at cutting greenhouse gas emissions, alongside a **quasi-equity approach** where the programme may take **ownership stakes in exchange for financing**, with returns linked to project success.

Targeting **High TRL projects** (9-7), it aims to **deploy and test decarbonisation solutions** such as emission reduction technologies and alternative fuels in existing vessels.

### 04 Fundamental research and feasibility

The programme will provide **non-repayable grants** to companies across **various maritime sectors**, particularly targeting those often **deemed risky by financial institutions**.

Focusing on projects demonstrating decarbonisation feasibility, early-stage exploration of technologies, and fundamental research, it aims to support developments typically at **Low TRL stages** (3-1) requiring financial backing for **advancement and commercialisation**.

## Financial recommendations: (1) targeted financial support programmes

### Financial recommendations

1

Targeted financial support programmes for the shipping industry including newbuilds and retrofitting activities

## 05 Bridging the shipbuilding financing gap:



This programme will offer **financial guarantees** to companies undertaking **large-scale decarbonisation projects** in the maritime industry, particularly in **shipbuilding activities with High TRL**. These guarantees provide assurance to lenders and investors, mitigating financial risks during construction period and promoting investment in decarbonisation.

Terms will require shipbuilding activities to be conducted within the EU, aligning with EU objectives and supporting local industry.

## Financial recommendations: (1) targeted financial support programmes

### Financial recommendations

1

Targeted financial support programmes for the shipping industry including newbuilds and retrofitting activities

## 06 Specialised maritime financing and calls:

Dedicated financial opportunities should be created for the maritime sector, offering tailored financial support to vessel owners and operators transitioning to sustainable practices.

These opportunities should be adaptable to accommodate various factors, such as individual vessel characteristics, remaining service life, and the dynamic nature of the industry but remain flexible to effectively address the diverse needs of the shipping industry

## 07 Specialised financing for the maritime decarbonisation from traditional banks:

This programme will provide **standard loans** tailored for **financing new builds and retrofitting activities** in the maritime sector, offering flexible repayment terms to accommodate the industry's cyclical nature, including grace periods and structured schedules aligned with revenue streams.

Projects demonstrating significant environmental impact and alignment with sustainability criteria will be prioritised, with a streamlined application process ensuring accessibility to financing for eligible maritime decarbonisation initiatives. Borrowers will receive expert advisory support for project evaluation, risk assessment, and technical considerations

## Financial recommendations: (1) targeted financial support programmes

### Financial recommendations

1

Targeted financial support programmes for the shipping industry including newbuilds and retrofitting activities



### Discussion focus

#### 1. Identified market gaps and associated financial needs:

- Do you agree with the market gaps and identified needs? Are these representative of the needs for maritime industry?
- Are there any other gaps or areas that should also be considered or that might require further clarification?

#### 2. Recommendations

- What are your views concerning the categorisation of investment activities and financing products? Are there any adjustments or enhancements that you could suggest to better align with the needs of the maritime sector?
- Are the main/support products considered aligned with your views/experience? Is the scope aligned with the needs of the industry?
- How do you envision integrating these recommendations into the current framework to address the identified gaps more comprehensively and effectively?

## Financial recommendations: (2) financial support for onshore bunkering and recharging infrastructure

### Financial recommendations

2

Targeted financial support and incentives schemes for onshore bunkering and recharging infrastructure

### Identified market gaps

a

Higher costs and lower availability of alternative fuels when compared to conventional fuels

There is a need to address the financial requirement to bridge the fuel cost gap, which poses a significant challenge for financing institutions. Additionally, fuel production, especially for alternative fuels like hydrogen and biofuels, necessitates substantial investment in infrastructure, technology development, and scaling up production capacity

b

Financing products not fit for purpose

Current financing tools often adopt a one-size-fits-all approach, failing to accommodate the diverse needs of the shipping industry. Given the multidimensional nature of transport, including a flexible approach to technology criteria for finance is essential, recognising that 'one size does not fit all' in this sector.



## Financial recommendations: (2) financial support for onshore bunkering and recharging infrastructure

### Financial recommendations

2

Targeted financial support and incentives schemes for onshore bunkering and recharging infrastructure

## 08 Finance for fuel production

This programme will provide **green loans** specifically designed for companies engaged in **alternative fuel production**, with a particular emphasis on **hydrogen, biofuels and power generation**.

Aimed at addressing financing requirements for infrastructure development, technology innovation, and expanding production capacity, the initiative encompasses support for investment in infrastructure, technology advancement, and the incorporation of renewable electricity for fuel production.

## 09 Finance for bunkering infrastructure

This programme will offer **green loans** dedicated to financing the establishment of **infrastructure for producing and distributing alternative fuels** within the maritime sector.

The loans will be specifically aimed at projects focused on expanding production and implementing decarbonisation technologies operating at a High TRL (6-4), such as ammonia and hydrogen bunkering facilities, alongside renewable energy infrastructure.

## Financial recommendations: (2) financial support for onshore bunkering and recharging infrastructure

### Financial recommendations

2

Targeted financial support and incentives schemes for onshore bunkering and recharging infrastructure

## 10 Closing the alternative fuels cost gap

Under this programme, vessel operators would enter into **long-term contracts with fuel suppliers**, which would guarantee a **fixed price or price differential** for **cleaner fuels** over a specified period. The contracts provide stability and predictability in fuel prices, shielding vessel operators from price volatility associated with traditional fuel markets

A **blended finance approach** could also be employed, leveraging public and private sector finance to provide **guarantees or risk-sharing mechanisms**, ensuring lenders and investors against potential losses. Guarantees could cover aspects such as fuel price differentials or project performance, making investments in cleaner fuel projects more attractive to financial institutions.

Governmental support, such as subsidies or grants, could further incentivise the adoption of cleaner fuels by offsetting costs, especially for SMEs

## Financial recommendations: (2) financial support for onshore bunkering and recharging infrastructure

### Financial recommendations

2

Targeted financial support and incentives schemes for onshore bunkering and recharging infrastructure

## 11 Specialised maritime financing and calls

Dedicated financing opportunities should be created for the maritime sector, offering tailored financial support to alternative fuel producers and infrastructure developers.

These opportunities should be adaptable to accommodate various factors, such as individual vessel specifications, operational requirements, and regional variances in infrastructure availability but remain flexible to effectively address the diverse needs of the shipping industry

## 12 Maritime decarbonisation financing from traditional banks

Within this programme, traditional banks will establish financial derivatives, such as futures or options contracts, to hedge against price fluctuations and ensure stability in operating costs related to alternative fuels.

Also, they could offer guarantees or risk-sharing mechanisms to attract investors and mitigate financial risks, while governmental support, like subsidies or grants, could incentivise the adoption of cleaner fuels.

## Financial recommendations: (2) financial support for onshore bunkering and recharging infrastructure

### Financial recommendations

2

Targeted financial support and incentives schemes for onshore bunkering and recharging infrastructure



### Discussion focus

#### 1. Identified market gaps and associated financial needs:

- Do you agree with the market gaps and identified needs? Are these representative of the needs for maritime industry?
- Are there any other gaps or areas that should also be considered or that might require further clarification?

#### 2. Recommendations

- What are your views concerning the categorisation of investment activities and financing products? Are there any adjustments or enhancements that you could suggest to better align with the needs of the maritime sector?
- Are the main/support products considered aligned with your views/experience? Is the scope aligned with the needs of the industry?
- How do you envision integrating these recommendations into the current framework to address the identified gaps more comprehensively and effectively?

# Lunch break

---

12:00 – 13:00

Introduction to the study and the meeting of experts

---

Session 1: Identifying and addressing market gaps

---

Methodology

---

Results and discussion (part I)

---

**Results and discussion (part II)**

---

Session 2: Development of the database and the digital toolbox

---

Methodology

---

Results and discussion

---

Next steps

---

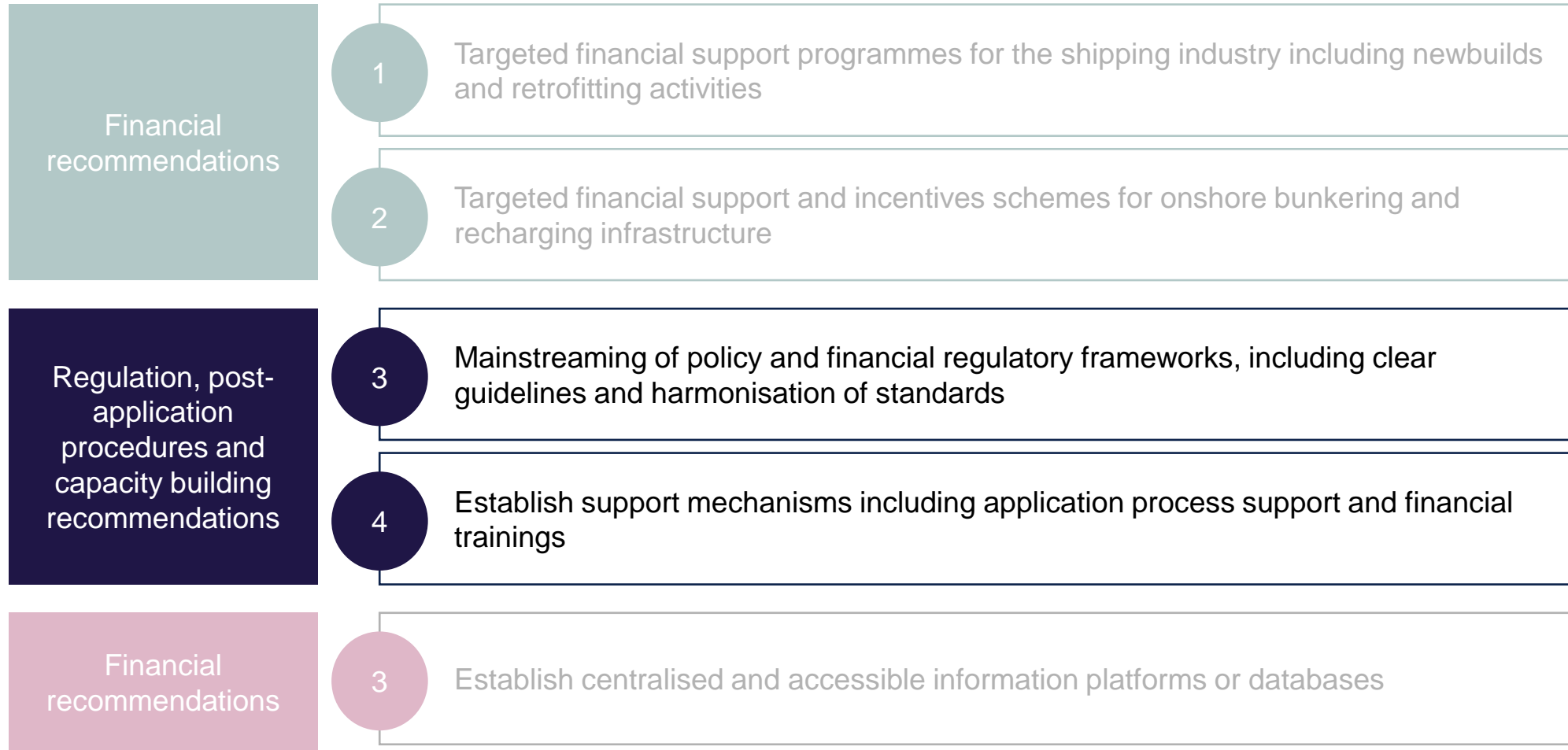
Closure of sessions 1 and 2

# CONTENTS

## Agenda

Section	Objective	Timing
<b>Session 1: Identifying and addressing market gaps</b>		
Introduction	Introduction to the study and to the objective of the session	10:00
Methodology	Introduction to the identification of market gaps and the development of the recommendations.	10:10
Results and discussion (part I)	Presentation of market gaps and recommendations, and discussion on these, structured as follows: <ul style="list-style-type: none"> <li>- Financial recommendations</li> <li>- Regulation, post-application procedures and capacity building</li> <li>- Communication and streamline</li> </ul>	10:15
<b><i>Lunch break</i></b>		12:00
<b>Results and discussion (part II)</b>		13:00

## Pathway to recommendations





## Regulation, post-application procedures and capacity building recommendations

### Regulation recommendations

3

Mainstreaming of policy and financial regulatory frameworks, including clear guidelines and harmonisation of standards

### Identified market gaps

a

Existing taxonomy and standardisation schemes are difficult to understand

Stakeholders in the maritime industry face challenges understanding the various taxonomies used in the sector. This lack of understanding complicates the financing process, highlighting the need for clearer, more uniform standards to facilitate smoother interactions and improve access to funding.

b

Lack of schemes that consider the whole value chain

The shipping industry faces the absence of comprehensive schemes that address the entire value chain. Instead, interventions often target specific segments, neglecting the interconnected nature of shipping operations.

c

Administrative burden on application processes and compliance requirements for SMEs

SMEs in the maritime sector face hurdles accessing finance due to complex application processes including extensive reporting and compliance demands. Limited resources hinder their ability to navigate these challenges independently.

## Regulation, post-application procedures and capacity building recommendations: discussion

### Regulation recommendations

3

Mainstreaming of policy and financial regulatory frameworks

### 13 Mainstreaming policy and financial regulatory frameworks

Simplifying existing taxonomy and standardisation schemes by restructuring categories and using clear, user-friendly language to make them easier to understand and apply in practice.

By streamlining categories and using straightforward language, users can more readily grasp the concepts, resulting in improved implementation and uptake of these frameworks.

### 14 Training programmes for evaluation and bidder teams

Develop targeted training sessions or workshops designed for evaluation teams operating within the maritime sector, providing in-depth knowledge of industry-specific dynamics.

These sessions will offer comprehensive insights into emerging market trends, cutting-edge technological developments, and effective commercialisation strategies, equipping evaluators with the expertise needed to critically assess proposals across the whole value chain

## Financial recommendations: (2) financial support for onshore bunkering and recharging infrastructure

### Regulation recommendations

3

Mainstreaming of policy and financial regulatory frameworks

## 15 Establish support mechanisms

Implementing support mechanisms like financial advisory services or mentorship programs can significantly benefit SMEs in the maritime sector.

These initiatives will offer vital guidance on application procedures, financial planning, and compliance requirements, equipping SMEs with the necessary tools to navigate the complex financial landscape effectively.

By improving access to finance and enhancing competitiveness, SMEs can thrive and contribute to the overall growth and sustainability of the maritime industry.

## Regulation, post-application procedures and capacity building recommendations: discussion

### Regulation recommendations

3

Mainstreaming of policy and financial regulatory frameworks, including clear guidelines and harmonisation of standards

4

Establish support mechanisms including application process support and financial trainings



### Discussion focus

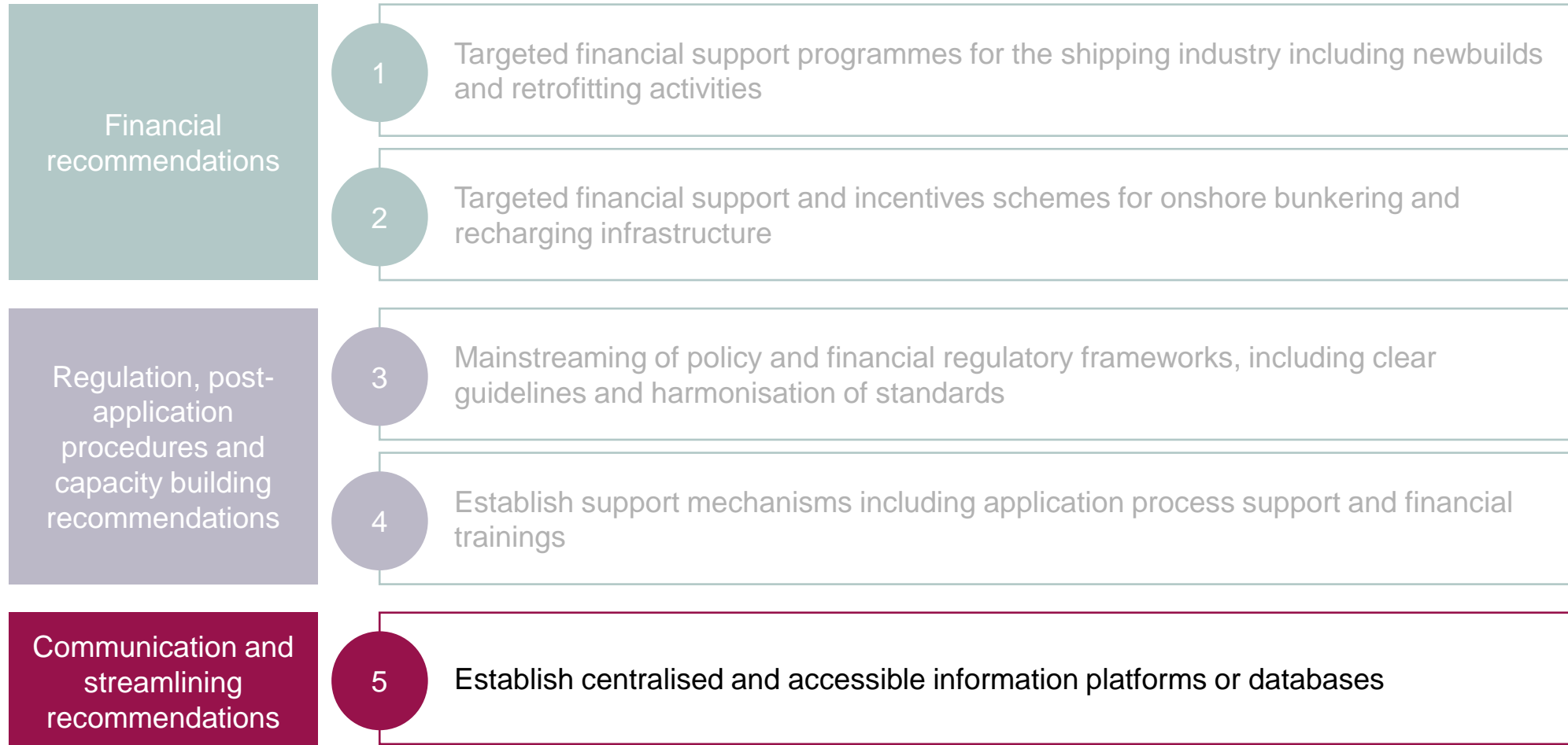
#### 1. Identified market gaps and associated needs:

- Do you agree with the market gaps and identified needs? Are these representative of the needs for maritime industry?
- Are there any other gaps or areas that should also be considered or that might require further clarification?

#### 2. Recommendations

- What are your views concerning the recommendations:
  - **mainstreaming of policy and financial regulatory frameworks**, including clear guidelines and harmonisation of standards?
  - establish **support mechanisms** including application process support and financial trainings?
- Are there any other recommendations that should be considered to address the identified gaps and needs?

## Pathway to recommendations



## Communication and streamlining recommendations

### Communication and streamlining recommendations

5

Establish centralised and accessible information platforms or databases

### Identified market gaps

**a** Lack of industry understanding of the existing taxonomy and standardisation schemes

The maritime industry faces challenges understanding the taxonomies used in financing applications. This lack of understanding complicates the financing process, highlighting the need for clearer, more uniform standards to facilitate smoother interactions and improve access to funding.

**b** Lack of information on private and public financing products

The maritime industry faces challenges due to a lack of clear and accessible information on public, EU, and private financing options. Essential details such as interest rates and repayment terms are often unavailable online, making it difficult for stakeholders to make informed financing decisions and secure funding for maritime projects.

## Communication and streamlining recommendations

### 16 Establish centralised and accessible information platforms or databases

Developing centralised platforms or databases is crucial to streamline access to financing options within the maritime sector.

These platforms would serve as comprehensive repositories, offering detailed information on available financing options, eligibility criteria, and application processes.

By consolidating resources in one accessible location, stakeholders can efficiently navigate the financial landscape, ensuring easier access to funding opportunities and fostering greater participation in the industry's growth and sustainability initiatives.

## Communication and streamline recommendations: discussion

### Communication and streamlining recommendations

5

Establish centralised and accessible information platforms or databases



### Discussion focus

#### 1. Identified market gaps and associated needs:

- Do you agree with the market gaps and identified needs? Are these representative of the needs for maritime industry?
- Are there any other gaps or areas that should also be considered or that might require further clarification?

#### 2. Recommendations

- What are your views concerning the recommendation 'establish centralised and accessible information platforms or databases'?
- Are there any other recommendations that should be considered to address the identified gaps and needs?



Introduction to the study and the meeting of experts

---

Session 1: Identifying and addressing market gaps

---

Methodology

---

Results and discussion (part I)

---

Results and discussion (part II)

---

**Session 2: Development of the database and the digital toolbox**

---

Methodology

---

Results and discussion

---

Next steps

---

Closure of sessions 1 and 2

# CONTENTS

## Agenda

Section	Objective	Timing
<b>Session 2: Development of the database and the digital toolbox</b>		
Introduction	Introduction to the objective of the session	13:50
Methodology	Introduction to the development of the database, the toolbox and the fiches	14:00
Results and discussion	Presentation of results and discussion focusing on the following: <ul style="list-style-type: none"> <li>- Mapping of financing products (database)</li> <li>- Structure of the toolbox (living inventory), particularly focusing on the fiches, their format and content.</li> </ul>	14:10
Next steps	Including information on the publication of the results and the launch of the toolbox.	14:20
Closure of sessions 1 and 2		

## Introduction to the objectives and scope of the session

### Session 2: Development of the database and the digital toolbox

Improve the visibility and communicate the **availability of green financing options and opportunities** to shipping sector stakeholders

**Reduce the administrative burden** related to securing green financing for shipping projects

**Identify gaps in the availability and relevance of existing options** to finance investments in technological improvements, particularly for midcaps.

Define concrete options for shipbuilding and maritime equipment industry stakeholders to **access EU financing instruments**

#### Digital toolbox

##### Targeted audience

How best to develop a user-friendly inventory that meets the needs of all stakeholders, including finance seekers, finance providers and intermediaries

##### Fiche

A summary of the key features for each financing tool included in the inventory (amount available, type of projects that could be selected, financing conditions)

## Introduction to the objectives and scope of the session

---

### Session 2: Development of the database and the digital toolbox

#### Background

A **database of maritime financing opportunities** has been developed from information gathered through a comprehensive literature review and stakeholder engagement activities. This database, derived from publicly accessible information sources, will form the basis of a **digital toolbox**, which aims to enhance the visibility and accessibility of financing opportunities for the decarbonisation of the maritime sector.

#### Objective

Present preliminary results and gather feedback regarding the following:

- Mapping of financing products (database)
- Digital toolbox, mainly focusing on the fiches

#### Focus of the discussion

- **Database:** have a better understanding of the relevance of the financing products mapping and identify potential gaps in green maritime financing
- **Digital toolbox:** gather information and feedback regarding the digital toolbox and its draft layout, mainly focusing on the structure and content that will be provided on each financing product through the fiches.

## Outline of the session

### Session 1: Identifying and addressing market gaps

01

#### Introduction

Setting the scene. Give context to the session and understand the main focus of the discussion

02

#### Methodology

Explanation on how the database and the digital toolbox were developed

03

#### Results and discussion

Presentation of the database and the toolbox and discussion on the preliminary results



Introduction to the study and the meeting of experts

---

Session 1: Identifying and addressing market gaps

---

Methodology

---

Results and discussion (part I)

---

Results and discussion (part II)

---

Session 2: Development of the database and the digital toolbox

---

**Methodology**

---

Results and discussion

---

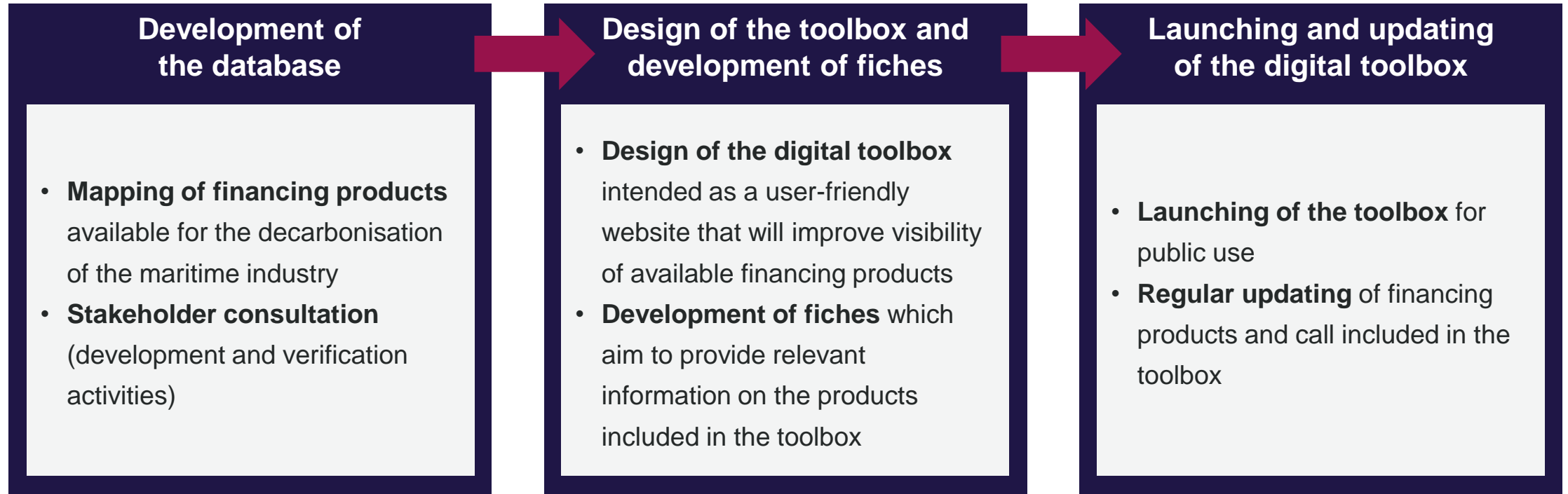
Next steps

---

Closure of sessions 1 and 2

# CONTENTS

## Methodology: development of the database and the digital toolbox



Introduction to the study and the meeting of experts

---

Session 1: Identifying and addressing market gaps

---

Methodology

---

Results and discussion (part I)

---

Results and discussion (part II)

---

Session 2: Development of the database and the digital toolbox

---

Methodology

---

**Results and discussion**

---

Next steps

---

Closure of sessions 1 and 2

# CONTENTS



## Preliminary results and discussion: development of the database

### Mapping of financing products (database)

#### Objective

To provide a **comprehensive overview** of the financing landscape for the decarbonisation of the maritime industry, covering the number, magnitude, scope, and assessing the relevance of the financing products identified.

The information gathered in the database will serve as the **basis for the digital toolbox**.



#### Discussion focus

Additional **financing products to be included**, e.g. national or private financing opportunities?

#### Information mapped in the database

- Programme / financing product name
- Short description
- Scope and objectives
- Type of financing provider: public / private
- Type of financing product
- Financing value (total and relevant to maritime if available)
- Technology readiness level (TRL)
- Technology type(s)

#### Overview

Total number of financing products: ~45  
(including specific calls under EU programmes)

- public products – 30
- private products – 15
- public-private products – 1

Public financing products have been mapped at EU and Member State level.

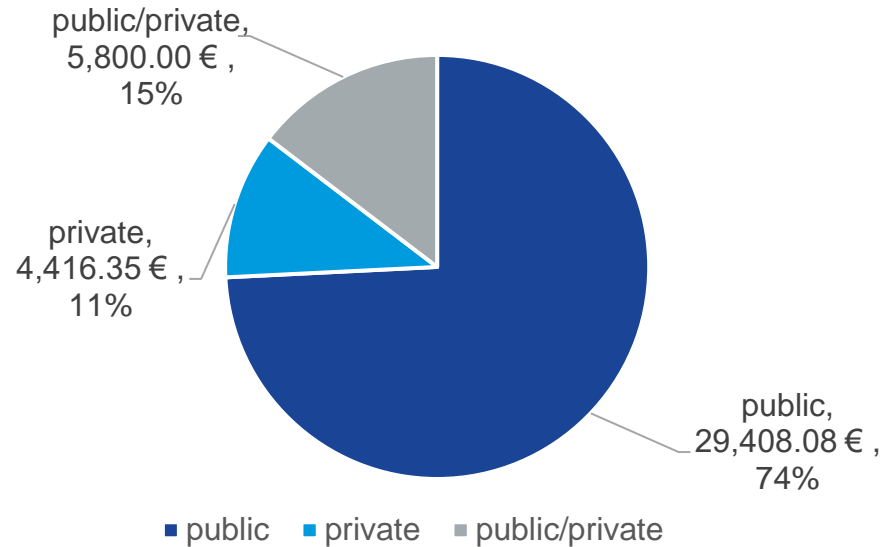
#### Information sources used

- Literature review
- Stakeholder consultation activities (survey, roundtable, targeted interviews)

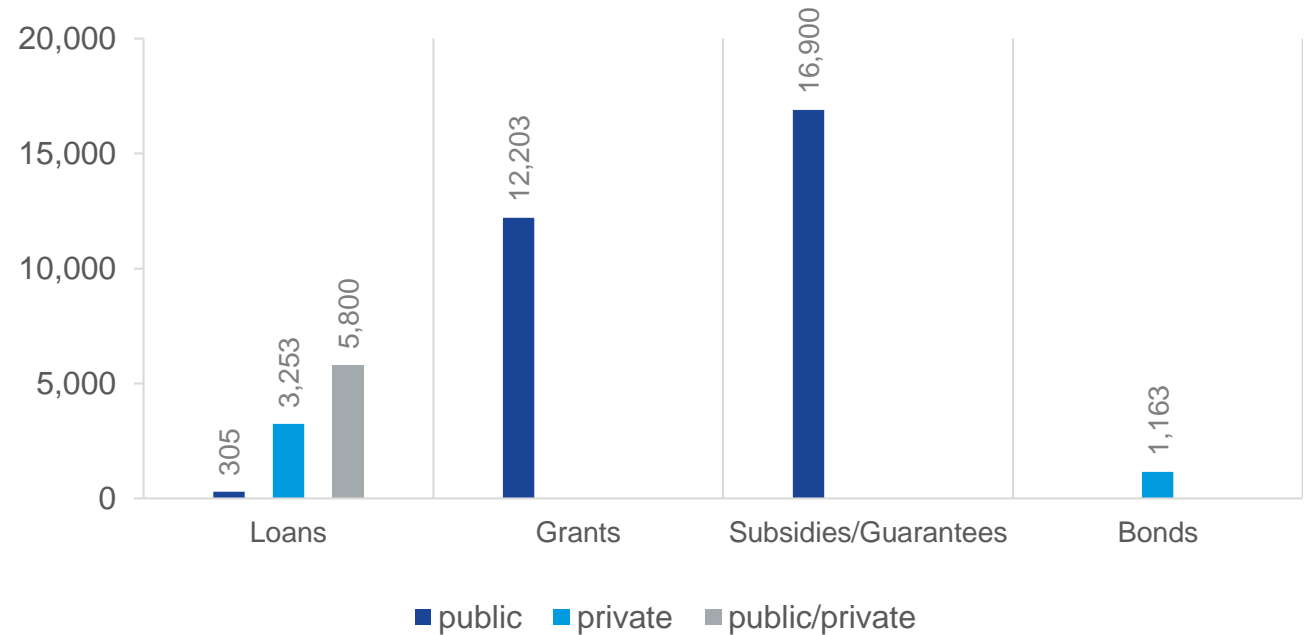
## Preliminary results and discussion: development of the database

### Mapping of financing products (database)

#### Relevant proportions of financing



#### Type of financing products (availability in million Euro)



\* Excluding European and Development Funds, Cohesions Funds and European Maritime Fisheries and Aquaculture Fund (EMFAF)

# Preliminary results and discussion: structure of the digital toolbox

## Digital toolbox

### Objective

Increase the visibility of financing opportunities for the maritime sector, allowing users to identify products available to support the decarbonisation of the industry

### Expected launching

Third quarter of 2024

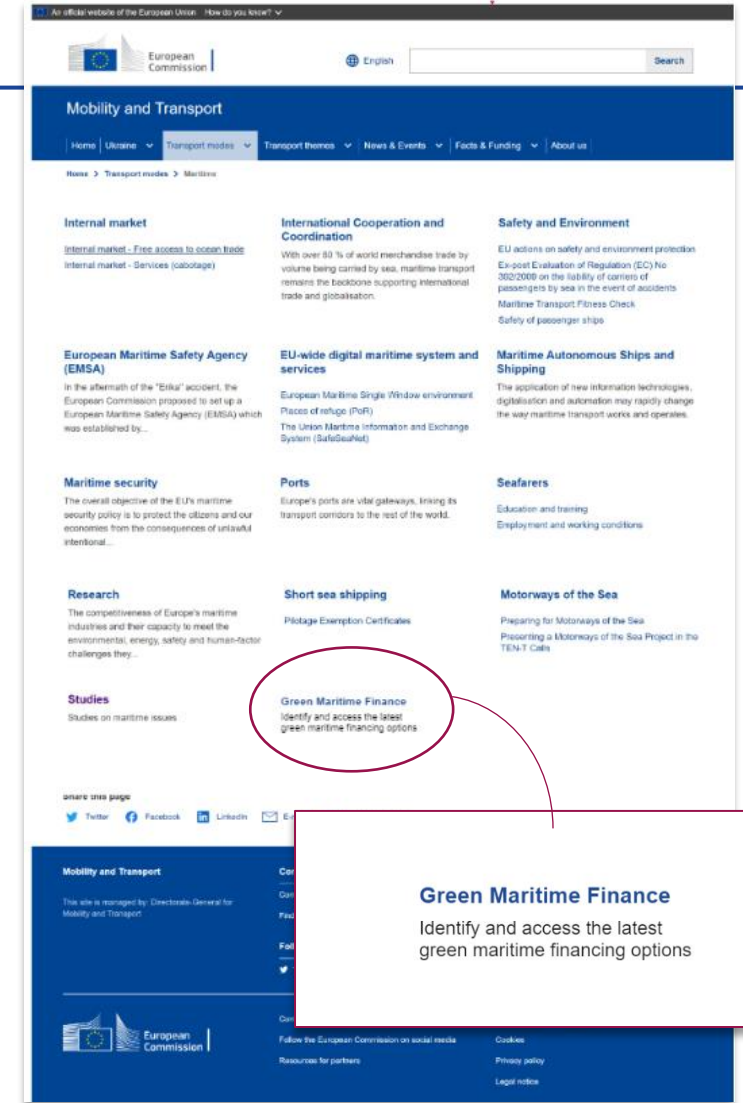
### Location (hosting)

Mobility and Transport site > Transport modes > Maritime > **Green Maritime Finance**

### Main features

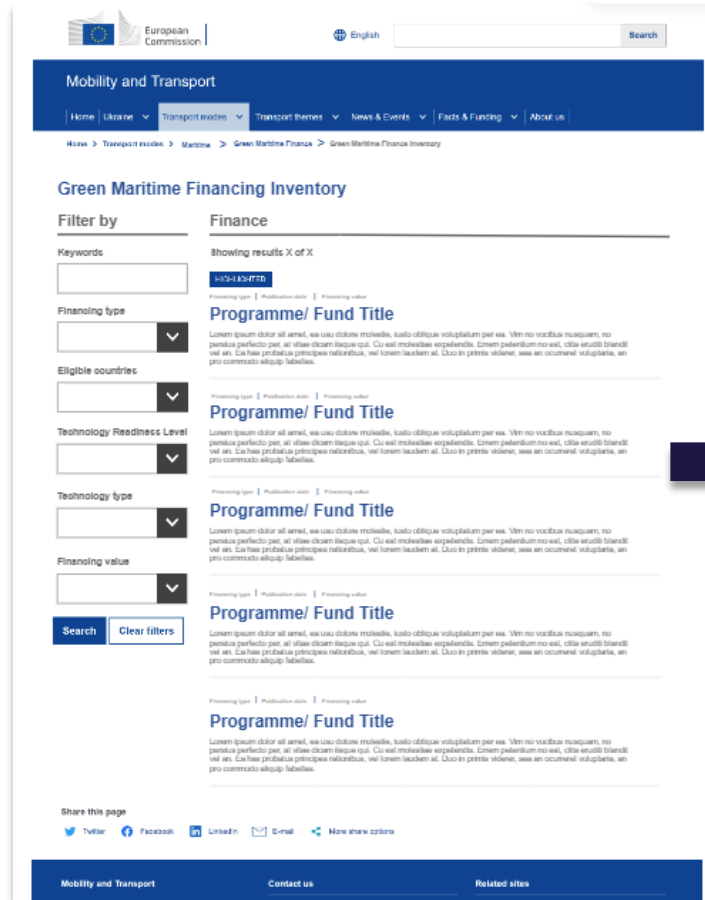
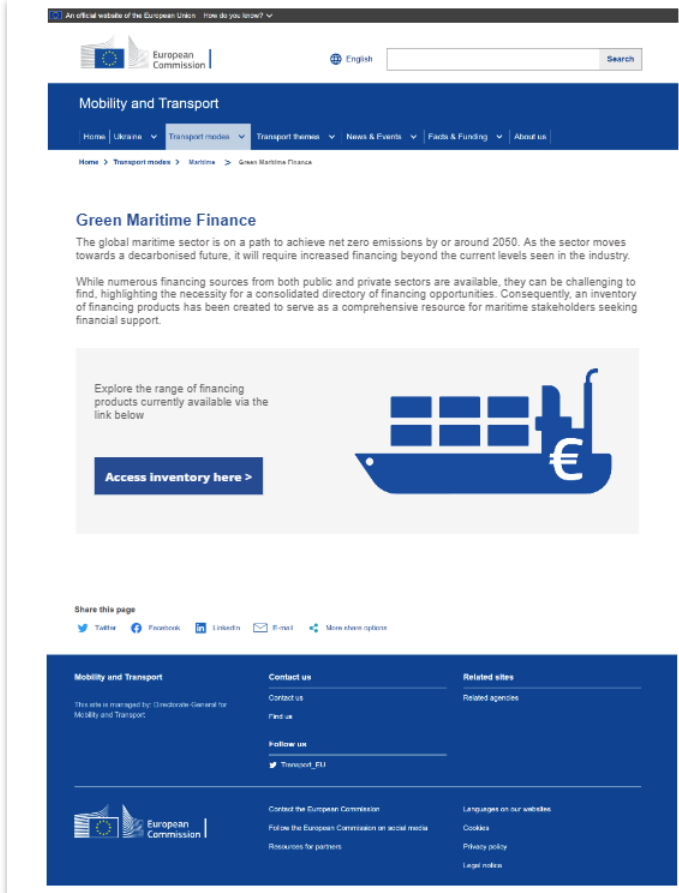
- Filtering options
- Fiches
- Regularly updated

**Access to the preliminary version**



# Preliminary results and discussion: structure of the digital toolbox

## Digital toolbox



## Filtering options

- Keywords
- Financing type (public, private, public-private)
- Eligible countries
- Technology readiness level (TRL)
- Technology type
- Financing value (ranges)



# Preliminary results and discussion: structure of the digital toolbox

## Digital toolbox: financing product fiches

Information category	Description
Programme name	Interregional Innovation Investments (I3) Instrument Strand 1 - Financial and advisory support for investments in interregional innovation projects
Objective(s) and scope	<p>The Interregional innovation investments instrument as part of the European Regional and Development Fund (ERDF) aims at supporting interregional innovation projects in their commercialisation and scale-up phases giving them the tools to overcome regulatory and other barriers and bring their project to investment level.</p> <p>The agency has available two call strands:</p> <ul style="list-style-type: none"> <li>Financial and advisory support for investments in interregional innovation projects</li> <li>Financial and advisory support to the development of value chains in less developed regions</li> </ul> <p><i>[Call currently closed. This information is related to the 2023 call and is provided for reference.] Strand 1 – Financial and advisory support for investments in interregional innovation projects targets mature partnerships to help them accelerate market uptake and scale-up of innovative solutions in shared smart specialisation priority areas, as well as to develop a portfolio of investment projects.</i></p>
Type of finance provider	Public
Administering body	Innovation Council and SMEs Executive Agency (EISMEA)
Financing product	Grant
Financing value	<i>[Call currently closed. This information is related to the 2023 call and is provided for reference.]</i> A total of EUR 570 million for I3 Instrument Work Programme over the period 2021 – 2027. For 2023, EUR 13 million were allocated, aiming at between EUR 2,000 and EUR 10 million per project
Eligible countries	EU Member States Non-EU countries associated with the I3 programme
Eligibility criteria (where available)	- Be legal entities - Be established in one of the participating countries
Further information on eligibility criteria	Section 6 Eligibility: <a href="#">ERDF Interregional Innovation Investments (I3) Instruments (Strand 1) - Call Document</a>
Application period	Call currently closed. For reference, last call was published on 17 May 2023 and remained open until 17 October 2023 (5 months).
Technology type	Not specified
Technology readiness level (TRL)	Close to market activities (TRL 6-9)
Project example (s)	<a href="#">EU Funding &amp; Tenders Portal (europa.eu)</a>
Additional information	Information on activities that can be founder is included in section 2.3: <a href="#">ERDF Interregional Innovation Investments (I3) Instruments (Strand 1) - Call Document</a>
Links	<a href="#">ERDF Interregional Innovation Investments (I3) Instruments (Strand 1) - Call Document</a> <a href="#">EU Funding &amp; Tenders Portal - I3 Capacity Building (I3-2023-CAP2b)</a>
Contacts	<a href="#">Contact form - European Commission (europa.eu)</a>



## Preliminary results and discussion: financing product fiches

### Digital toolbox: financing product fiches

#### What is a fiche?

A document (pdf format) that summarises relevant information on each of financing product included in the digital toolbox

#### Objective

To provide users with useful information to understand the financing product (i.e., information is provided on the objective and scope, the type of finance provider, the administering body, financing value, etc.)

#### The fiches will also allow users to...

- Determine if a product is suitable for their needs, e.g., type of finance product or financing value available
- Understand the application process for each product, e.g., eligibility criteria or application period

#### Where to find the fiches?

Fiches will be available on the digital toolbox for users to download the (in PDF format)

#### Fiches will be developed for different type of products

EU programmes

- Umbrella fiches
- Call fiches

National financing products

Private financing products



# Preliminary results and discussion

## Digital toolbox: financing product fiches

Examples of fiches include the following:

Fiche 1: EU programme (umbrella)

Fiche 2: EU programme – specific call

Fiche 3: National financing product

Fiche 4: Private financing product

Fiche I – EU programmes	
<b>Information category</b>	<b>Description</b>
Programme name	Innovation Fund
Objectives and scope	The Innovation Fund is the EU fund for climate policy, with a focus on energy and industry. It aims to bring to the market solutions to decarbonise European industry and support its transition to climate neutrality, while fostering its competitiveness with its funding coming from the EU emissions trading system (ETS).
Type of finance provider	Public
Administering body	European Investment Bank / CINEA
Financing product	Grants
Financing value	Call currently closed. This information is related to the 2023 call and is provided for reference. A total of EUR 4 billion available for projects as follows: <ul style="list-style-type: none"> <li>General decarbonisation (large-scale): €1.7 billion available for projects with CAPEX above €100 million</li> <li>General decarbonisation (medium-scale): €400 million available for projects with CAPEX between €20 million and €100 million</li> <li>Research manufacturing (small-scale): €200 million available for projects with CAPEX between €2.5 million and €20 million</li> <li>Research manufacturing (€1.4 billion available for projects with CAPEX above €2.5 million focusing on the manufacturing of components for renewable energy, energy storage, heat pumps and hydrogen production. Pilot: €200 million available for projects with CAPEX above €2.5 million focusing on deep decarbonisation.</li> </ul> The Innovation Fund can cover up to 80% of a project's relevant costs.
Eligible countries	EU Member States EEA

Fiche II – EU programmes (specific calls)	
<b>Information category</b>	<b>Description</b>
Programme name	Horizon Europe Work Programme 2023-2025
Objectives and scope	Call currently closed. This information is related to the 2023 call and is provided for reference. <b>HORIZON-CL5-2024-06-01-12 - HORIZON IA - HORIZON Innovation Actions</b> This funding is for projects that increase efficiency and reduce emissions of marine and inland waterway vessels and demonstrate robust business models and strategies for deployment. The objectives of the programme include the following: <ul style="list-style-type: none"> <li>Develop at least three market ready vessel designs using innovative emission reduction technologies for different shipping sectors in line with the EU's F &amp; R for 50% package.</li> <li>Quantitatively assess these designs to ensure significant emissions reductions, aligned with EU and the International Maritime Organization (IMO) targets, using measurable Key Performance Indicators (KPIs).</li> <li>Facilitate continuous improvement of existing vessels by measuring and benchmarking operational profiles.</li> <li>Evaluate emission reduction technologies' life cycle impact and retrofit options for environmental efficiency.</li> <li>Support the rapid transition of maritime vessels to higher energy efficiency and lower emissions.</li> <li>Create strong business models for these designs to ensure successful commercial deployment in Europe by 2030.</li> </ul>
Type of finance provider	Public
Administering body	European Commission, CINEA
Financing product	Grants
Financing value	Call currently closed. This information is related to the 2023 call and is provided for reference. A total of EUR 15,000,000 was allocated to the call HORIZON-CL5-2024-01-12 - HORIZON IA - HORIZON Innovation Actions. The contribution to the projects was approximately EUR 7,500,000 (two grants were awarded).

Fiche III – National programmes	
<b>Information category</b>	<b>Description</b>
Programme name	National Growth Fund
Objectives and scope	The National Growth Fund invests in projects that make the greatest possible contribution to sustainable and structural economic growth. The National Growth Fund does this together with industry and other investors. With the National Growth Fund, the government is allocating EUR 20 billion for projects between 2021 and 2025. The National Growth Fund invests in projects in two areas: <ul style="list-style-type: none"> <li>Knowledge Development and Research – opportunities to invest in education and skills learning</li> <li>Development and Innovation – opportunities for sustainable moving capacity and economic growth that the National Growth Fund wants to establish on with industry.</li> </ul> Research, development and innovation includes fundamental research, the further development of new technologies or ideas, in doing so, the fund is committed to strengthening the Netherlands' position in research, development and innovation as a driver of productive growth.
Type of finance provider	Public
Administering body	Government of the Netherlands
Financing product	Subsidies, Grants
Financing value	EUR 20,000,000,000 over the period 2021 – 2025, from which EUR 210,000,000 are allocated to the Maritime Master Plan.
Eligible countries	The Netherlands

Fiche IV – Private financing products	
<b>Information category</b>	<b>Description</b>
Programme name	Danish Maritime Fund
Objectives and scope	The Danish Maritime Fund is a commercial fund supporting the growth of the Danish maritime sector. It funds innovation projects that help shape and develop Denmark's shipping and marine industries. Focus is given on high-risk, forward-looking initiatives aiming to shape the future of the Danish maritime sector. The fund also contributes to non-profit projects with the purpose of developing the Danish maritime sector and thereby creating jobs. Efforts involve fostering collaboration between companies, educational institutions, and universities in the maritime sector. Focus areas are organization, automation, green transition, entrepreneurship, research, and development of maritime education. The fund was established in 2024 and its primary financing for grants and loans derives from a 15% ownership of Danish Ship Finance.
Type of finance provider	Private
Administering body	Danish Ship Finance (Danmarks Skibsfærds A/S)
Financing product	Loans, Sustainability-linked loans
Financing value	Not specified – Contact Danish Ship Finance for more information
Eligible countries	Denmark
Eligibility criteria (if available)	Applications are assessed on the basis of the following criteria: <ul style="list-style-type: none"> <li>Is the project innovative and future-oriented?</li> <li>How mature is the project? Is it idea development or prototype?</li> </ul>

### Discussion focus

1. **Type of information included** – is it relevant? Is there more or different information that you would like to see in these fiches?
2. **Level of detail**
3. **Availability of PDF format**
4. **Links to further information**



## Fiche I – EU programmes

Information category	Description
Programme name	Innovation Fund
Objective(s) and scope	The Innovation Fund is the EU fund for climate policy, with a focus on energy and industry. It aims to bring to the market solutions to decarbonise European industry and support its transition to climate neutrality while fostering its competitiveness with its funding coming from the EU emissions trading system (ETS).
Type of finance provider	Public
Administering body	European Investment Bank / CINEA
Financing product	Grants
Financing value	<p><i>[Call currently closed. This information is related to the 2023 call and is provided for reference]</i> A total of EUR 4 billion distributed as follows:</p> <ul style="list-style-type: none"> <li>• General decarbonisation (large-scale) - €1.7 billion available for projects with CAPEX above €100 million</li> <li>• General decarbonisation (medium-scale) - €500 million available for projects with CAPEX between €20 million and €100 million</li> <li>• General decarbonisation (small-scale) - €200 million available for projects with CAPEX between €2.5 million and €20 million</li> <li>• Cleantech manufacturing - €1.4 billion available for projects with CAPEX above €2.5 million focusing on the manufacturing of components for renewable energy, energy storage, heat pumps and hydrogen production.</li> <li>• Pilot - €200 million available for projects with CAPEX above €2.5 million focusing on deep decarbonisation.</li> </ul> <p>The Innovation Fund can cover up to 60% of a project's relevant costs.</p>
Eligible countries	EU Member States/ EEA

Information category	Description
Eligibility criteria (where available)	<ul style="list-style-type: none"> <li>• Projects must be located in an EU/EEA Member States</li> <li>• Projects must comply with EU policy interests</li> <li>• Enter into operation within five years after grant signature</li> </ul>
Further information on eligibility criteria	<a href="#">Innovation Fund - Auction call for proposals - Innovation Fund auction call for RFNBO Hydrogen (INNOVFUND-2023-AUC-RFNBO-Hydrogen)</a>
Application period	Call currently closed. For reference, last call was published on 23 November 2023 and remained open until 9 April 2024 (5 months).
Technology type	Multiple
Technology readiness level (TRL)	Multiple
Previous projects financed example(s)	<a href="#">IF - SustainSea: Reducing maritime transport CO2 emissions using wind</a>
Additional information	Different topics are covered under each call, some of which may not be specifically related to the marine industry. For reference, a total of 337 project proposals were submitted in response to the 2023 call. Out of those, 10% were related to mobility, and 70% of those concerned the maritime industry. This resulted in 24 applications (7%) for support for the maritime industry.
Links	<a href="#">Legal framework - European Commission (europa.eu)</a> <a href="#">Innovation Fund (INNOVFUND)   EU Funding &amp; Tenders Portal (europa.eu)</a>
Contact(s)	<a href="#">National Contact Points - European Commission (europa.eu)</a>





## Fiche II – EU programmes (specific calls)

Information category	Description
<b>Programme name</b>	Horizon Europe (Work Programme 2023-2025) -
<b>Objective(s) and scope</b>	<p><i>[Call currently closed. This information is related to the 2023 call and is provided for reference.]</i> <b>HORIZON-CL5-2024-D5-01-12 - HORIZON-IA HORIZON Innovation Actions</b></p> <p>This funding is for projects that increase efficiency and reduce emissions of marine and inland waterway vessels and demonstrate robust business models and strategies for deployment.</p> <p>The objectives of the programme include the following:</p> <ul style="list-style-type: none"> <li>• Develop at least three market-ready vessel designs using innovative emission reduction technologies for different shipping sectors in line with the EU's "Fit for 55" package.</li> <li>• Quantitatively assess these designs to ensure significant emissions reductions, aligned with EU and the International Maritime Organization (IMO) targets, using measurable Key Performance Indicators (KPIs).</li> <li>• Facilitate continuous improvement of existing vessels by measuring and benchmarking operational profiles.</li> <li>• Evaluate emission reduction technologies' life cycle impact and retrofit options for environmental efficiency.</li> <li>• Support the rapid transition of maritime vessels to higher energy efficiency and lower emissions.</li> <li>• Create strong business models for these designs to ensure successful commercial deployment in Europe by 2030.</li> </ul>
<b>Type of finance provider</b>	Public
<b>Administering body</b>	European Commission, CINEA
<b>Financing product</b>	Grants
<b>Financing value</b>	<i>[Call currently closed. This information is related to the 2023 call and is provided for reference.]</i> A total of EUR 15,000,000 was allocated to the call HORIZON-CL5-2024-D5-01-12 - HORIZON-IA HORIZON Innovation Actions. The contribution to the projects was approximately EUR 7,500,000 (two grants were foreseen).

Information category	Description
<b>Eligible countries</b>	Legal entities from the EU and associated countries (EEA, European Neighbourhood Policy countries, third countries that fulfil the criteria of Article 16 of Regulation (EU) 2021/695). Further information can be found here: <a href="#">Horizon Europe - Work Programme 2023-2025 13 General Annexes</a>
<b>Eligibility criteria (if available)</b>	Any legal entity, regardless of its place of establishment and including legal entities from non-associated third countries or international organisations, may participate in actions under the Programme, provided that the conditions laid down in Regulation (EU) 2021/695 have been met together with any conditions laid down in the work programme or call for proposals.
<b>Further information on eligibility criteria</b>	<a href="#">Horizon Europe - Work Programme 2023-2025 13 General Annexes</a> Articles 22 and 23 of <a href="#">Regulation (EU) 2021/695</a>
<b>Application period</b>	Call currently closed. For reference, the last call was published on 7 December 2023 and remained open until 18 April 2024 (approx. 4 months).
<b>Technology type</b>	Not specified
<b>Technology readiness level (TRL)</b>	Lower levels of Technology Readiness (research and innovation activities)
<b>Previous projects financed example(s)</b>	<p><a href="#">Realisation and Demonstration of Advanced Material Solutions for Sustainable and Efficient Ships   RAMSSES   Project   Fact sheet   H2020   CORDIS   European Commission (europa.eu)</a></p> <p><a href="#">Realising the world's first sea-going hydrogen-powered RoPax ferry and a business model for European islands   HySeas III   Project   Fact sheet   H2020   CORDIS   European Commission (europa.eu)</a></p> <p><a href="#">Autonomous Shipping Initiative for European Waters   AUTOSHIP   Project   Fact sheet   H2020   CORDIS   European Commission (europa.eu)</a></p>
<b>Additional information</b>	-
<b>Links</b>	<p><a href="#">Horizon Europe - European Commission (europa.eu)</a></p> <p><a href="#">Reference Documents   EU Funding &amp; Tenders Portal (europa.eu)</a></p> <p><a href="#">Horizon Europe work programmes - European Commission (europa.eu)</a></p>
<b>Contact(s)</b>	<p><a href="#">Research Enquiry Service - European Commission (europa.eu)</a></p> <p><a href="#">National Contact Points (NCPs) for Horizon Europe - EU Funding &amp; Tenders Portal (europa.eu)</a></p>



## Fiche III – National programmes

Information category	Description
Programme name	National Growth Fund
Objective(s) and scope	<p>The National Growth Fund invests in projects that make the greatest possible contribution to sustainable and structural economic growth. The National Growth Fund does this together with initiators and other investors. With the National Growth Fund, the government is allocating EUR 20 billion for projects between 2021 and 2025.</p> <p>The National Growth Fund invests in projects in two areas:</p> <ul style="list-style-type: none"> <li>• Knowledge Development and Research – opportunities to invest in education and skills learning.</li> <li>• Development and Innovation – opportunities for sustainable earning capacity and economic growth that the National Growth Fund wants to capitalize on with initiators.</li> </ul> <p>Research, development and innovation includes fundamental research, the further development of new technologies or ideas. In doing so, the fund is committed to strengthening the Netherlands' position in research, development and innovation as a driver of productivity growth.</p>
Type of finance provider	Public
Administering body	Government of the Netherlands
Financing product	Subsidies, Grants
Financing value	EUR 20,000,000,000 over the period 2021 – 2025, from which EUR 210,000,000 are allocated to the Maritime Master Plan.
Eligible countries	The Netherlands

Information category	Description
Eligibility criteria (if available)	<p>In the subsidy route, any party (except ministries) can apply directly for a subsidy that is in line with the objectives and conditions of the National Growth Fund. There are currently 4 judging criteria:</p> <ol style="list-style-type: none"> <li>1. <b>Contribution to sustainable earning capacity</b> – The concept of sustainable earning capacity is defined as the economic growth that the Netherlands can generate in the long term on a structural basis, with an eye for an economically, socially and environmentally friendly sustainable future.</li> <li>2. <b>Strategic underpinnings</b> – The judging committee wants to gain insight into the objectives of the proposal and what problems the proposal solves or how the proposal contributes to a social transition. It also assesses the legitimacy and effectiveness of the proposed interventions, as well as the question of how international affiliation is safeguarded.</li> <li>3. <b>Quality of the plan</b> – The committee will also assess the quality of the plan and thus assess how realistic it is that the plan will be implemented in such a way that the intended contribution to the sustainable earning capacity is realised.</li> <li>4. <b>Collaboration and governance</b> – In addition to a good strategic foundation and a good quality of the plan, it is important which parties implement the plan. The committee looks at the knowledge position and/or market leadership, the experience and whether the proposed collaboration is convincing to achieve the objectives of the plan.</li> </ol>
Further information on eligibility criteria	<p><a href="#">How does the National Growth Fund work?   National Growth Fund (nationaalgroEIFonds.nl)</a>  <a href="#">Primary conditions and criteria   English   Nationaal Groeifonds</a></p>
Application period	<p>Dates published are no longer up-to-date due to the postponement of the 4th round until further notice. Contact the Government of the Netherlands for more information.  <a href="#">Submit application in 2024/2025   National Growth Fund (nationaalgroEIFonds.nl)</a></p>
Technology type	Not specified
Technology readiness level (TRL)	Not specified
Previous projects financed example(s)	<p><a href="#">Maritime Masterplan 2.0   Overview of current projects   National Growth Fund (nationaalgroEIFonds.nl)</a></p>
Additional information	<p><a href="#">News   National Growth Fund (nationaalgroEIFonds.nl)</a>  <a href="#">Manual for submission form departmental route National Growth Fund 2024/2025   Guideline   National Growth Fund (nationaalgroEIFonds.nl)</a></p>
Links	<p><a href="#">Home   National Growth Fund (nationaalgroEIFonds.nl)</a></p>
Contact(s)	<p><a href="#">Contact   National Growth Fund (nationaalgroEIFonds.nl)</a></p>



## Fiche IV – Private financing products

Information category	Description	Information category	Description
Programme name	Danish Maritime Fund		<ul style="list-style-type: none"> <li>• Has interest been expressed from already defined customers?</li> <li>• Is there potential for creating more jobs in Denmark?</li> <li>• Is there a need for residual or co-financing?</li> <li>• Does a high-quality business plan exist?</li> <li>• Does the team possess the necessary competencies?</li> <li>• Is it likely that the refund claim can be met?</li> </ul>
Objective(s) and scope	<p>The Danish Maritime Fund is a commercial fund supporting the growth of the Danish maritime sector. It funds innovation projects that help shape and develop tomorrow's shipping and maritime industries. Focus is given on high-risk, forward-looking initiatives aiming to shape the future of the Danish maritime sector. The fund also contributes to non-profit projects with the purpose of developing the Danish maritime sector and thereby creating jobs. Efforts involve fostering collaboration between companies, educational institutions, and universities in the maritime sector. Focus areas are digitization, automation, green transition, entrepreneurship, research, and development of maritime education.</p> <p>The fund was established in 2005 and its primary financing for grants and loans derives from a 10% ownership of Danish Ship Finance.</p>	Further information on eligibility criteria	<a href="https://dendanskemaritimefond.dk">Loans for maritime entrepreneurship and innovation - Danish Maritime Fund (dendanskemaritimefond.dk)</a>
Type of finance provider	Private	Application period	Not specified – Contact Danish Ship Finance for more information
Administering body	Danish Ship Finance (Danmarks Skibskredit A/S)	Technology type	Not specified – Contact Danish Ship Finance for more information
Financing product	Loans, Sustainability-linked loans	Technology readiness level (TRL)	Not specified – Contact Danish Ship Finance for more information
Financing value	Not specified – Contact Danish Ship Finance for more information	Previous projects financed example(s)	<a href="https://dendanskemaritimefond.dk">Projects - The Danish Maritime Fund (dendanskemaritimefond.dk)</a>
Eligible countries	Denmark	Additional information	-
Eligibility criteria (if available)	<p>Applications are assessed on the basis of the following criteria:</p> <ul style="list-style-type: none"> <li>• Is the project innovative and future-oriented?</li> <li>• How mature is the project? Is it idea development or prototype?</li> </ul>	Links	<a href="https://dendanskemaritimefond.dk">The Danish Maritime Fund - We create the foundation for the Blue Denmark of the future (dendanskemaritimefond.dk)</a>
		Contact(s)	<a href="https://dendanskemaritimefond.dk">Contact us - The Danish Maritime Fund (dendanskemaritimefond.dk)</a>

Introduction to the study and the meeting of experts

---

Session 1: Identifying and addressing market gaps

---

Methodology

---

Results and discussion (part I)

---

Results and discussion (part II)

---

Session 2: Development of the database and the digital toolbox

---

Methodology

---

Results and discussion

---

**Next steps**

---

Closure of sessions 1 and 2

# CONTENTS

## Next steps for the study and publication of results

---

### **How will the outcomes of these sessions be used for the study?**

- The information gathered through this event will feed into the finalisation of the market gaps, the recommendations and the toolbox as outputs of this study.
- Feedback on this session can be provided until 22<sup>nd</sup> of May 2024 through DG MOVE.

### **When will the study be finalised?**

Third quarter of 2024 (July – August 2024)

### **Which will be the main outputs of the study? Will these be publicly available?**

The outputs will include:

- A report with recommendations – expected for Autumn 2024
- Launching of the digital toolbox

### **When will the digital toolbox be available for users to access?**

The expected launching date is July 2024

Introduction to the study and the meeting of experts

---

Session 1: Identifying and addressing market gaps

---

Methodology

---

Results and discussion (part I)

---

Results and discussion (part II)

---

Session 2: Development of the database and the digital toolbox

---

Methodology

---

Results and discussion

---

Next steps

---

Closure of sessions 1 and 2

# CONTENTS

Closure of sessions 1 and 2


---

Thank you!



## Approach to the development of the recommendations: financial recommendations

Formulation of  
recommendations



### Formulation of recommendations: financial recommendations

#### Specific objectives

- Formulate financial recommendations that are tailored to the **maturity level (TRL) and capital needed** to execute the investment activity associated to each of the barriers and needs
- Other factors as the expected **cashflow of the investment activities**, and the particularities of small and medium size enterprises (**SMEs**) were also factored in the design of tailored financial programmes.

#### Steps

1. Development of guiding matrixes to connect decarbonisation activities with financing instruments
2. Identification of most appropriate financing products(s)
3. Definition of scope of the programme
4. Indications on how to adapt programme to SMEs



## Approach to the development of the recommendations: financial recommendations

### Formulation of recommendations: financial recommendations

Categorisation of decarbonisation investment activities in the shipping industry according to the maturity of the markets (TRL level) and level of capital investment (High/Medium/Low) associated to each investment activity

#### Technology Readiness Level (TRL) drives investment

- Projects are categorised based on their TRL, with higher TRL levels indicating greater maturity and readiness for deployment
- Higher TRL projects typically require higher capital investments, reflecting the advanced stage of development and potential for large-scale implementation

#### Scale of deployment dictates investment

- The scale and scope of deployment also influence capital investment requirements
- Larger-scale projects, whether at high or medium TRL levels, generally necessitate higher investments to support infrastructure development, production scaling, and market penetration efforts

#### Risk and uncertainty impact investment

- Lower TRL projects and those involving early-stage exploration or fundamental research typically require lower capital investments due to higher levels of uncertainty and risk
- Focused on feasibility studies, prototype development, and validation activities

## Approach to the development of the recommendations: financial recommendations

### Formulation of recommendations: financial recommendations

Categorisation of financing instruments according to TRL level (High/Medium/Low) and level of capital investment (High/Medium/Low)

#### Technology maturity and finance instruments alignment

- Alignment of financing products with the maturity level of decarbonisation projects, offering diverse options for different stages, from blended finance and government grants for advanced projects to standard bonds for early-stage concepts

#### Capital investment tailored to project type and scale

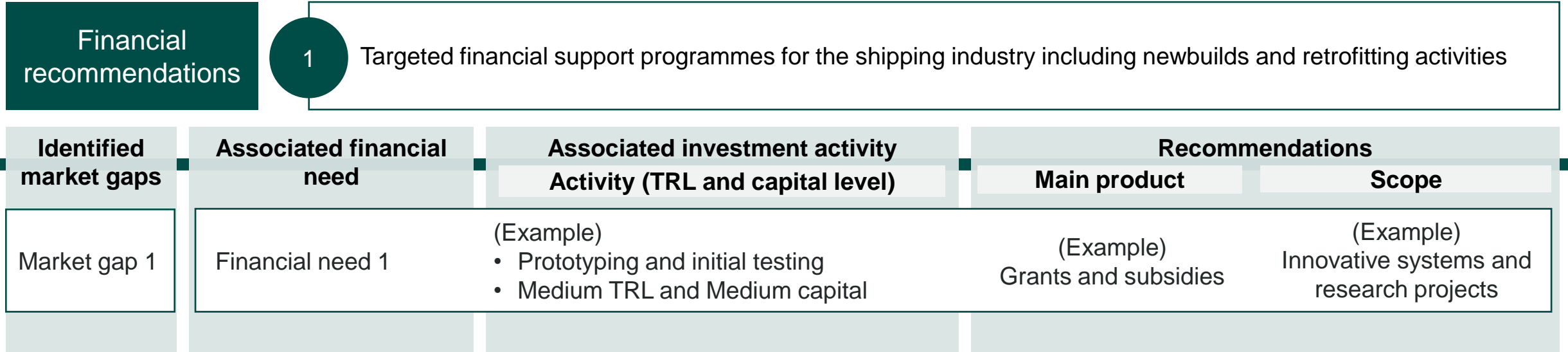
- Tailoring of capital investment options to suit project types and scales, with high-capital options for large-scale initiatives like retrofitting ships with hydrogen cells and lower-capital options for smaller-scale efforts like researching advanced materials

#### Focus on sustainability and environmental impact

- Emphasis on financing products that prioritise sustainability, such as green loans and bonds, ensuring that financing strategies align with environmental goals in decarbonisation projects

## Financial recommendations: structure of the presentation

### Structure of the presentation for financial recommendations



#### Discussion focus

- 1. Identified market gaps and associated financial needs:** From your perspective, are these representative? Are there any other gaps that should also be considered?
- 2. Recommendations** – Are the main/support products considered aligned with your views/experience? Is the scope aligned with the needs of the industry?

## Financial recommendations: (1) targeted financial support programmes

### Financial recommendations

**1** Targeted financial support programmes for the shipping industry including newbuilds and retrofitting activities

Identified market gaps	Associated financial need	Associated investment activity Activity (TRL and capital level)	Recommendations	
			Main product(s)	Scope
<p><b>a</b></p> <p>Lack of financing instruments for certain activities and/or technologies</p>	Bridging the innovation financing gap	<ul style="list-style-type: none"> <li>Prototyping and initial testing</li> <li>Medium TRL and Medium capital</li> </ul>	Grants and subsidies Quasi-equity	Innovative systems and research projects
	Early-stage demonstration and testing	<ul style="list-style-type: none"> <li>Scaling up production and deployment</li> <li>Medium TRL and High capital</li> </ul>	Blended Finance Concessions and Guarantees	Scaling up operations and implementing emission reduction measures
	Retrofit existing vessels	<ul style="list-style-type: none"> <li>Commercial deployment and testing</li> <li>High TRL and Medium capital</li> </ul>	Grants and subsidies Quasi-equity	Upgrading existing vessels with cleaner fuels or technologies
	Fundamental research and feasibility	<ul style="list-style-type: none"> <li>Demonstrating feasibility and research</li> <li>Low TRL and Low capital</li> </ul>	Grants and subsidies	High-risk research projects

## Financial recommendations: (1) targeted financial support programmes

### Financial recommendations

**1** Targeted financial support programmes for the shipping industry including newbuilds and retrofitting activities

Identified market gaps	Associated financial need	Associated investment activity Activity (TRL and capital level)	Recommendations	
			Main product	Scope
<p><b>b</b></p> <p>Scarcity of EU-shipbuilding activities</p>	<p>EU shipbuilding financing gap in maritime industry</p>	<ul style="list-style-type: none"> <li>Implementation and operation of large-scale projects.</li> <li>High (TRL 9-7) and High Capital</li> </ul>	<p>Guarantees</p>	<p>Large-scale shipbuilding activities occurring in EU</p>

## Financial recommendations: (1) targeted financial support programmes

### Financial recommendations

**1** Targeted financial support programmes for the shipping industry including newbuilds and retrofitting activities

Identified market gaps	Associated financial need	Associated investment activity Activity (TRL and capital level)	Recommendations	
			Main product	Scope
<b>C</b> Financing products not fit for purpose	Specialised maritime financing and calls	All	All	Dedicated but flexible calls and financing opportunities for the shipping sector
	Maritime decarbonisation financing from traditional banks	All	Standard loans, grants and subsidies	Dedicated loans for new builds and retrofitting activities

## Financial recommendations: (2) financial support for onshore bunkering and recharging infrastructure

### Financial recommendations

2

Targeted financial support and incentives schemes for onshore bunkering and recharging infrastructure

Identified market gaps	Associated financial need	Associated investment activity Activity (TRL and capital level)	Recommendations	
			Main product	Scope
<p>a</p> <p>Higher costs and lower availability of alternative fuels when compared to conventional fuels</p>	Finance for alternative fuel production	<ul style="list-style-type: none"> <li>Scaling up production and deployment</li> <li>High TRL and High capital</li> </ul>	Green Loans	Alternative fuel production (alternative fuels) and renewable electricity generation
	Finance for technology deployment	<ul style="list-style-type: none"> <li>Scaling up production and deployment</li> <li>High TRL and High capital</li> </ul>	Green Loans	Infrastructure for the production and distribution of alternative fuels
	Closing the alternative fuel cost gap	<ul style="list-style-type: none"> <li>Implementation of operation of large-scale projects</li> <li>High TRL and High capital</li> </ul>	Guarantees Quasi-equity	Fixed price or price differential for cleaner fuels

## Financial recommendations: (2) financial support for onshore bunkering and recharging infrastructure

### Financial recommendations

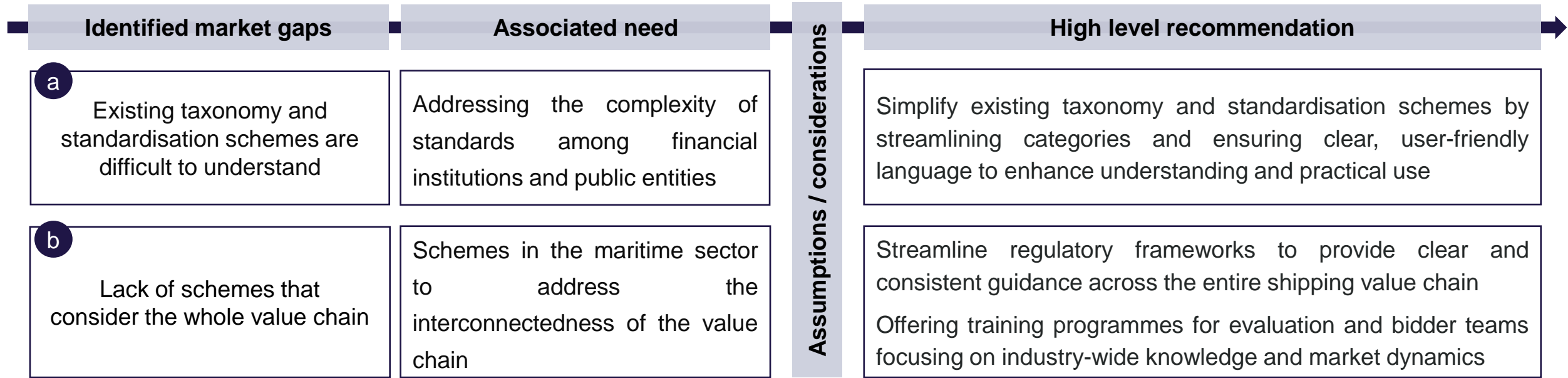
2

Targeted financial support and incentives schemes for onshore bunkering and recharging infrastructure

Identified market gaps	Associated financial need	Associated investment activity Activity (TRL and capital level)	Recommendations	
			Main product	Scope
<b>b</b> Financing products not fit for purpose	Specialised maritime financing and Calls	All	All	Dedicated calls
	Maritime decarbonisation financing from traditional banks	<ul style="list-style-type: none"> <li>Implementation and operation of large-scale projects</li> <li>High (TRL 9-7) and High capital</li> </ul>	Guarantees Blended finance	Fixed price or price differential for cleaner fuels



## Regulation, post-application procedures and capacity building recommendations



### Discussion focus

- Support mechanisms** – what should be the focus of this streamlining process? How do we ensure these are clear and user friendly?
- Training programmes** – what topics could be covered in evaluation and bidder teams training programmes?

## Regulation, post-application procedures and capacity building recommendations

### Regulation recommendations

4

Establish support mechanisms including application process support and financial trainings

#### Identified market gaps

#### Associated need

#### High level recommendation

C

Administrative burden on application processes and compliance requirements for SMEs

Simplified and more accessible application processes

Considerations

Establish **support mechanisms** like financial advisory services or mentorship programs for SMEs, aiding them in understanding financial processes, planning, and compliance in the maritime sector.



#### Discussion focus

1. **Support mechanisms** – what should be the main focus of these support mechanisms? In your view, how can these be effectively implemented? Do you identify any barriers for users accessing these support mechanisms?
2. **Application process support** – what type of support would you envisage? Should any specific considerations be considered for SMEs accessing maritime green financing opportunities?
3. **Financial trainings** – what do you think should be the main focus of these trainings?

## Communication and streamlining recommendations

### Communication and streamlining recommendations

5

Establish centralised and accessible information platforms or databases

#### Identified market gaps

#### Associated financial need

#### High level recommendation

a

Lack of industry understanding of the existing taxonomy and standardisation schemes

b

Lack of information on private and public financing products

Transparency in maritime financing options to enable stakeholders to make well-informed decisions and secure funding for projects effectively.

Considerations

Establish centralised platforms or databases that provide comprehensive information and resources on available financing options making it easier for stakeholders to navigate and access financing opportunities.



#### Discussion focus

1. **Centralised platforms or databases** – how could we ensure these platforms/databases are user friendly and useful for the needs of the maritime industry?