



DOCKSTHEFUTURE
defining the concept of "Port of the Future"

Clustered Projects Guidance Document

Deliverable 2.2

This project has received funding from the *European Union's Horizon 2020 research and innovation programme* under grant agreement No 770064



Document Status	
Deliverable Lead	Circle
Internal Reviewer 1	
Type	Deliverable
Work Package	WP2: Selection and Clustering of Projects and Initiatives of interest
ID	D2.2: Clustered Projects Guidance Document
Due Date	22nd July 2019
Delivery Date	16th July 2019
Status	Final
Dissemination Level	Public

Document History	
Contributions	Circle Spa
Final Version	Final version revised after rejection. Comments sent by the Project Officer the 5th of July 2019

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Table of contents

Table of contents	4
1. Executive summary	5
2. Selection of Projects and Initiatives of Interest	6
2.1 Project list	6
2.2 Main results	8
LIST OF FIGURES	
1 FIVE MACRO AREAS OF STRATEGIC OBJECTIVES	9
2- STRETEGIC OBJECTIVES- CLIMATE AND ENERGY MACRO AREA	10
3 STRATEGIC OBJECTIVES- COMMUNITY OUTREACH AND PORT- CITY MACRO AREA	12
4 STRETEGIC OBJECTIVES- GOVERANNACE AND ETHICS MACRO AREA	13
5 STRETEGIC OBJECTIVES- RESILIENT INFRASTRUCTURE MACRO AREA	14
6 STRATEGIC OBJECTIVES- SAFETY AND SECURITY MACRO AREA	15

1. Executive summary

The present deliverable presents the results of the selection for clustering of related Projects and Activities based on the defined methodology described in D1.1 *Clustering methodology*.

This deliverable is the result of an in depth analysis further refined thanks to the feedback of the port experts participating to the workshop which took place in Trieste the 3rd of April 2019.

According to the Grant Agreement, D2.2 document contains the relevant information for Projects to be clustered including key information (projects description, the level and date of execution, Topics & Tactical Objectives in relevance to D 1.5 of WorkPackage.1, etc.). Based on the prescribed methodology in D2.1, different port-related projects/initiatives have been selected for Task 2.2: Selection for clustering of related Projects and Activities.

Taking the attentions to the point that the selection is a critical activity, it was necessary to concentrate on on-going projects/initiatives in order to gain a more in-depth insight of the content, the scope, and also the issues like very recent European policies around it. Already having had the criteria for clustering the projects/initiatives, more than 120 Projects/Initiatives clustered. The work carried on by appointing the Topics, Tactical Objectives, and Measure Codes, from D1.5 of WorkPackage.1. Later, this clustered project/initiative table revised according to the valuable comments received from a wide range of port experts/managers of the European States participated at DTF workshop in Trieste, on 3 April 2019. To explain about the small deviation in the methodology of Task 2.2, it would be highlighted that the methodology mentioned in the section of "Benefit mapping one", was later agreed by the project consortium to be changed due two following reasons:

First, in order to keep the consistent flow between WP.1 (D1.5: Topics Identified), WP.2 (Clustering Projects/initiatives), and WP.3 (analysis of the clustered Projects/initiatives).

Second, bearing in mind that the clustered projects/initiatives with their Measure Codes from WP.1(D1.5) and WP.2 (defining Strategic Objectives with regards to the UN 2030 SDG goals) will be analyzed more in-depth in a multi-criteria approach in WP3.

2. Selection of Projects and Initiatives of Interest

This deliverable presents the results deriving from the application of the selection and clustering methodology described in deliverable 2.1 – *Clustering methodology*.

The projects and initiatives selected have been improved after the feedback coming from the second experts' workshop, which took place in Trieste the 3rd April 2019. One of the main goals of workshop, indeed, was to get the feedback from the experts who were asked, during the afternoon session, to validate the list of projects and initiatives as well as add other missing projects and initiatives.

2.1 Project list

The project list (please refer to annex I), was produced according to the methodology presented in Deliverable 2.1 – Clustering Methodology.

As previously highlighted (refer to deliverable 2.1), each “port of the future” topic, previously identified, has been already analysed in WP1, according to the following framework:

- Definition of the topic and related tactical objectives
- Definition of possible solutions (measures)
- Identification of needed researchers and further developments

The activities carried out to cluster initiatives and projects (including RIAs) across topics and United Nation Sustainable Development Goals were the following:

- Selecting projects and initiatives from the existing Docks The future database (refer to deliverable 1.1), trimis, cordis, feedbacks from project team partners, ports' websites and feedbacks from the port experts get during the Expert workshop the 3rd of April in Trieste
- Mapping projects and initiatives with topics codes/tactical objectives codes/measures codes (provided in WP1)

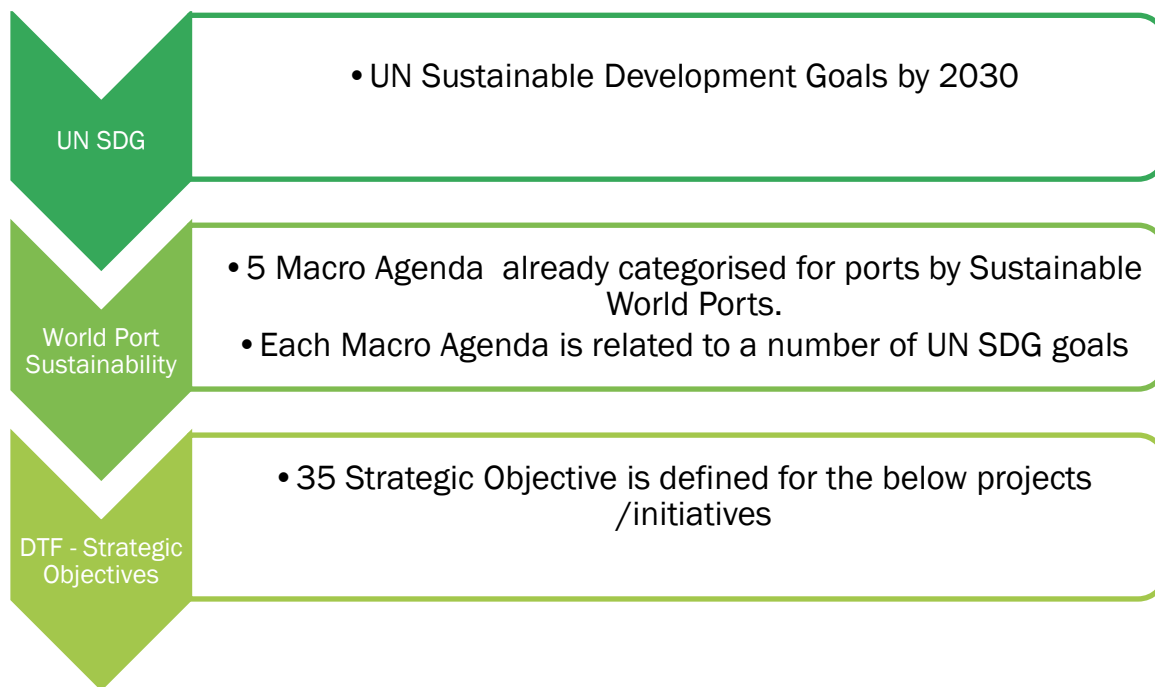
Projects and initiatives added according to the experts' suggestions are the following:

- Danish Initiative SOUNDREP for more input on how to improve security
- SUMPORT- Interreg project
- FINEST Smart Mobility – Finland/Estonia
- Green Cruise Port- Sustainable Development of Cruise port Location
- Maritime Connectivity Platform Consortium (MCPC)
- STEAM- Sea Traffic Management in Eastern Mediterranean
- NXT port
- Corisma
- Transforming Transport Project <https://transformingtransport.eu/>
- SYNCHRONET project <https://www.synchronet.eu/>

Treasuring the experts' advice, the Consortium concluded that the only overall global initiative that could be considered in this respect is the UN AGENDA 2030 and the related Sustainable Development Goals in the scope of the ports.

Therefore, the five Macro Agenda themes in relation to the UN 2030 SDG, according to the sustainable world ports, is selected for the ports and inserted into the Table. Each of this macro themes has a certain number of the Strategic Objectives defined clearly, altogether they are 35 Strategic Objectives (relevant with certain UNSDG goals) based on the sustainable worldport format. The level of the relevance of clustered project or initiative to the Strategic Objectives are defined with number 1, 2, 3.

Number 1 shows a weak relevance between the project's /initiative's tactical objectives & Measures with the defined Strategic Objective to achieve. Number 2 shows a medium relevance, and number 3 shows that the project / initiative is quite in line with the defined Strategic Objective.



136 clustered Projects and Initiatives - WorkPackage 2

Defined with topics , tactical objectives , and measures - WorkPackage.1

2.2 Main results

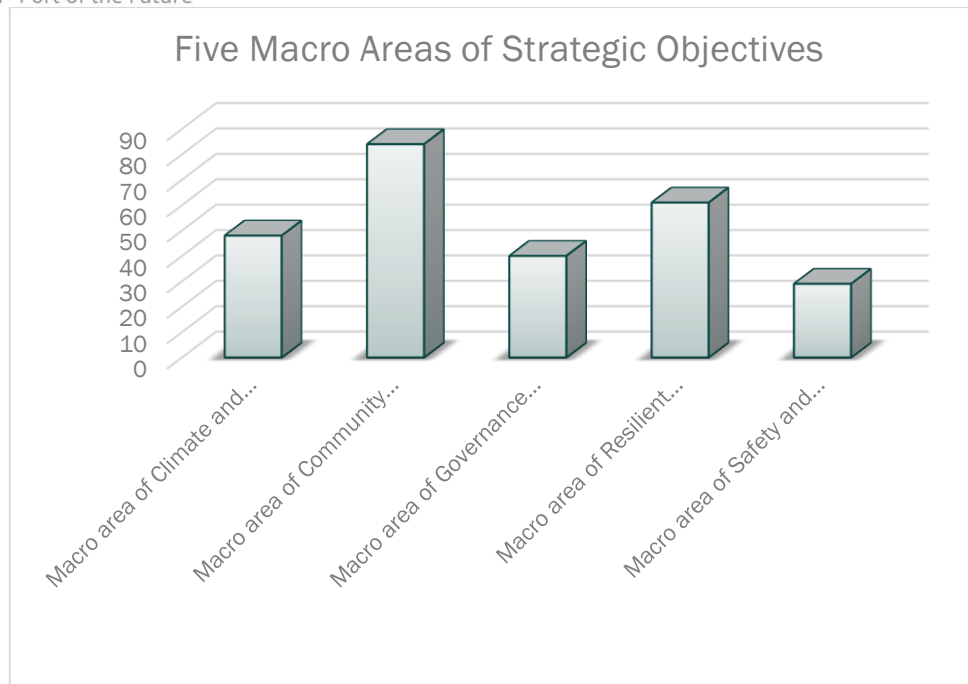
Annex I shows the full list of clustered projects. 136, between projects and initiatives, were assessed and clustered.

To have a better understanding of the clustered projects and initiatives addressing the defined Strategic Objectives. For, this purpose, First the number of the projects/initiatives per each Macro areas of Climate and Energy, Community outreach and Port-City dialogue, Governance and Ethics, Resilient Infrastructure, Safety and Security are listed, followed by a short explanation.

Then, the Number of the Projects/Initiatives per each specific Strategic Objectives is calculated. The Strategic Objectives which have been addressed with highest and lowest numbers of the projects/initiative are named and analyzed. At the end the Gap analysis shows the areas in which the clustered projects/initiatives suffer from being addressed in specific Strategic Objectives.

First, we have an overlook over the clustered projects and initiatives regarding the five 5 Macro Areas of the Strategic Objectives. It gives us the indication of the focus of the attention of the port projects in recent years, in particular in Europe. The number of the Projects and Initiatives per each Macro Agenda & Strategic Objective are listed as per below.

→ Macro area of Climate and Energy:	48
→ Macro area of Community outreach and Port-City dialogue:	84
→ Macro area of Governance and Ethics:	40
→ Macro area of Resilient Infrastructure:	61
→ Macro area of Safety and Security:	29



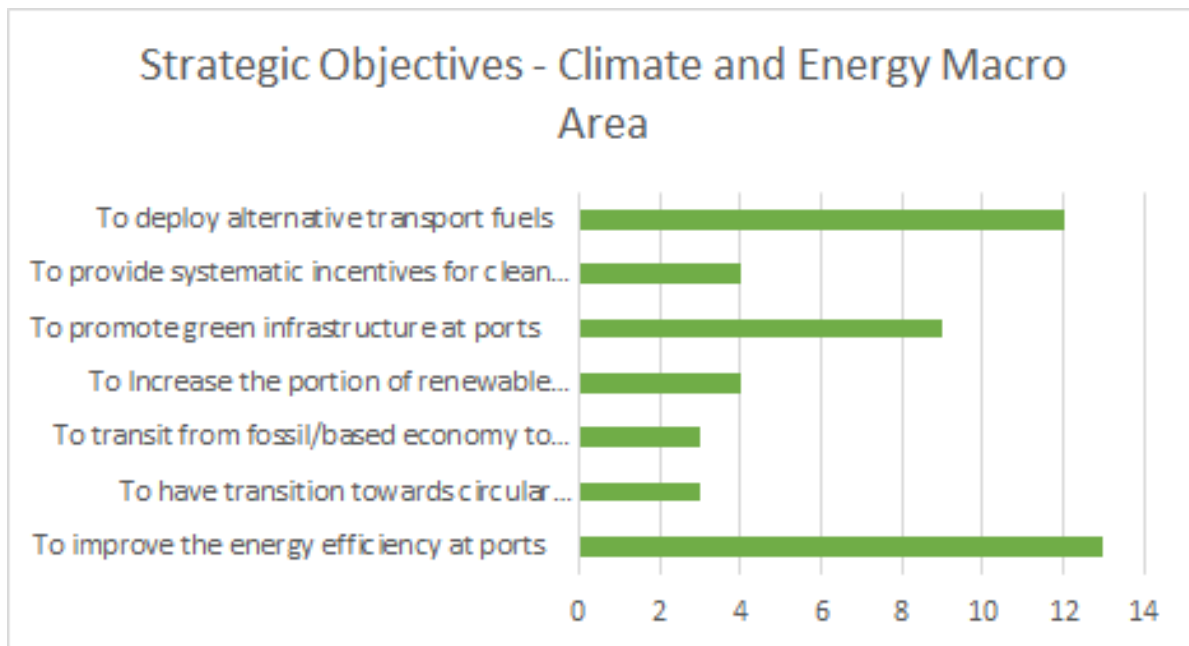
1 Five Macro Areas of Strategic Objectives

The statistics of the relevance of the defined Strategic Objectives (defined in 5 Macro Areas) to the clustered Projects and Initiatives indicates that Areas of Port-city dialogue, Resilient Infrastructure, Climate and Energy, Governance and Ethics, and at the last Safety and Security are in order with the highest number of engagements to the clustered. The statistics shows that Port issues and projects are very inter-related to their cities. It means port development have mostly considered as a part of a bigger plan of port-city development. The second important issue, regarding the number of the projects on each strategic Object, is the climate concerns with a focus on Resilience in port.

The other point that can be taken into consideration, is that safety security of the ports together with port labor issues such as training and skills for new technologies, etc. is at the least center of attentions. However, it should be taken into consideration that human element has been recognized as the most valuable asset of the entities and companies in all industries. Therefore, lack of well trained and skillful people who work at port area, or port logistics can slow down sustainable developments and achieving different targeted goals for the ports.

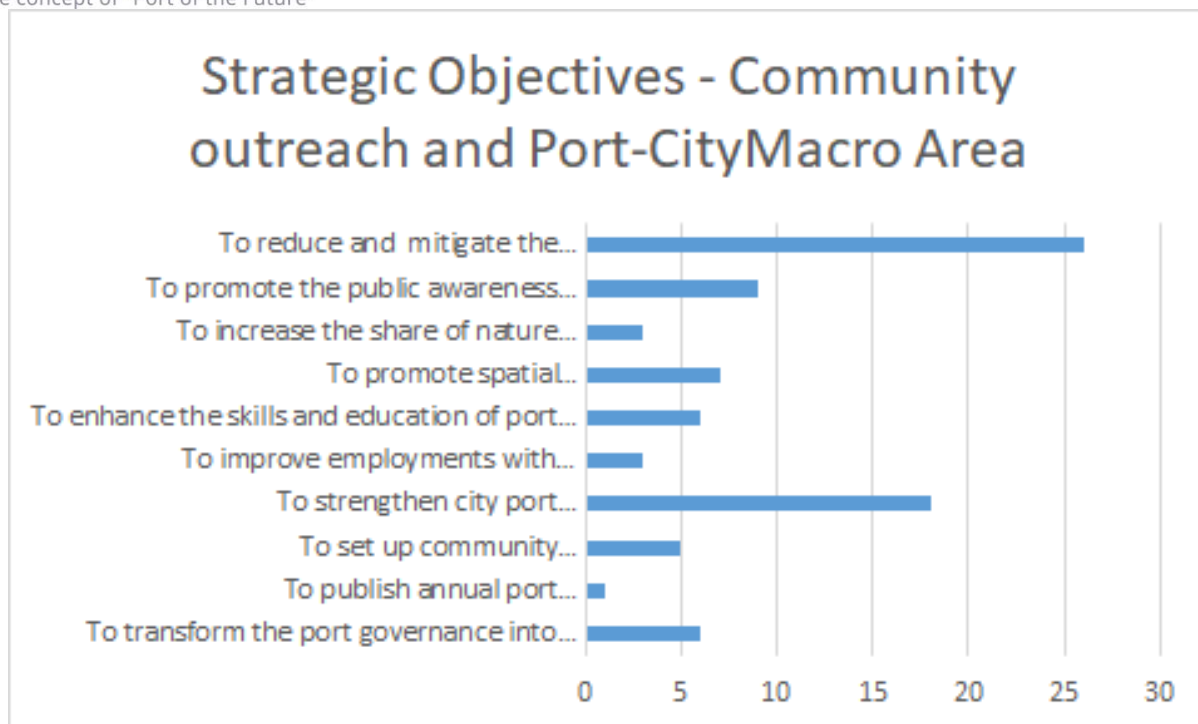
Here are the number of Projects or the Initiatives addressing each of the defined Strategic Objectives in the five Macro Areas:

To improve the energy efficiency at ports	13
To have transition towards circular economy	3
To transit from fossil/based economy to bio-based economy	3
To Increase the portion of renewable energy in port	4
To promote green infrastructure at ports	9
To provide systematic incentives for clean ships,	4
To deploy alternative transport fuels	12



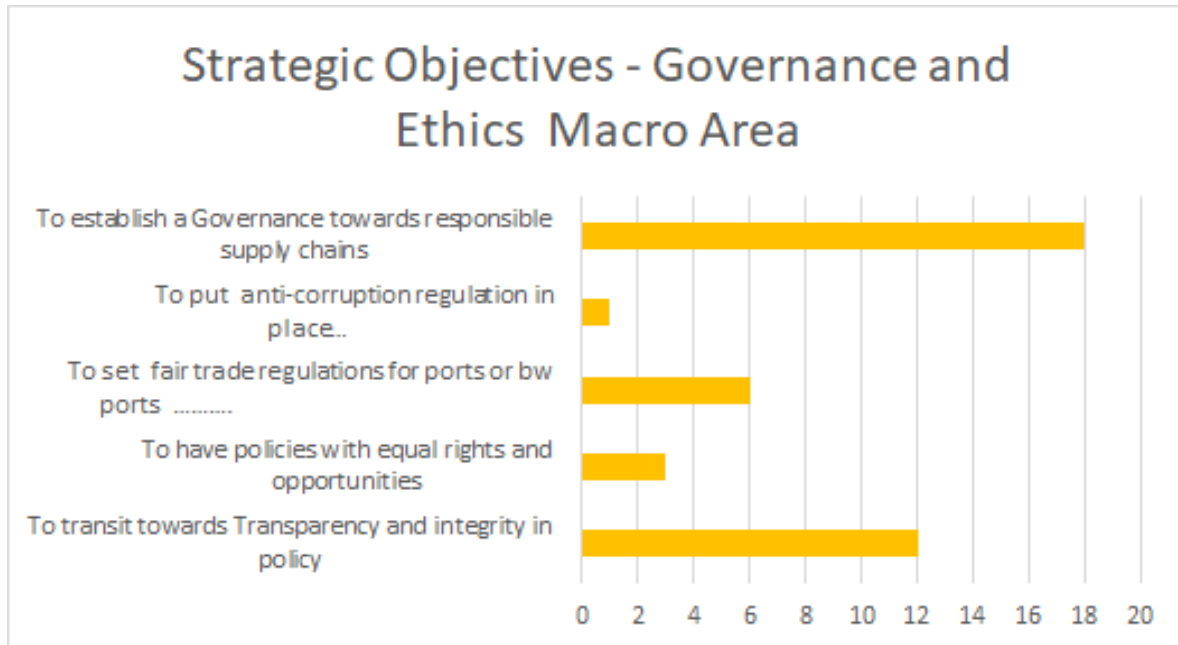
2- Strategic Objectives- Climate and Energy Macro Area

To transform the port governance into stakeholder management,	6
To publish annual port sustainability report,	1
To set up community outreach	5
To strengthen city-port relations	18
To improve employments with new business models	3
To enhance the skills and education of port community	6
To promote spatial planning,	7
To increase the share of nature areas in ports	3
To promote the public awareness and port culture,	9
To reduce / mitigate the externalities of port operations	26



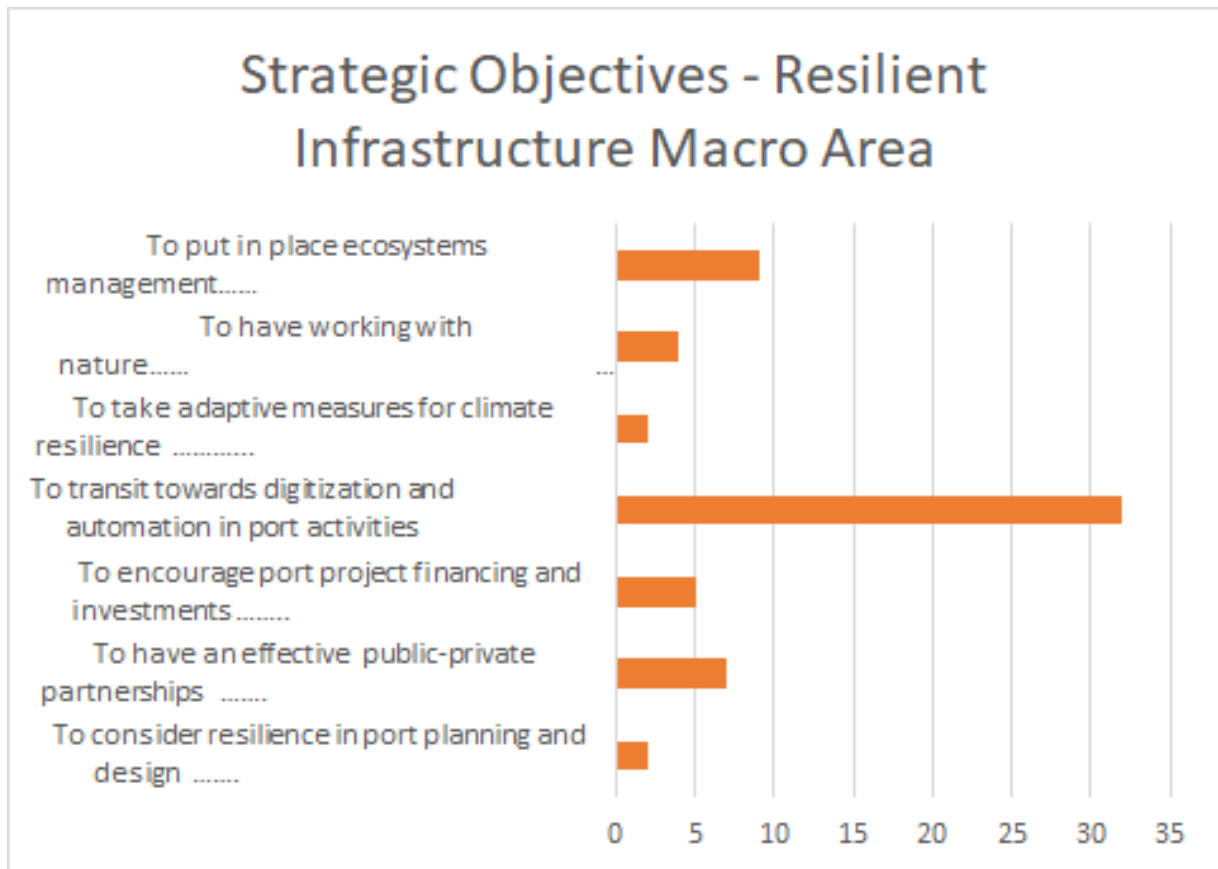
3 Strategic Objectives- Community outreach and Port- City Macro Area

To transit towards Transparency and integrity in policy,	12
To have policies with equal rights and opportunities,	3
To set fair trade regulations for ports or between ports,	6
To put anti-corruption regulations,	1
To establish a Governance towards responsible supply chains	18



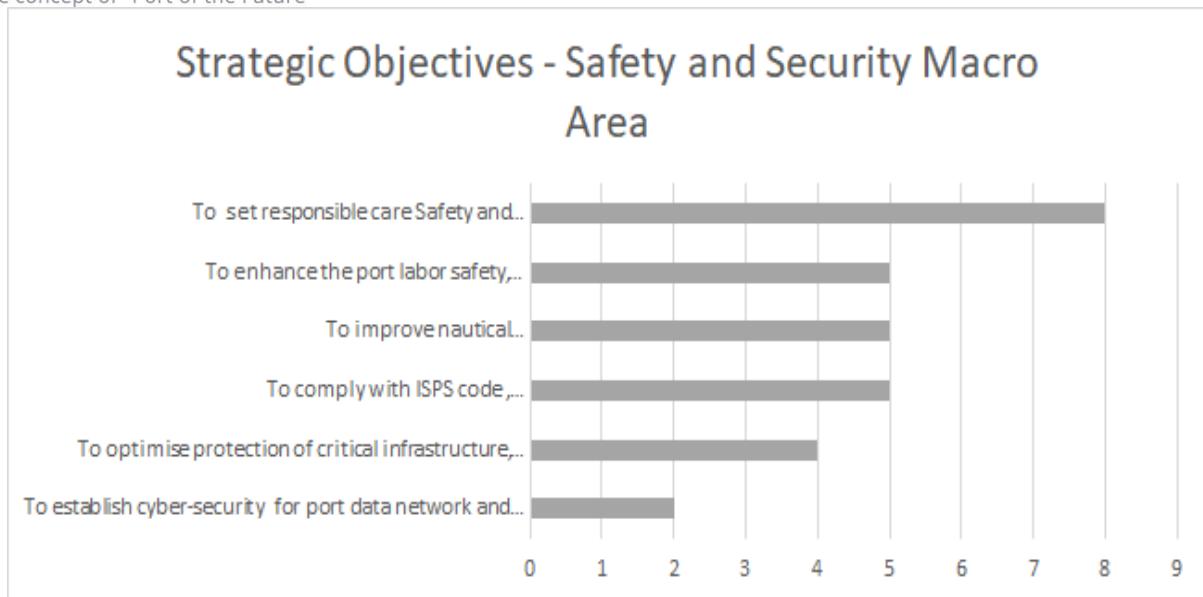
4 Strategic Objectives- Governannace and Ethics Macro Area

To consider resilience in port planning and design,	2
To have an effective public-private partnerships,	7
To encourage port project financing and investments	5
To transit towards digitization and automation in port activities,	32
To take adaptive measures for climate resilience,	2
To have working with nature,	4
To put in place ecosystems management	9



5 Strategic Objectives- Resilient Infrastructure Macro Area

To establish cyber-security for port data network and platforms,	2
To optimize protection of critical infrastructure,	4
To comply with ISPS code ,	5
To improve nautical safety,	5
To enhance the port labor safety,	5
To set responsible care Safety and Security	8



6 Strategic Objectives- Safety and Security Macro Area

More in detail analysis of the Number of projects/initiatives related to each Strategic Objectives. It shows that the good practices among all, are the strategic objectives: To transit towards digitization and automation in port activities with contribution to 32 projects/Initiatives (Resilient Infrastructure), and also To reduce / mitigate the externalities of port operations with contribution to 26 projects/Initiatives (Community outreach and Port-City dialogue) are far away from other strategic objectives.

To strengthen city-port relations , To improve the energy efficiency at ports, To deploy alternative transport fuels, To transit towards Transparency and integrity in policy, To establish a Governance towards responsible supply chains, To put in place ecosystems management are also the most repeated strategic objectives among the Clustered objectives /initiatives.

The Gap analysis shows that the clustered projects and initiatives suffer from the projects with the goals aiming at the following Strategic Objectives:

- To have transition towards circular economy
- To transit from fossil/based economy to bio-based economy,
- To Increase the portion of renewable energy in port
- To provide systematic incentives for clean ships,
- To publish annual port sustainability report,
- To improve employments with new business models
- To increase the share of nature areas in ports
- To have policies with equal rights and opportunities,
- To put anti-corruption regulations,
- To consider resilience in port planning and design,
- To take adaptive measures for climate resilience,
- To have working with nature,



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- To establish cyber-security for port data network and platforms,
- To optimize protection of critical infrastructure,

