Port of Rotterdam © Freek van Arkel

ECG Sustainability days 2026 – 04/02/2025

Tim Verhoeven - European Sea Ports Organisation

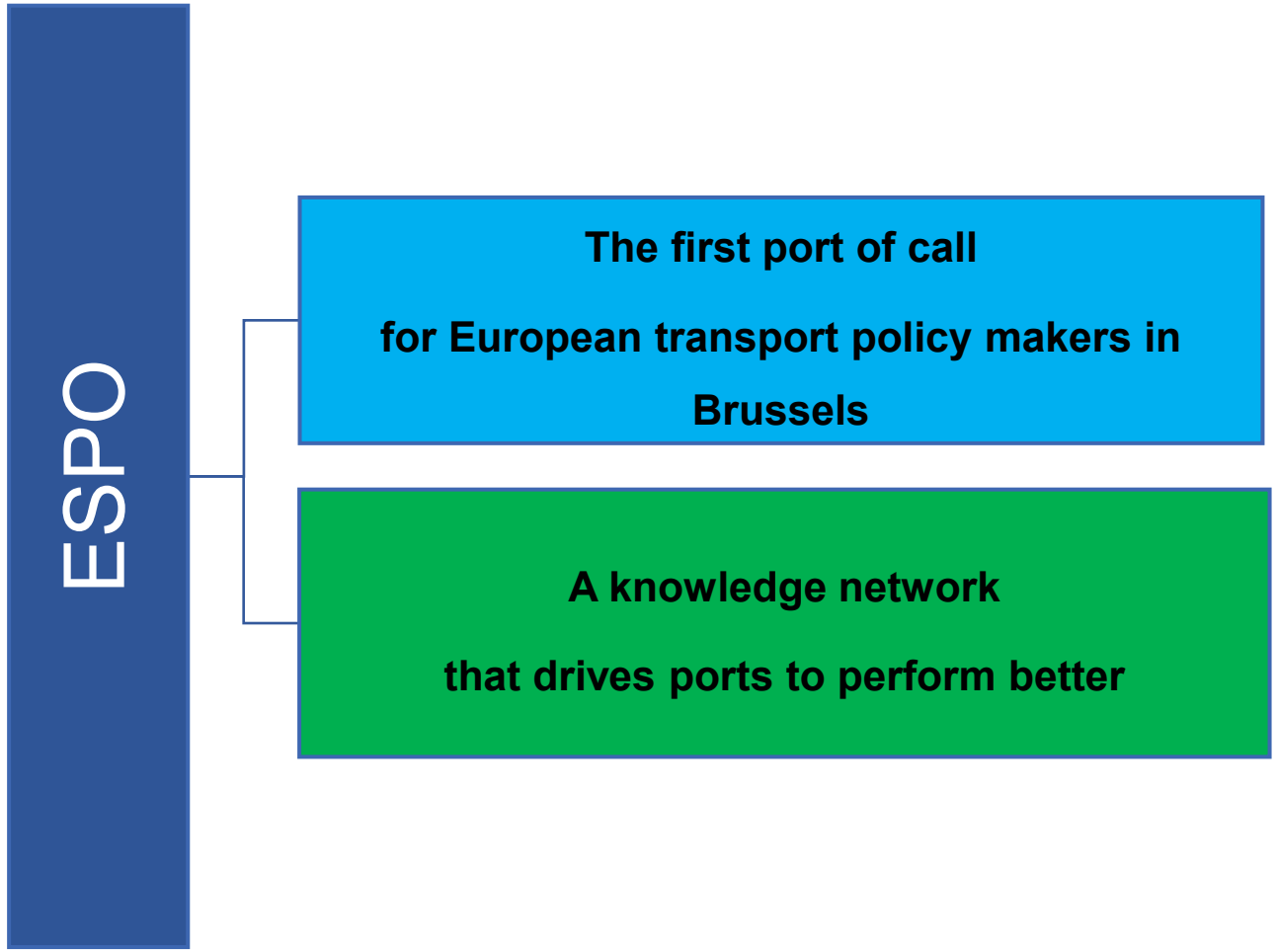
Sustainable practices in EU Ports

1. Introduction on Ports
2. European (Maritime) Policy
3. Voluntary action - EcoPorts

European Sea Ports Organisation

ESPO represents the port authorities, port associations and port administrations of the seaports of 22 Member States of the European Union including Norway at EU political level.

ESPO also has observer members in Albania, Iceland, Israel, Montenegro, Ukraine and United Kingdom.



All ports are different

- **Size: area, throughput, #ship calls**
- **Traffic / cargo: container, vehicles, passenger, fishery, offshore**
- **Location:**
  - coastal, inland, island
  - near cities or isolate
  - Mediterranean, Baltic, …
  - Hinterland connection
- **Industries**
- **Governance: Public – Private**

Port Governance – The different actors operating in the port area

Source ESPO Green Guide 2021

ESPO

ECOPORTS

TRADITIONAL PORT FUNCTIONS

Basic Infrastructure

Cargo handling, storage, and logistics

Regulatory Role

Customs, border control, and maritime safety

Local Economic Hubs

Supporting regional trade and employment

Local Economic Hubs

STRATEGIC ENABLERS

Energy Transition Hubs

Import/export of renewable energy (e.g. hydrogen, wind components). intrastructure like pipelines, support for offshore wind and ocean economy

Decarbonisation Partners

Electrification of port operations, green corridors for shipping, carbon capture and storage (CCS)

Climate Resilience Frontlines

Strategic logistics for European defence and security
dual-use capabilities for civil military

EU Maritime Policy

Fit For 55

AFIR - OPS requirements by 2030 (Article 9)

Type of vessels above 5000 gross tonnes	average **annual number of port calls** of ships moored at the **quayside (>2h)**, averaged over last 3 years
seagoing **container** ships	above **100**
seagoing **ro-ro passenger** ships	above **40**
seagoing high-speed **passenger** crafts	above **40**
seagoing **passenger** ships (other than seagoing ro-ro passenger ships and seagoing high-speed passenger crafts) = *cruise ships*	above **25**

are equipped to provide each year shore-side electricity supply **for at least 90% of the total number of port calls** [from ships] that are moored at the quayside at the maritime port concerned *(TEN-T core and compr)*

- From 2035: in non-AFIR ports with OPS available at the visited quayside, the ship has to connect to OPS

+ **Article 11** – Relative light requirements ("an appropriate number") to supply **LNG** in maritime ports
In TEN-T *core* maritime ports, **by 31 December 2024**
Member States cooperation with other MS to ensure sufficient coverage. Deployment driven by market demand.

OPS requirements in ports by 2030: challenges

- Scope AFIR is very large (almost no prioritisation possible)
- Massive investments in ports (bigger ports more than 100 million EUR) (4 – 10mjn€/berth) (500 berths)
- Stakeholder alignment: complex projects involving energy providers, grid operators, port authorities, terminal operators and shipping lines. → study times > 2 years
- Difficult to get shipping lines engaged to use before 2030 – no business case – infrastructure ≠ emission reduction
- Market has delays (equipment) = small market with limited service providers
- Case by case approach needed, terminal setup and port governance always different.
- Grid Capacity will be challenging / timing grid expansions - first come first serve principle
- OPEX (not clear)

Fuel EU – new fuels

- Role of ports:
    - **Support** maritime decarbonisation
        - Safe bunkering: rules and regulations = Setting right regulatory framework
        - Acting as facilitator: attracting the right investors on the port platform
    - Decarbonise **own operations** → setting the example

- No call for mandatory requirements on ports for fuels infrastructure → **market demand** & rest will follow.
- Ports are already **far advanced** in implementing new fuels (fuel readiness level) – Global market

Maritime ETS

- **Financial impact** for shipping is real: Cost differences are significant when rerouting. And shipping is a competitive business. --> Competitive disadvantage for ports,
- **Operational impact**: extra stops from far-east takes extra time
- **Strategic control** over transshipment in danger: Transhipment ports often in strategic geopolitical locations (difficult to keep these state of the art if no economic base)
- Loss of cargo outside EU will affect **competitiveness** of EU ports & jeopardise **investments** that come with crucial challenges.
- Counterproductive effect on emissions: modal shift to road, longer sailing routes and extra stops can lead to **more emissions**. Needs to be monitored!

→ Revenues flow back to MS! Not dedicated to the maritime sector

ETS and Fuel EU

- We fully support the decarbonisation strategy of Europe

BUT: EU local shipping measures → concern about carbon & business leakage

→ Support the global approach for decarbonising shipping under IMO

- Need for maximal alignment
- Avoid overlap and double counting

Decision MEPC on the NZF postponed 1 year → what will happen?

EU Zero pollution strategy

- Ambient Air quality Directive
- Water framework Directive
- Marine strategy framework directive
- Soil directive
- Nature restauration regulation
- …

NEW EU initiatives

Voluntary action: EcoPorts

29 years of EcoPorts

- ESPO's flagship environmental project
- Initiated by a number of proactive ports in 1997 and has been fully integrated into ESPO since 2011
- Developed by ports, for ports, encouraging the free exchange of experience on environmental issues among its members
- To increase awareness about environmental challenges, deliver compliance with legislation and to demonstrate a high standard of environmental management
- EcoPorts helps European ports to:
  - be at the frontline
  - to take initiatives to protect the environment
  - improve public health
  - address the challenges of climate change

Three important parts of EcoPorts

- SDM: Self Diagnosis Method
- PERS: Port Environmental Review System
- Environmental Report

SDM

- The use of port roadmaps and targets for GHG/air emissions
- The inclusion of environmental policy developments (Paris Agreement, European Green Deal)
- Compliance with existing international standards (ISO14001, EMAS, PERS)
- Carbon footprints
- Waste management from vessels and land sources
- Ballast water management and scrubber discharges
- Environmentally differentiated port fees and environmental incentives
- Stakeholder communications
- Emergency planning
- Green services in the port
- Clean alternative fuels infrastructure development

ESPO Environmental Report 2025

EcoPortsinSights 2025

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PREPARED FOR

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LIST OF COUNTRIES REPRESENTED IN THE STUDY

Country	Number of ports	Percentage (%)
Spain	16	20,8
United Kingdom	10	13,0
Germany	10	13,0
Netherlands[1]	8	10,4
Greece	5	6,5
Denmark	4	5,2
Finland	4	5,2
Ireland	4	5,2
Norway	3	3,9
Sweden	2	2,6

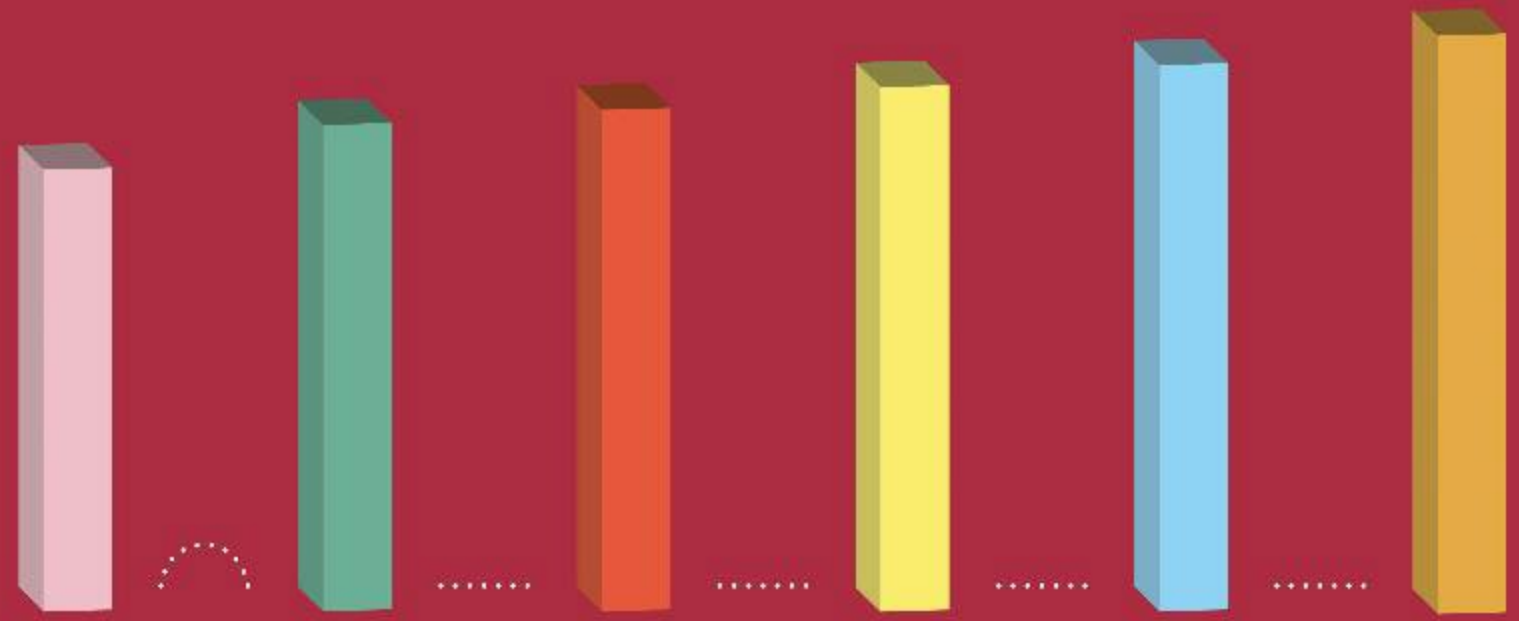
1 Ports in the Netherlands include North Sea Port, a cross-border port authority covering a 60-kilometer area in the Netherlands and Belgium.

TOP 10 ENVIRONMENTAL PRIORITIES OF THE PORT SECTOR IN 2025

SHARE OF PORTS EXPERIENCING OPERATIONAL CHALLENGES RELATED TO CLIMATE CHANGE

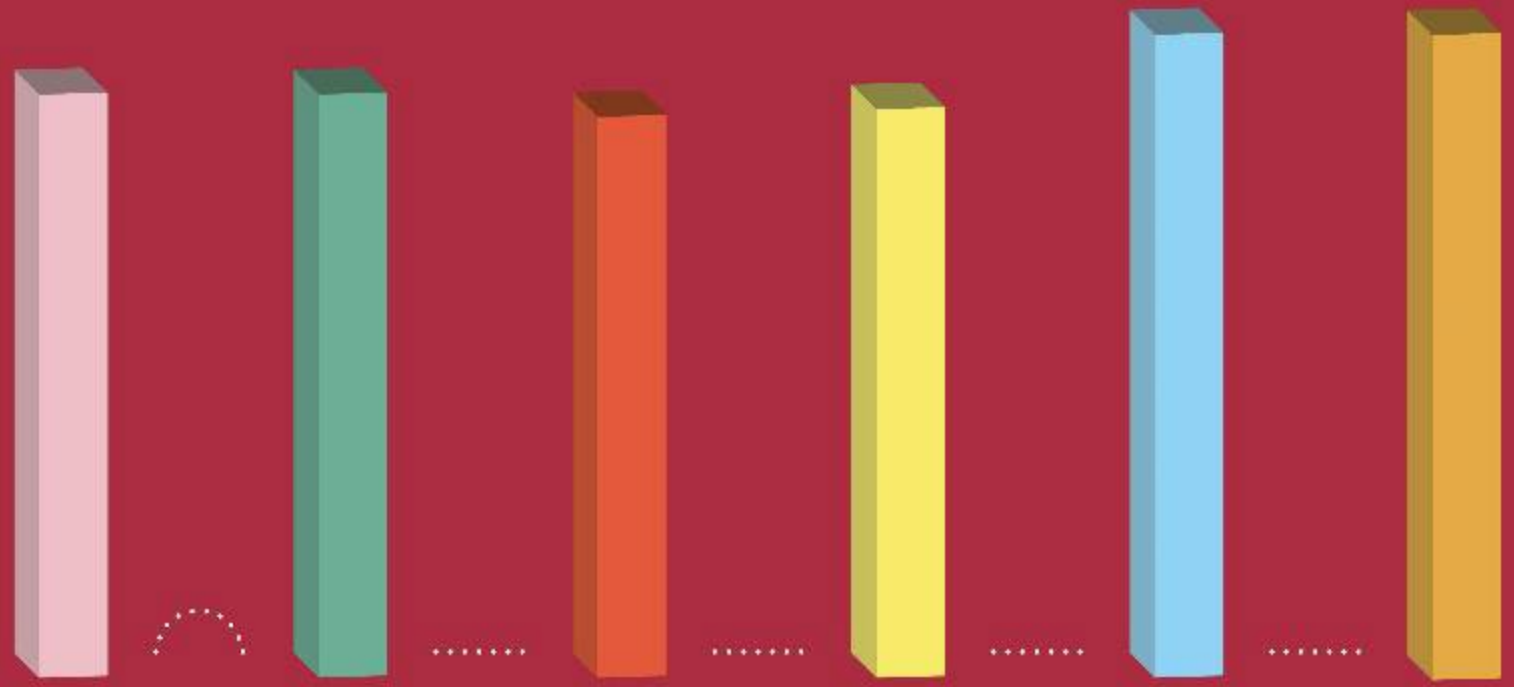
2018	2021	2022	2023	2024	2025
41%	53%	49%	47%	64%	69%

SHARE OF PORTS ADAPTING EXISTING INFRASTRUCTURE TO INCREASE RESILIENCE



2018	2021	2022	2023	2024	2025
59%	65%	67%	70%	73%	77%

SHARE OF PORTS CONSIDERING CLIMATE ADAPTATION FOR NEW INFRASTRUCTURE



2018	2021	2022	2023	2024	2025
78%	78%	75%	76%	86%	86%

TABLE 3
Adoption of emission reduction and zero-emission targets by port authorities.

	Indicators	2025 (%)
A	Has the Port Authority set up its own GHG reduction target?	80
B	Has the Port Authority set up its own air emissions reduction target?	66
C	Is the Port Authority aligned with any local authority GHG and air emissions reduction targets?	66
D	Have low emissions zones and/or emission berth standards been introduced in the port area?	37
E	Does the Port Authority have a zero-emission target for the emissions related to port activities and operations?	53


ESPO
Thank you!
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