



FUTURE PROOF EFFICIENT AND SUSTAINABLE DEPLOYMENT OF ZEWTS

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ABSTRACT

This document presents the Stakeholder Engagement Plan developed within the TRUSTEE project, outlining the methods, tools and activities used for the stakeholder consultation process for the deployment of Zero Emission Waterborne Transport (ZEWt). Stakeholder engagement is a central part of the project, helping capture different perspectives on the ZEWt transition.

The consultation process for TRUSTEE project is built around the establishment of the Stakeholders Forum (SF), a consultation body that brings together a wide range of actors across the waterborne transport ecosystem, including industry stakeholders, public authorities, research organisations and civil society representatives. The document describes the criteria and process for the setting up of the SF and its composition at the delivery date of this document. It also describes the engagement plan, based on a Participatory Design approach, which actively involves stakeholders as contributors throughout the knowledge-generation process, detailing the overall engagement process. It is structured as four steps complementary consultation activities, starting from an initial online survey, thematic semi-structured interviews, and a series of workshops.

Overall, the Stakeholder Engagement Plan provides a coherent and systematic approach to stakeholder consultation, ensuring alignment between collected inputs and the project's thematic framework. By combining quantitative and qualitative methods, detailing the timing and techniques to be used, the plan supports the identification of key challenges and opportunities for ZEWt deployment and helps inform project recommendations.



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LIST OF ACRONYMS

DG	Directorate General
eV	eingetragener Verein
LCA	Life Cycle Assessment
SF	Stakeholders Forum
SRL	Società a Responsabilità Limitata
ZEWT	Zero Emission Waterborne Transport

1. RATIONALE FOR THE STAKEHOLDERS CONSULTATION

Transport policy in the maritime and inland waterway domain is characterised by a complex constellation of actors, encompassing public and private operators, port authorities, and inland waterway managers. In the case of a complex sector such as Zero Emission Waterborne Transport (ZEWT), structured engagement with this broad range of actors becomes particularly essential. In order to achieve its core objectives TRUSTEE adopts a structured and progressive stakeholder engagement approach, bringing together maritime and river transport authorities, port and infrastructure managers, public administrations, investment and funding bodies, shipbuilders and technology providers, service operators, research organisations workforce representatives as well as citizens.

Each ZEWT solution entails specific advantages and constraints, and not all technologies are suited to every operational context. Around this central challenge, further success factors include the development of fit-for-purpose infrastructure for berthing, mooring and port or river operations, the availability of reliable zero-emission energy supply, and the integration of digital and communication systems enabling safe, efficient and resilient services.

Equally important is the emergence of service providers capable of deploying robust and sustainable operational and business models, supported by coherent investment perspectives and long-term planning. These developments need to be accompanied by a regulatory and governance framework able to address safety, liability, environmental performance, system interoperability and compatibility with existing maritime and inland waterway operations, while ensuring alignment with broader decarbonisation objectives.

The mobilisation of a wide range of actors enables the identification and sharing of needs and requirements, while supporting the legitimacy of decision-making pathways through a learning-by-doing approach. When stakeholder engagement is broad and inclusive, stakeholders become active contributors to the implementation of zero-emission waterborne transport solutions, accompanying them along a pathway of applied research, operational validation and large-scale feasibility. This approach facilitates the emergence of relevant issues requiring further investigation, clarifies priorities, and helps distinguish effective solutions from those that are not operationally or socially viable.

Within the TRUSTEE project, stakeholders active across the maritime and inland waterway ZEWT ecosystem are engaged through a dedicated external consultation and dialogue mechanism, the Stakeholders Forum (SF). The SF provides a structured platform for exchange, coordination and co-creation among public authorities, industry, operators, research organisations and societal representatives, ensuring that diverse perspectives are systematically integrated into the project activities. Through a combination of surveys, interviews and participatory workshops, the SF enables the alignment of technical, strategic, environmental and societal viewpoints, thereby supporting the validation of analytical frameworks, the identification of barriers and enablers, and the consolidation of shared understanding required for the effective and timely achievement of ZEWT targets.

2. THE ZEWT STAKEHOLDERS INVOLVED IN THE CONSULTATION PROCESS

2.1. Composition of the Stakeholders Forum

The SF will support the TRUSTEE project in understanding needs, perspectives and priorities related to the most promising ZEWT) use cases across maritime and inland waterway contexts.

The SF will contribute to the development of a coherent framework addressing technical, environmental, regulatory, societal, spatial planning and financial dimensions relevant to the future deployment of ZEWT solutions.

Through structured consultation activities, the SF will enable the early identification of concerns, constraints and barriers that may affect the successful implementation of the envisaged use cases.

In addition, inputs gathered from SF members will support the development of realistic scenarios, contributing to evidence-based decision-making and recommendations for:

- standards and regulations
- policies and strategies.

Potential SF members have been invited on the basis of their recognised expertise, which falls within one or more of the thematic areas defined by the project design.

These thematic areas are explicitly articulated as follows:

- Overall environmental impact;
- Technologies and technical integration;
- Workforce transition and wider societal impact;
- Strategy and finance.

SF members belong to all major categories of organisations potentially involved in, or affected by, the deployment of ZEWT solutions. The representation across organisational types is broad and balanced, and includes:

- Industry – shipbuilding, manufacturing and maintenance
- Industry – infrastructures
- Industry – efficiency and optimisation
- Industry –waterborne transport business operators
- Public institutions, networks and citizen associations involved in strategy, policy and rule-making
- Research organisations
- Shipowners and maritime operators

This diversity ensures that strategic, operational, technological, environmental and societal perspectives are all adequately reflected within the Forum.

To date, a total of **35 members** has formally confirmed their participation in the Stakeholders Forum demonstrating strong interest in the themes addressed by TRUSTEE and ensuring a broad and credible representation of the ZEWT stakeholder landscape.

This level of participation provides confidence in the Forum's ability to deliver clear, robust and actionable feedback on key project questions, including identified needs, potential solutions and planning guidelines.

The SF also includes representatives of DG RESEARCH and it also includes representatives of Horizon Europe projects relevant to waterborne transport decarbonisation, including but not limited to projects funded under calls such as HORIZON-CL5-2024-D5-01.

At present, SF members originate from:

- EU Member States represented: 19
- Norway: 4
- Serbia
- United Kingdom: 2
- European (supranational-level) bodies and networks: 7
- Global (supranational-level) bodies and networks: 2

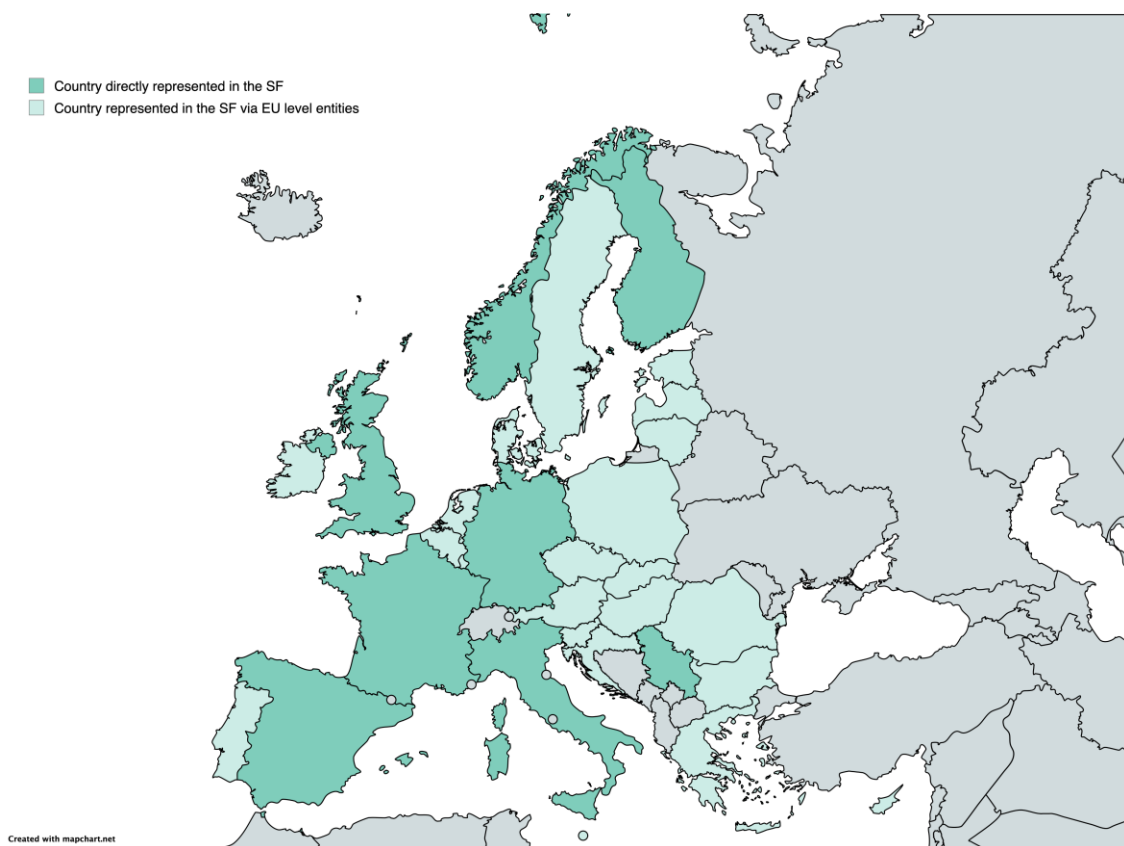


Figure 1 - Geographical distribution SF

This wide geographical and institutional coverage, combined with the diversity of public and private stakeholders and expert profiles (infrastructure managers, research organisations, civil society representatives, transport and logistics companies, operators and European networks), ensures that TRUSTEE will benefit from comprehensive and well-rounded feedback on the specific challenges it aims to address.

During the project development, the opportunity to include further relevant experts will be cultivated and new invitation will be sent.

2.2. Type of consulted stakeholders

As stated above, a key feature of the SF lies in its diversity, which ensures that strategic, operational, technological, environmental and societal perspectives are comprehensively represented within the Forum. This diversity is reflected in a well-balanced composition across the defined stakeholder categories.

In particular, the Forum includes industry actors covering the full value chain of the waterborne sector, ranging from shipbuilding, manufacturing and maintenance to infrastructure development and management, as well as providers of efficiency and optimisation solutions and waterborne transport business operators. These are complemented by shipowners and maritime operators, who contribute with direct operational experience and market-oriented perspectives.

Alongside industry representation, the Forum also brings together research organisations, ensuring the integration of scientific knowledge, innovation capacity and evidence-based approaches. Moreover, public institutions, networks and citizen associations involved in strategy, policy and rule-making are well represented, providing essential contributions in terms of regulatory frameworks, governance and societal engagement.

Overall, the composition of the SF ensures a balanced participation of public and private stakeholders. Out of a total of 35 members, 4 represents shipowners, 12 represent public institutions, 10 belong to research organisations (equally distributed between public and private entities), while the remaining 9 are distributed across the industry categories, including several cases of public infrastructure managers and private sector actors as well as citizens. The full distribution is broken down in Figure 2.

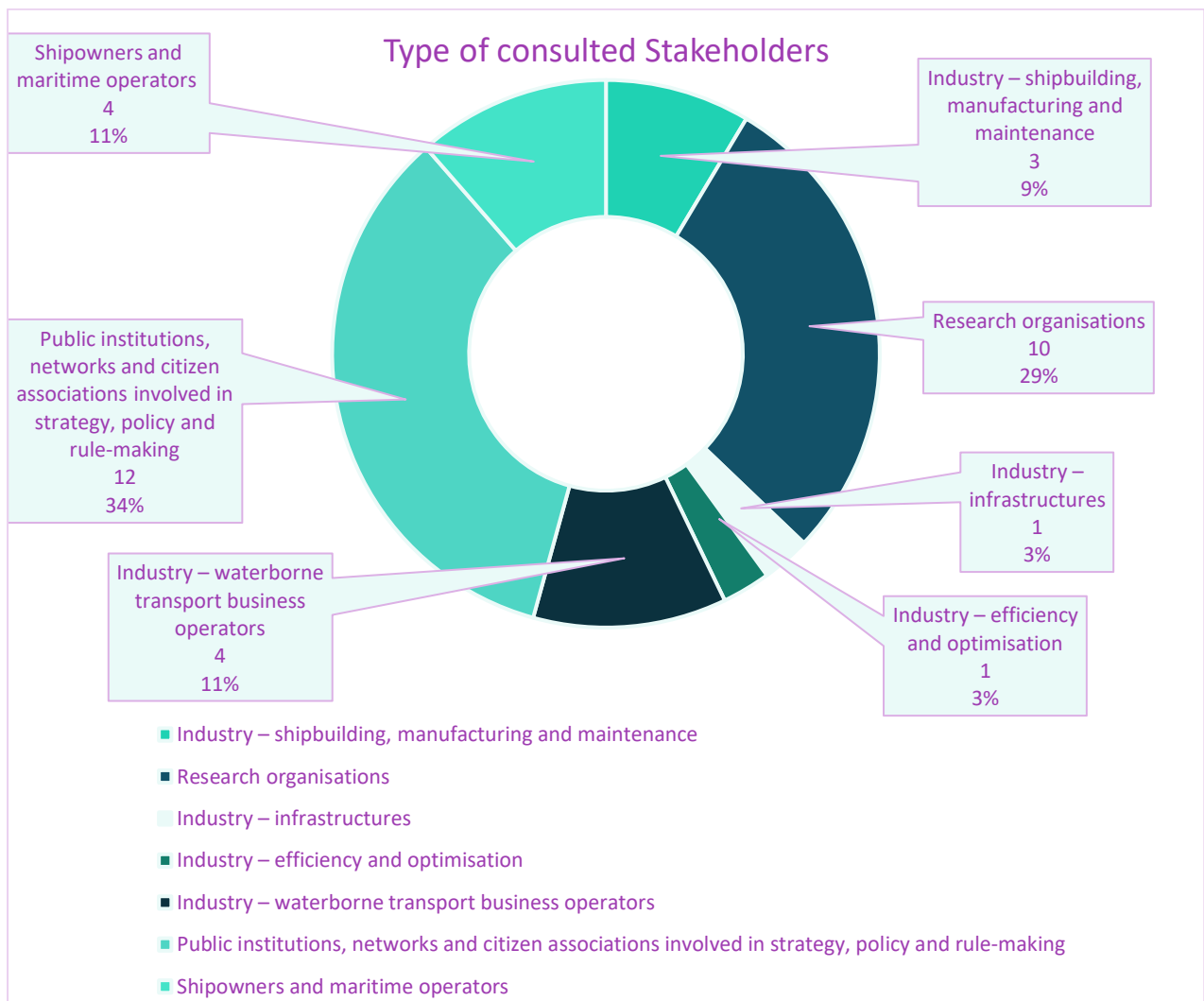


Figure 2 - Breakdown of type of consulted Stakeholders in the SF

2.3. Type of consulted expertise

In terms of expertise, the TRUSTEE SF incorporates a very comprehensive set of competences, as shown in the picture below.

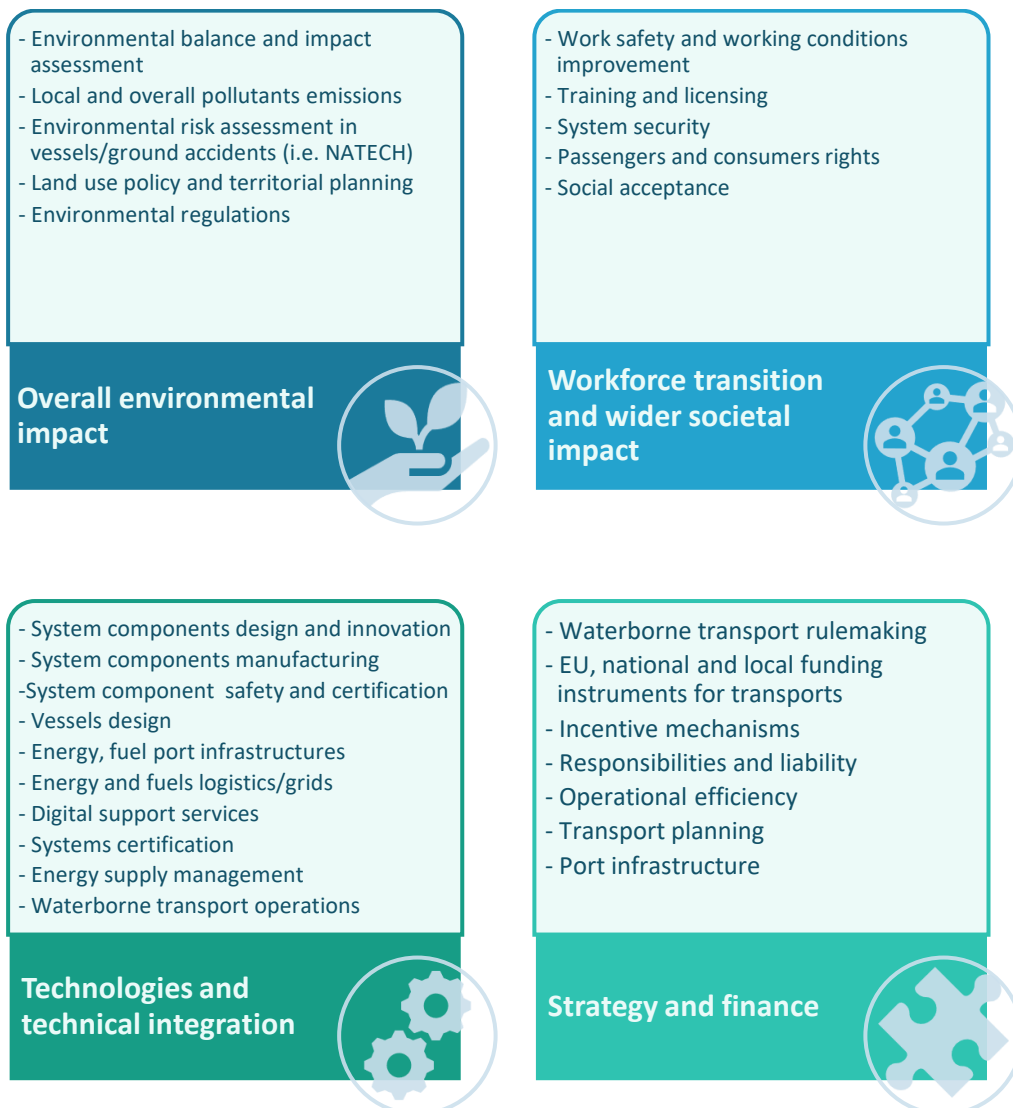


Figure 3 - Expertise within the thematic groups of SF

With regard to the thematic area of **overall environmental impact** (5 members), participation within the Stakeholders Forum reflects a strong involvement of organisations with expertise in sustainability assessment, emissions reduction, environmental protection and lifecycle considerations. Contributions originate from a combination of industry actors, research organisations and public and civil society bodies, ensuring a comprehensive view of environmental implications across maritime and inland waterway ZEWT applications.

For the thematic area of **technologies and technical integration** (10 members) the Stakeholders Forum brings together a significant number of members with direct experience in vessel design, propulsion systems, energy integration, digital solutions and interoperability with existing maritime and inland waterway infrastructure. Industrial actors are complemented by research organisations and technical bodies, allowing for a balanced assessment of technological readiness and system integration challenges.

Concerning **workforce transition and wider societal impact** (5 members), the Stakeholders Forum includes members representing research organisations, public institutions, networks and civil society, alongside selected industry actors. This composition supports informed discussion on skills development, employment impacts, social acceptance and the broader implications of ZEWT deployment for local communities and the labour market.

In the area of **strategy and finance** (15 members), the Stakeholders Forum is characterised by a broad representation of organisations involved in strategic planning, investment decision-making, business modelling and policy development. Participants include industry operators, infrastructure managers, research bodies and public institutions, providing a solid basis for analysing economic feasibility, funding mechanisms and long-term deployment pathways for ZEWT solutions.

2.4. Members of the Stakeholders Forum

Table 1 - Summary table on the SF members by thematic group

Organisation	Country	General field of expertise	Type
Agent Plus Group	Serbia	Technologies and technical integration	Industry ZEWT or waterborne transport business operators
Association for European Inland Navigation and Waterways	EU	Strategy and finance	Public institutions, networks and citizen associations
Autorità portuale Ravenna	Italy	Strategy and finance	Public institutions, networks and citizen associations
CAFF Alliance	Germany	Workforce transition and wider societal impact	Public institutions, networks and citizen associations
Confederazione Italiani Armatori	Italy	Strategy and finance	Trade associations shipowners and maritime operators
Cruise Lines International Association	Global	Strategy and finance	Trade associations shipowners and maritime operators
EC DG Research	EU	Strategy and finance	Public institutions, networks and citizen associations
Ecole Nationale Supérieure Maritime	France	Workforce transition and wider societal impact	Public institutions, networks and citizen associations
European Community Shipowners' Associations	EU	Strategy and finance	Trade associations shipowners and maritime operators
European Federation of Inland Ports	EU	Strategy and finance	Public institutions, networks and citizen associations
European Passengers' Federation	EU	Workforce transition and wider societal impact	Public institutions, networks and citizen associations
Federal Association of Public Inland Ports	Germany	Strategy and finance	Public institutions, networks and citizen associations
FORSCHUNGSZENTRUM JULICH GMBH - MarLEN coordinator	Germany	Overall environmental impact	Research organisation

German Shipowners Association	Germany	Strategy and finance	Trade associations shipowners and maritime operators
Grimaldi Euromed	Italy	Strategy and finance	Industry ZWET or waterborne transport business operators
GTS General Transport Service	Italy	Strategy and finance	Industry ZWET or waterborne transport business operators
IMAREST	United Kingdom	Workforce transition and wider societal impact	Research organisation
LCA expert	Italy	Overall environmental impact	Research organisation
National Council of Research – Institute for advanced technologies CNR-ITAE	Italy	Technologies and technical integration	Research organisation
Naturschutzbund Deutschland e.V.	Germany	Overall environmental impact	Public institutions, networks and citizen associations
Norwegian cluster for sustainable and autonomous transport	Norway	Technologies and technical integration	Public institutions, networks and citizen associations
NTNU	Norway	Technologies and technical integration	Research organisation
PONANT	France	Strategy and finance	Industry ZWET or waterborne transport business operators
Port Authority of the Strait of Messina	Italy	Strategy and finance	Public institutions, networks and citizen associations
SEAWAY AGENCY SRL	Italy	Strategy and finance	Industry ZWET or waterborne transport business operators
Shipyards' and Maritime Equipment Association of Europe	EU	Technologies and technical integration	Industry manufacturing and maintenance
Sintef	Norway	Technologies and technical integration	Research organisation
Steamship Mutual	United Kingdom	Strategy and finance	Industry infrastructure
TECNALIA RESEARCH & INNOVATION	Spain	Technologies and technical integration	Research organisation
UNISANNIO	Italy	Overall environmental impact	Research organisation
Università Partenope	Italy	Workforce transition and wider societal impact	Research organisation
Vard Design	Norway	Technologies and technical integration	Industry manufacturing and maintenance
Wärtsilä Voyage Oy	Finland	Technologies and technical integration	Industry manufacturing and maintenance
Waterborne Technology Platform	EU	Technologies and technical integration	Research organisation
WORLD OCEAN COUNCIL	Global	Overall environmental impact	Public institutions, networks and citizen associations involved in strategy, policy and rule-making

3. THE PROCESS OF STAKEHOLDERS CONSULTATION

3.1. Methodological Framework for the SF Consultation

The development of sustainable transport policies and services may be regarded as a *wicked problem*, for which identifying definitive solutions is often challenging, as the problem domain is not clearly bounded and involves a wide range of stakeholders holding diverging and sometimes competing [1]. This characterisation is equally relevant in the context of ZEWT, where safe, secure, sustainable and competitive deployment requires an implementation pathway capable of integrating the perspectives, contributions and capabilities of individuals and organisations with markedly different viewpoints [2].

Within this context, TRUSTEE will adopt a *Participatory Design* approach to support the identification of needs, the assessment of potential solutions and the alignment of strategies across the stakeholder groups. By drawing on a set of principles and design practices aimed at actively engaging future users as co-designers throughout the development process [3], this approach is expected to enhance the long-term robustness and effectiveness of the strategies developed.

The Participatory Design methodology enables participants to anticipate future uses and alternative futures [4] through a process of exploration, comprehension, critical reflection, definition, development and support of mutual learning among multiple actors engaged in a collective *reflection-in-action*.

To ensure a genuinely participatory process leading to the fair and effective consideration of the wide range of perspectives contributed by TRUSTEE Stakeholders Forum (SF) members, the consultation framework has been structured by embedding the workflow of *user-centred design* (also referred to as *human-centred design*) within the broader participatory design approach [5][6]. This results in a four-step methodology, illustrated in Figure 5 - TRUSTEE Workflow of Stakeholders Forum consultation.

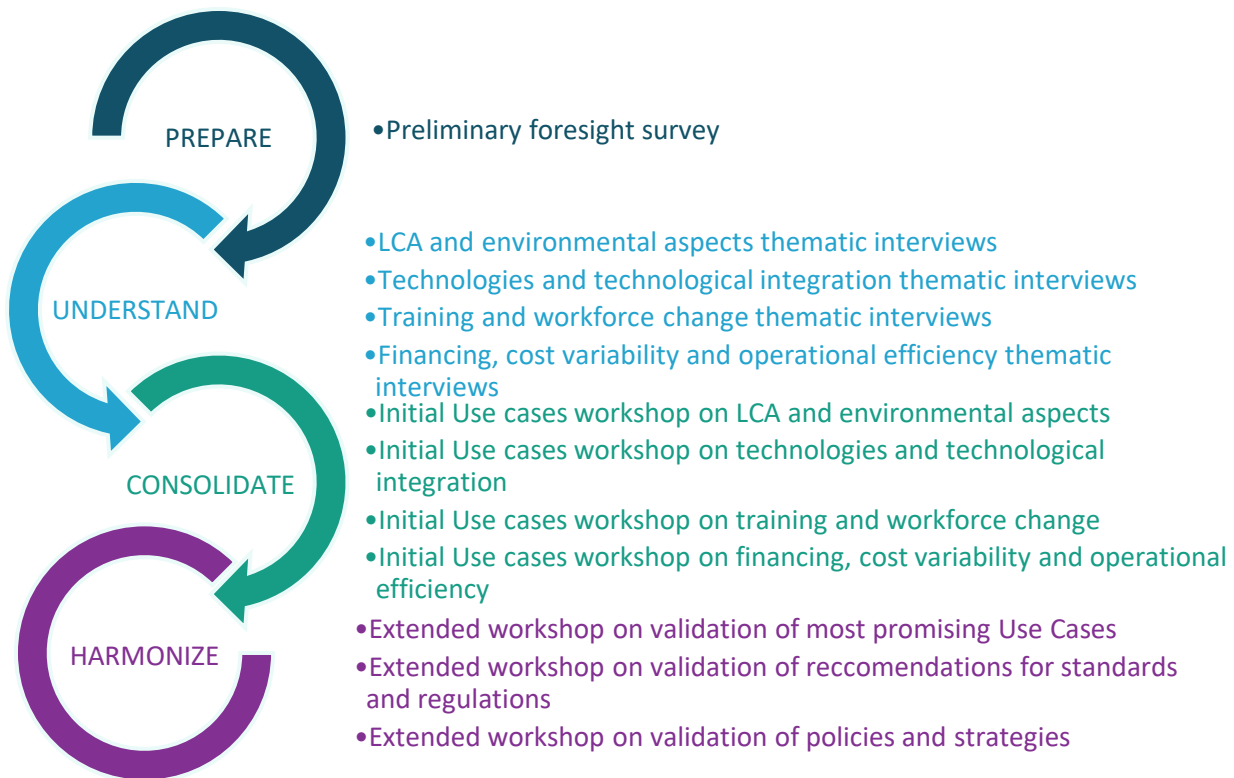


Figure 4 - TRUSTEE Workflow of Stakeholders Forum consultation

The proposed approach allows the consultation process to begin with the collection of unbiased expressions of needs, concerns and expectations. These initial inputs are subsequently examined in greater depth to identify the underlying drivers behind stakeholders' views, thereby informing the development of ZEWT use cases and foresight scenarios. In a subsequent step, stakeholders are engaged again to provide feedback, both in terms of how their needs have been addressed and in relation to the extent to which their expectations and forward-looking perspectives for ZEWT are adequately represented. In the final phase of engagement, TRUSTEE outputs are validated through the integration of insights from all stakeholder groups, resulting in consolidated knowledge and guidance to support the coherent and effective development of the European ZEWT ecosystem.

3.2. Planned activities

The stakeholder engagement plan is aligned with the overall timing of project activities, both contributing inputs to, and drawing inputs from, parallel tasks and work packages. Table 2 further details the objectives, the stakeholders involved and the modes of implementation adopted within the project for each consultation activity.

Table 2 - Overview of planned activities with stakeholders

	Activity	Objective	Involved stakeholders	Mode
PREPARE	Survey	Gather preliminary impressions and feelings on possible ZEWT foresights, not biased by the presentation of TRUSTEE use cases	All SF members (and beyond)	Web-based survey
	Thematic interviews #1	Derive an explanation of web-survey results and unveiling key issues and challenges for ZEWT focusing on the overall environmental impact	At least 3 from the overall environmental impact thematic Online group	Online
UNDERSTAND	Thematic interviews #2	Derive an explanation of web-survey results and unveiling key issues and challenges for ZEWT focusing on Technologies and technical integration	At least 3 from the technologies and technical integration thematic Online group	Online
	Thematic interviews #3	Derive an explanation of web-survey results and unveiling key issues and challenges for ZEWT focusing on workforce transition and wider societal impact	At least 3 from the workforce transition and wider societal Impact thematic Online group	Online
	Thematic interviews #4	Derive an explanation of web-survey results and unveiling key issues and challenges for ZEWT focusing on strategy and finance	At least 3 from the strategy and finance thematic Online group	Online
	Thematic workshop #1	Discuss Pro, Cons, Gaps, Suggestions on proposed initial Use cases with respect to overall environmental impact for the two time horizons	SF members of the intended thematic group	In presence
CONSOLIDATE	Thematic workshop #2	Discuss Pro, Cons, Gaps, Suggestions on proposed initial Use cases with respect to technologies and technical integration for the two time horizons	SF members of the intended thematic group	In presence
	Thematic workshop #3	Discuss Pro, Cons, Gaps, Suggestions on proposed initial Use cases with respect to workforce transition and wider societal impact for the two time horizons	SF members of the intended thematic group	In presence
	Thematic workshop #4	Discuss Pro, Cons, Gaps, Suggestions on proposed initial Use cases with respect to strategy and finance for the two time horizons	SF members of the intended thematic group	In presence
	Extended harmonization workshop	Evaluate the selected most promising Use Cases under the integrated perspectives of overall environmental impact, technologies and technical integration, workforce transition and wider societal impact, and strategy and finance to harmonize costs, benefits, risks for all the stakeholders	SF members from all thematic group	Online
HARMONISE	Recommendations validation workshop #1	Assess and harmonize proposed recommendations for standards and regulations	SF members from all thematic group	In presence

Recommendations validation workshop #2	Assess and harmonize proposed recommendations for policies and strategies	SF members from all thematic group	In presence
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In order establish a fruitful cooperation with the SF members and sustain their engagement along the project development, the following roadmap of contacts with SF has been defined (Figure 5).

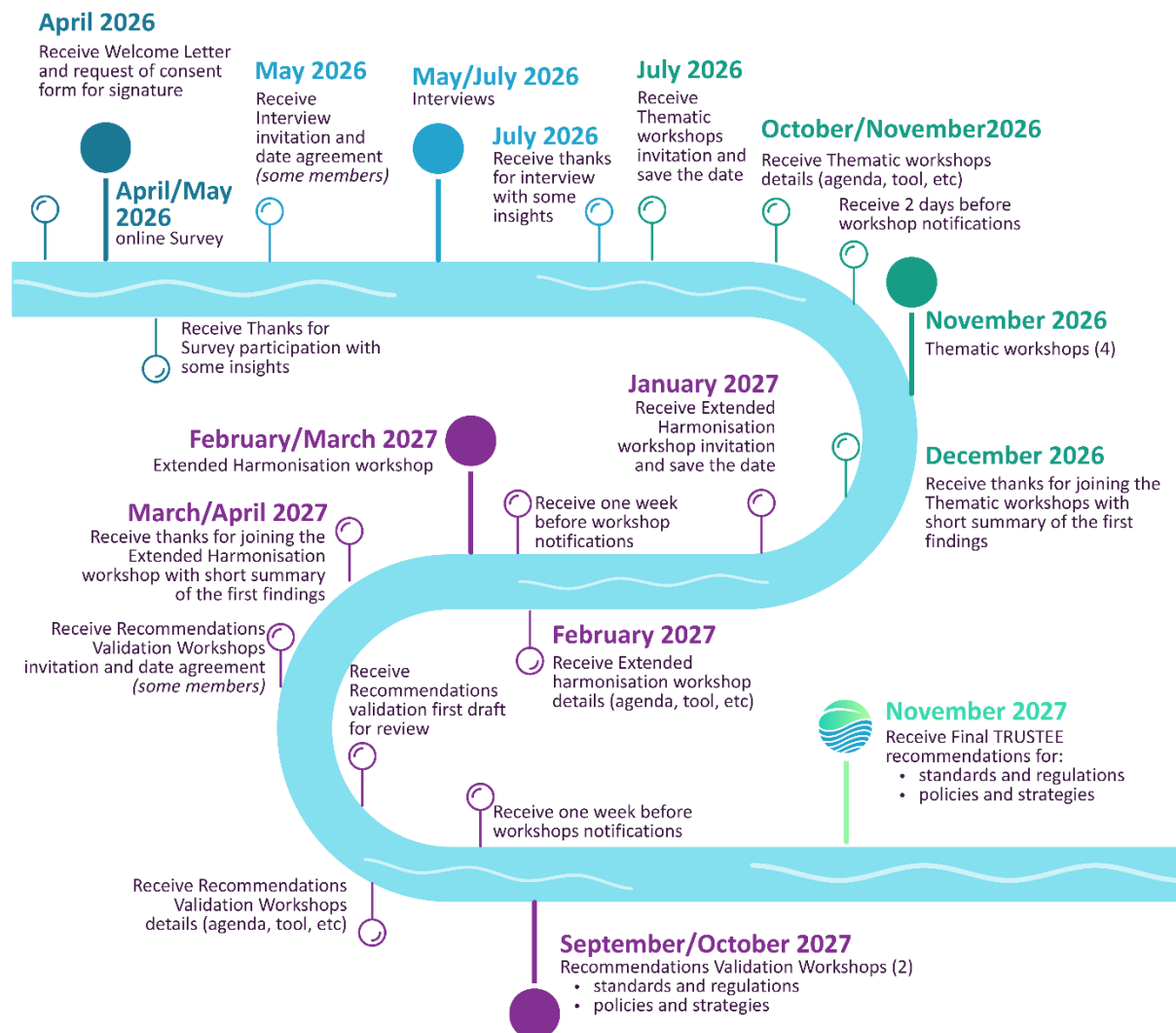


Figure 5 - Overview of the interaction plan with the SF members

4. TOOLKIT SUPPORTING PLANNED ACTIVITIES

4.1. *Web survey on ZEWT foresights*

Within the overall stakeholder engagement strategy of TRUSTEE, the online survey represents a key instrument for structuring and organising stakeholder input in a way that is fully aligned with the project's analytical framework. To this end, the survey content is designed not only to capture individual perspectives on specific issues, but also to ensure consistency with the core thematic dimensions guiding the project activities.

This section summarises the topics that will be addressed through the online preliminary survey conducted within the TRUSTEE Stakeholders Forum (SF). This tool is designed to collect initial perceptions, expectations and attitudes from SF members regarding the development and deployment of Zero Emission Waterborne Transport (ZEWT), prior to their exposure to the initial use cases and foresight scenarios developed within the TRUSTEE project. In this way, the project will benefit from expert inputs that are not influenced by previously presented project materials, while at the same time the survey will trigger early and active engagement of SF members shortly after their invitation, supporting sustained involvement throughout the project duration.

Thanks to the cooperation established with other EU-funded research and innovation projects active in the waterborne transport domain and represented within the SF, in addition to TRUSTEE SF members, the online survey will be disseminated to organisations participating in the aforementioned project consortia, as well as to members of their respective advisory and stakeholder bodies.

The online survey will be anonymous and will gather information on the individual assessment of respondents regarding likelihood, relevance and prioritisation of issues related to the following thematic topics:

- Credibility of ZEWT use cases across different time horizons, including perceived benefits and limitations
- Investment needs and regulatory conditions for infrastructure integration, including ports and terminals, inland waterway infrastructure, energy supply systems, digital traffic management, interconnection with land-based transport networks, maintenance and berthing facilities
- Trends in communication, navigation and digital technologies, with reference to technological maturity, costs and readiness for deployment
- Propulsion systems and zero-emission energy supply options, focusing on their impact on use case feasibility, operational costs and social acceptance
- Awareness of the overall environmental footprint, including lifecycle impacts and emissions reduction potential
- Safety-related aspects, such as, operational incidents and human safety
- Overall system resilience and potential vulnerabilities related to security aspects
- Regulatory and legal frameworks, covering standards development, certification processes and the potential constraining effects of regulatory requirements
- Societal considerations, including public acceptance, perceived risks, local impacts, nuisance effects and affordability of ZEWT services

The survey will consist of approximately 25 structured mandatory questions, plus around 30 optional ones, to be answered using a six-point Likert scale. A limited set of background information will also be collected from respondents, including area of expertise, type of organisation represented and years of professional experience, enabling the analysis of results to identify diverging perspectives, emerging trends and potential areas of contention, which may be explored further through follow-up semi-structured interviews.

To ensure coherence between the survey structure and the thematic focus of TRUSTEE, each topic addressed in the online questionnaire is systematically mapped to one or more of the four project thematic areas. Topics related to investment needs, business models, regulatory conditions, legal frameworks and the credibility of use cases across time horizons are primarily associated with the Strategy and finance thematic area. Questions addressing emissions reduction, lifecycle impacts, environmental awareness and sustainability implications are mapped to the Overall environmental impact area. Issues concerning propulsion systems, energy supply options, communication, navigation, digital technologies and infrastructure integration are linked to the Technologies and technical integration thematic area. Finally, topics focusing on safety and security, social acceptance, risk perception, affordability, skills and employment implications are mapped to the Workforce transition and wider societal impact area. This structured mapping allows survey results to be analysed both by individual topic and across thematic dimensions, ensuring consistency between stakeholder feedback and the analytical framework adopted within the TRUSTEE project.

4.2. *Semi-structured interviews to SF*

Following the completion of the online survey, a second phase of stakeholder engagement will be carried out through semi-structured interviews, with the objective of complementing and deepening the quantitative evidence collected. This qualitative step is designed to provide contextual insight and interpretative depth, supporting a more robust understanding of stakeholder positions and enabling the triangulation of findings across different engagement tools.

The interviews are intended to deepen the understanding of the underlying motivations and rationales behind the responses collected through the online survey. To this end, a semi-structured interview approach will be adopted, combining a predefined set of guiding questions with the flexibility for interviewees to elaborate freely according to their own reasoning and professional experience. Conducted in a conversational manner with one participant at a time, semi-structured interviews will employ a combination of closed and open-ended questions, complemented by targeted why and how follow-up prompts 28.

Within this framework, the semi-structured interviews will [8]:

- collect the interviewees' perspectives on the key findings emerging from the online survey, with specific reference to the thematic area corresponding to their field of expertise;
- elicit in-depth and well-argued explanations of the views expressed, allowing for a richer interpretation of stakeholder positions, priorities and concerns.

The interviews will therefore serve as a qualitative complement to the survey, supporting the interpretation of quantitative results and enabling the identification of causal relationships, trade-offs and contextual factors influencing stakeholder assessments.

The table below outlines the overall structure designed to guide the interviews. The specific questions and discussion prompts will be further refined and tailored on the basis of the results of the online survey, ensuring coherence and continuity across the different stakeholder engagement activities. Furthermore, the key topics will be proposed to the interviewers, mirroring the specific field of expertise of the interested SF member.

Table 3 - Semi-structured interview guide

KEY TOPICS	WHY / HOW EXPLORED WITH RESPECT TO
Barriers to large-scale deployment of ZEWT	Concrete obstacles limiting widespread adoption from the interviewee's perspective
Potential negative implications of ZEWT deployment	Environmental, operational, social or economic drawbacks associated with development and use
Mitigation measures and enabling actions	Concrete measures to overcome barriers and reduce potential risks
Expected benefits for the represented interest group	Anticipated advantages for the stakeholder group to which the interviewee belongs
Time horizons	Short-, medium- and long-term perspectives on ZEWT deployment
Potential ZEWT use cases	Relevance, feasibility and success likelihood of different use cases
Interaction with other stakeholder groups	Relationships, dependencies and potential conflicts with other interest groups
Urban, regional and territorial trends	Alignment with metropolitan, regional and spatial development dynamics
Passenger, user and citizen trends	Expectations, behaviours and acceptance patterns among users and consumers

4.3. Workshops

The TRUSTEE project will implement a series of participatory workshops aimed at eliciting structured knowledge, feedback and recommendations from stakeholders through dynamic interaction and moderated discussion. These workshops are designed to capitalise on the collective intelligence of experts with either homogeneous or complementary areas of expertise, depending on the specific objectives of each session.

To this end, the workshops will primarily adopt a focus group-based methodology [9]. Participants will be organised into small working groups (typically up to around 15 participants) and invited to engage in targeted discussions centred on specific intermediate or final project outputs, which will be presented prior to the discussion (for example, the credibility or feasibility of selected ZEWT use cases). This approach enables focused reflection while encouraging comparison of perspectives across different stakeholder profiles.

To stimulate discussion and support collaborative reasoning, visual facilitation tools will be employed, structured around logical building blocks that guide the development of reflections, ideas and proposals [10]. For this purpose, ad hoc graphic canvases will be developed, allowing the complexity of Zero Emission Waterborne Transport to be broken down into a limited number of key dimensions on which participants can express their views. The active engagement fostered through these canvas-based exercises is expected to generate consolidated, actionable and easily interpretable results within a relatively short timeframe.

The graphic canvases will be made available in printed format for face-to-face workshops and as digital templates for online sessions, to be shared and collaboratively completed using dedicated digital tools (e.g. Miro or equivalent platforms).

In addition to the focus group exercises based on canvas methodologies, each workshop agenda will include introductory and ice-breaking activities, followed by structured exercise sessions involving direct participant engagement. Each working group will be supported by a moderator, a note-taker and a timekeeper, ensuring balanced participation, clear documentation of inputs and effective time management throughout the session.

The following sections present a first draft of the graphic templates that will be used to guide the interactive workshop sessions and support the structured collection of stakeholder contributions.

4.3.1. Canvas for the thematic workshops


TRUSTEE THEMATIC WORKSHOP #

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PRO	CONS	GAPS	SUGGESTIONS
PRO	CONS	GAPS	SUGGESTIONS
PRO	CONS	GAPS	SUGGESTIONS
PRO	CONS	GAPS	SUGGESTIONS
PRO	CONS	GAPS	SUGGESTIONS

Figure 6 - Canvas template to facilitate the Discussion on Use Cases and scenarios within the thematic workshop

4.3.2. Canvas for the harmonisation workshop

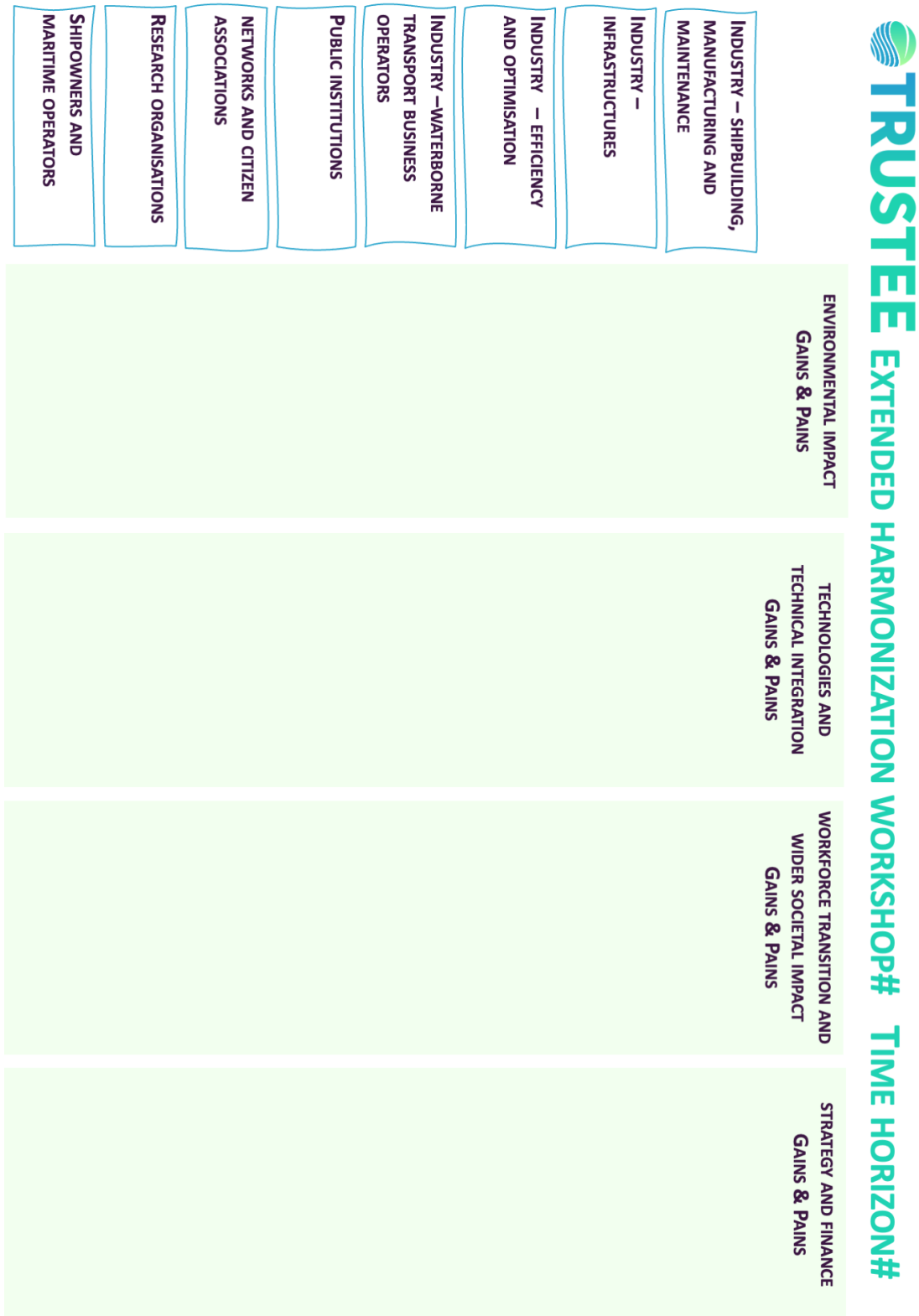


Figure 7 – Canvas template to facilitate the Discussion on Use Cases within the harmonisation workshop

4.3.3. Canvas for the Standards and policy Recommendation workshops



Figure 8 - Canvas template to facilitate the Discussion on Standards and Regulations within the Harmonisation Workshop for Standards and Regulations Recommendations



Figure 9 - Canvas template to facilitate the Discussion on Policies and Strategies within the Harmonisation Workshop for Policies and Strategies Recommendations

5. REFERENCES

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