



Environmental Priorities of European Ports

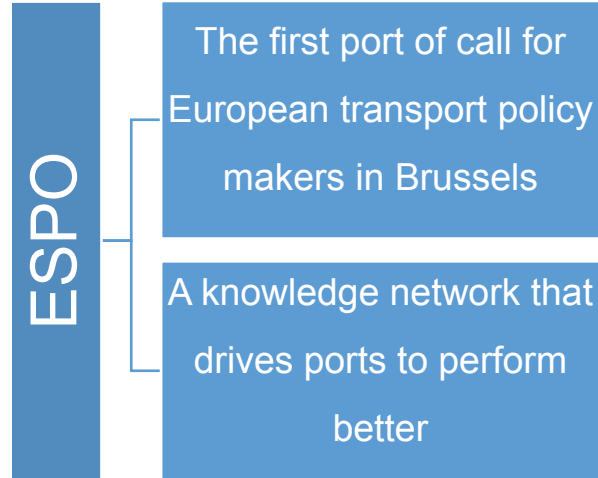
Sotiris Raptis, Senior Advisor for
Environment

Short Sea Shipping Days 2019

Piraeus, 13 June 2019

European Sea Ports Organisation

- **Port authorities**
- **Port associations**
- **Port administrations from EU and Norway**
- **Observers: Iceland, Israel & Ukraine**
- **Since 1993**

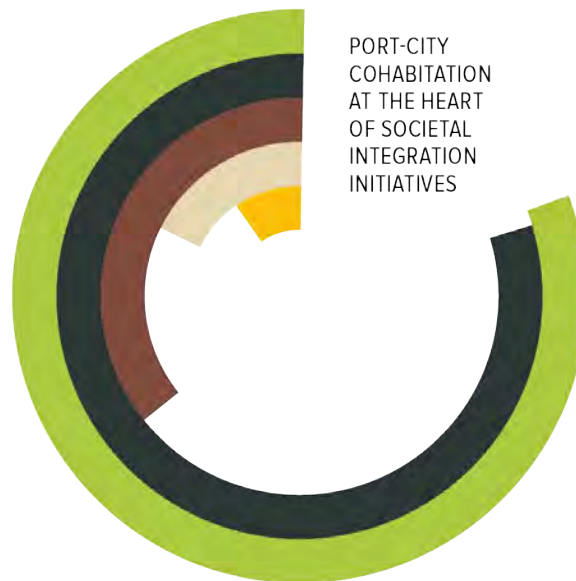


90% of European ports are urban ports



INITIATIVES LED BY THE PORT AUTHORITY AIMED AT IMPROVING SOCIETAL INTEGRATION OF PORT ACTIVITIES

- 81% Initiatives to establish cohabitation with local communities in and around the port area
- 80% Initiatives to make society experience and understand the port
- 36% Initiatives to attract young people to work in the port
- 18% Other societal integration initiatives
- 10% None



1



Air quality

2



Energy
consumption

3



Noise

4



Relationship with
local community

5



Ship waste

6



Port development
(land related)

7



Climate change

8



Water quality

9



Dredging
operations

10



Garbage /
Port waste

**Top 10 environmental
priorities of European
ports for 2018**

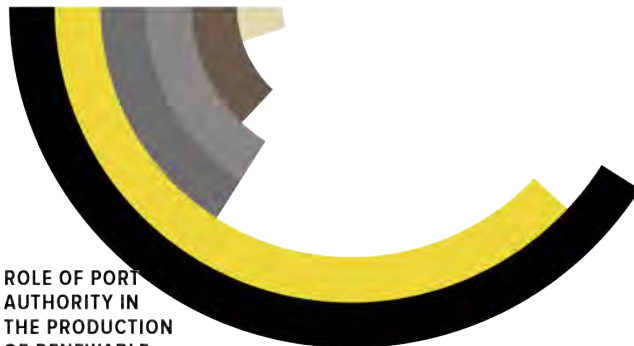
TOP 10 ENVIRONMENTAL PRIORITIES OF THE PORT SECTOR OVER YEARS

	1996	2004	2009	2013	2016	2017	2018
1	Port development (water)	Garbage/ Port waste	Noise	Air quality	Air quality	Air quality	Air quality
2	Water quality	Dredging operations	Air quality	Garbage/ Port waste	Energy consumption	Energy consumption	Energy consumption
3	Dredging disposal	Dredging disposal	Garbage/ Port waste	Energy consumption	Noise	Noise	Noise
4	Dredging operations	Dust	Dredging operations	Noise	Relationship with the community	Water quality	Relationship with the community
5	Dust	Noise	Dredging disposal	Ship waste	Garbage/ Port waste	Dredging operations	Ship waste
6	Port development (land)	Air quality	Relationship with the community	Relationship with the community	Ship waste	Garbage/ Port waste	Port development (land)
7	Contaminated land	Hazardous cargo	Energy consumption	Dredging operations	Port development (land)	Port development (land)	Climate Change
8	Habitat loss/ degradation	Bunkering	Dust	Dust	Water quality	Relationship with the community	Water quality
9	Traffic volume	Port development (land)	Port development (water)	Port development (land)	Dust	Ship waste	Dredging operations
10	Industrial effluent	Ship discharge (bilge)	Port development (land)	Water quality	Dredging operations	Climate Change	Garbage/ Port waste

Ports contribute to climate targets



38% OF PORT AUTHORITIES
ARE FACILITATORS OF RENEWABLE
ENERGY PRODUCTION IN THE PORT



ROLE OF PORT AUTHORITY IN THE PRODUCTION OF RENEWABLE ENERGY

- 41% Provider of land
- 38% Initiator/facilitator
- 16% Logistics support
- 16% Investor/
co-investor
- 13% Operator of the
facilities
- 5% Other roles

56% OF PORT
AUTHORITIES HAVE
ESTABLISHED ENERGY
TARGETS



22 Years

EcoPorts

- ✓ 22 years
- ✓ Around 100 ports are currently in the network
- ✓ Defines the environmental profile of your port: answering 250 questions (SDM): “check up”
- ✓ Review: compare with the average “wake up call”
- ✓ 1/3 is PERS certified (Lloyd’s Register)
- ✓ SDM and PERS: 2 years valid



**ESPO
ENVIRONMENTAL
REPORT 2018**

EcoPortsinSights 2018



PERCENTAGE OF POSITIVE RESPONSES TO THE ENVIRONMENTAL MANAGEMENT INDICATORS

Indicators	2013	2016	2017	2018	CHANGE 2013 – 2018
A Existence of a Certified Environmental Management System –EMS (ISO, EMAS, PERS)	54	70	70	73	19%
B Existence of an Environmental Policy	90	92	97	96	6%
C Environmental Policy makes reference to ESPO's guideline documents	38	34	35	36	-2%
D Existence of an inventory of relevant environmental legislation	90	90	93	97	7%
E Existence of an inventory of Significant Environmental Aspects (SEA)	84	89	93	93	9%
F Definition of objectives and targets for environmental improvement	84	89	93	93	9%
G Existence of an environmental training programme for port employees	66	55	68	58	-8%
H Existence of an environmental monitoring programme	79	82	89	89	10%
I Environmental responsibilities of key personnel are documented	71	85	86	86	15%
J Publicly available environmental report	62	66	68	68	6%

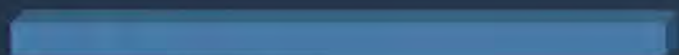
PROGRESS OF THE ENVIRONMENTAL MANAGEMENT INDEX OVER THE YEARS



7.25 2013



7.72 2016



8.08 2017



8.08 2018

DISTRIBUTION OF THE EMS CERTIFICATES

53.0%

ISO: 35

28.8%

PERS: 19

9.1%

ISO/PERS: 6

7.6%

EMAS/PERS/ISO: 5

1.5%

EMAS: 1



PERCENTAGE OF POSITIVE RESPONSES TO THESE COMMUNICATION INDICATORS



88 %

Is the Policy communicated to all relevant stakeholders?



84 %

Is the policy publicly available on the port's website?

PERCENTAGE OF POSITIVE RESPONSES TO ENVIRONMENTAL MONITORING INDICATORS

Indicators	2013	2016	2017	2018	CHANGE 2013 – 2018
Waste	67	79	88	84	17%
Energy consumption	65	73	80	80	15%
Water quality	56	70	75	76	20%
Water consumption	58	62	71	72	14%
Noise	52	57	64	68	16%
Air quality	52	65	69	67	15%
Sediment quality	56	63	65	58	2%
Carbon Footprint	48	47	49	47	-1%
Marine ecosystems	35	36	44	40	5%
Soil quality	42	44	48	38	-4%
Terrestrial habitats	38	30	37	38	0%

MONITORING INDICATORS RELATED WITH CLIMATE CHANGE



78 % Does your port consider climate change adaptation as part of new infrastructure development projects?

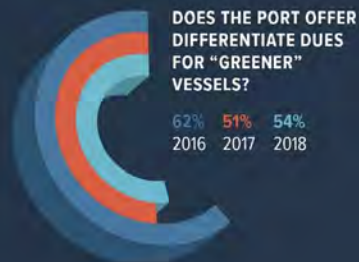


59 % Does your port take steps to strengthen the resilience of its existing infrastructure in order to adapt to climate change?



41 % Does your port experience operational challenges that could be related to climate change (e.g. more frequent storms, flooding, changes in wind or wave conditions)?

PERCENTAGE OF POSITIVE RESPONSES TO SERVICES TO SHIPPING INDICATORS



PERCENTAGE OF POSITIVE RESPONSES ACCORDING TO THE MEAN OF TRANSPORT USED FOR THE PROVISION OF LNG



2 %

Through a non-mobile installation?



26 %

By truck?



6 %

By barge?

IMO: 0.5% sulphur cap in 2020 & at least 50% reduction of CO₂ by 2050



Emission Control Areas



Air Quality and Climate Change

- Regulations
 - SOx 0.1% by 2015 in SECAs
 - SOx 0.5% globally in 2020
 - NOx Tier III limitations for new ships as from 2021 in NECAs
 - CO2 emissions at IMO & EU
 - Directive on the deployment of alternative fuels infrastructure



Alternative Fuels Infrastructure

Directive: LNG

1. Member States shall ensure, by means of their national policy frameworks, that an appropriate number of refueling points for LNG are put in place at maritime ports, to enable LNG inland waterway vessels or seagoing ships to circulate throughout the TEN-T Core Network by 31 December 2025. Member States shall cooperate with neighbouring Member States where necessary to ensure adequate coverage of the TEN-T Core Network.

- Appropriate number of refueling points for LNG are put in place at maritime ports in TEN-T Core Network by **31 December 2025**

Alternative Fuels Infrastructure

Directive: Shore-side electricity

5. Member States shall ensure that the need for shore-side electricity supply for inland waterway vessels and seagoing ships in maritime and inland ports is assessed in their national policy frameworks. Such shore-side electricity supply shall be installed as a priority in ports of the TEN-T Core Network, and in other ports, by 31 December 2025, unless there is no demand and the costs are disproportionate to the benefits, including environmental benefits.

- Shore-side electricity supply in ports of the TEN-T Core Network and in other ports **by 31 December 2025**
- Unless there is no demand and the costs are disproportionate to the benefits, including environmental benefits

Infrastructure challenges

- Availability of future fuels
- Technical challenges in storage and bunkering for some future fuels
- Availability of renewable electricity
- Policy barriers - coherence

PRIORITIES OF EUROPEAN PORTS FOR 2019 – 2024

*Memorandum of the European
Sea Ports Organisation for
the new Commission and
European Parliament*



DECARBONISATION: ALL HANDS ON DECK

Europe must support investments that implement the decarbonisation and climate adaptation strategy of the port

Ports can be the spider in the web for guiding Europe's economy through the energy transition

Europe must monitor the implementation of the IMO CO2 target for shipping: 2023 is a milestone

Avoid legislation that prevents the port sector to adapt to the continuous technological innovation

Strategies must be reviewed in the light of the EU 2050 long term strategy for a Climate Neutral Economy

AIR QUALITY AT THE HEART OF THE PORT-CITY RELATIONS

A gradual but mandatory transition plan to cleaner fuels must be developed: plan must deliver on both air quality and decarbonisation

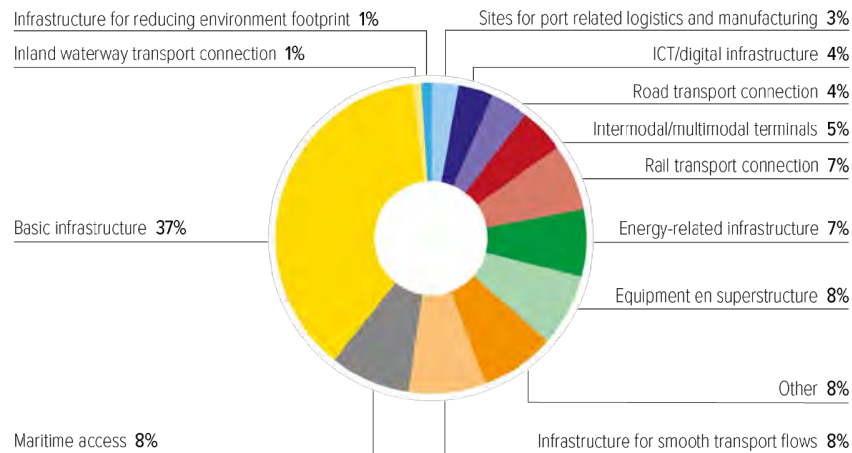
Start the discussion on the implementation of an EU Emission Control Area (ECA) in close cooperation with all relevant stakeholders

Chicken/egg: policy measures on the port side should be accompanied by corresponding measures for the users

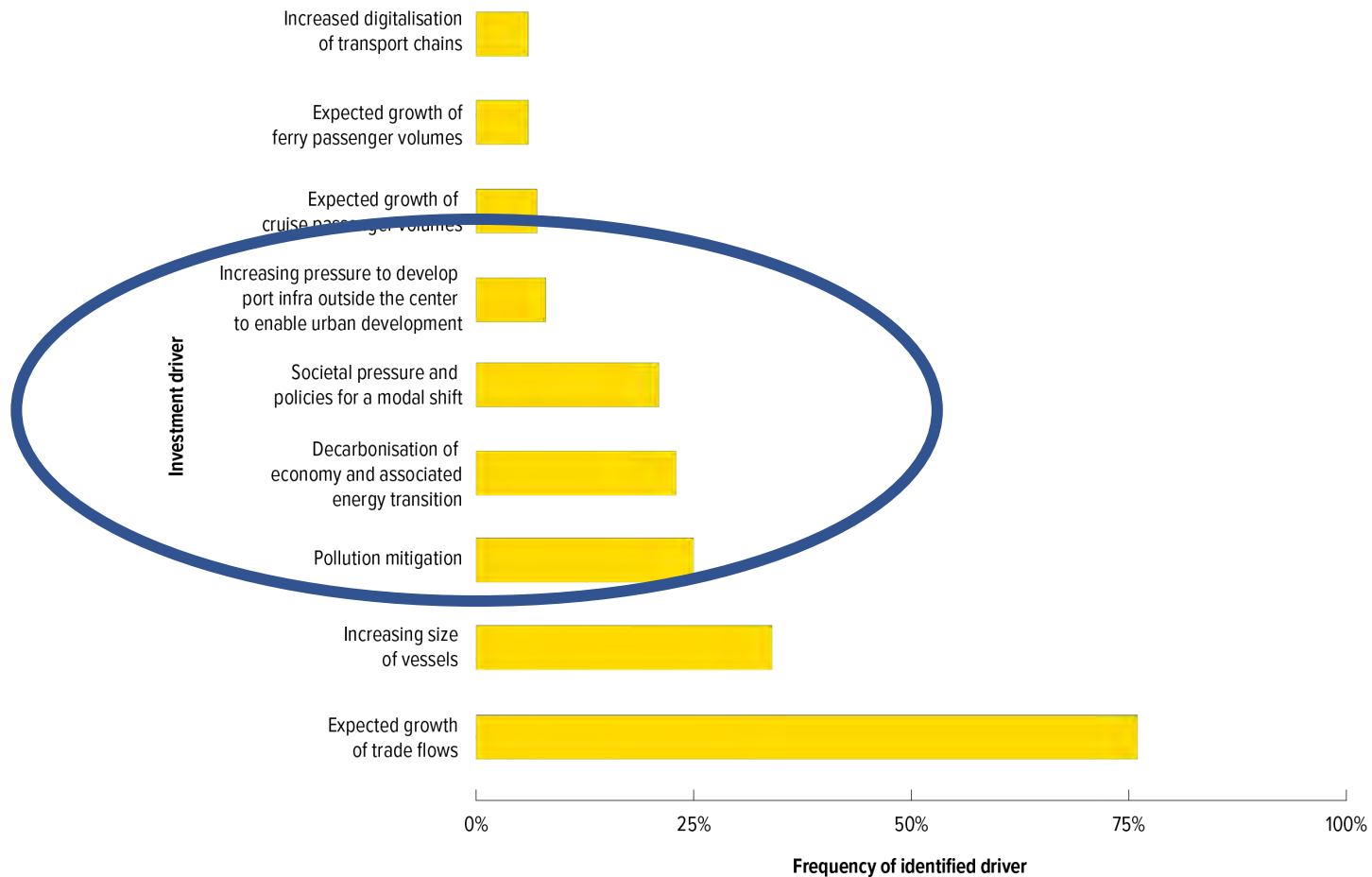
Tax exemption for onshore power supply for vessels is needed

Prompt and harmonised approach on liquid discharges from scrubbers is needed

48 billion EUR investment needs in ports in coming 10 years



**Source: ESPO study - THE INFRASTRUCTURE
INVESTMENT NEEDS
AND FINANCING
CHALLENGE OF
EUROPEAN PORTS - 2018**





Thank you for your attention!

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