





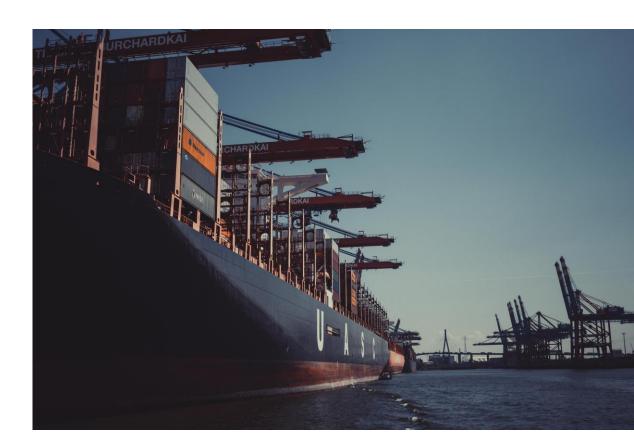


FIT FOR 55 PACKAGE: How the decarbonisation challenge leads to investments in renewables in ports

Valter Selén Senior Policy Advisor, ESPO

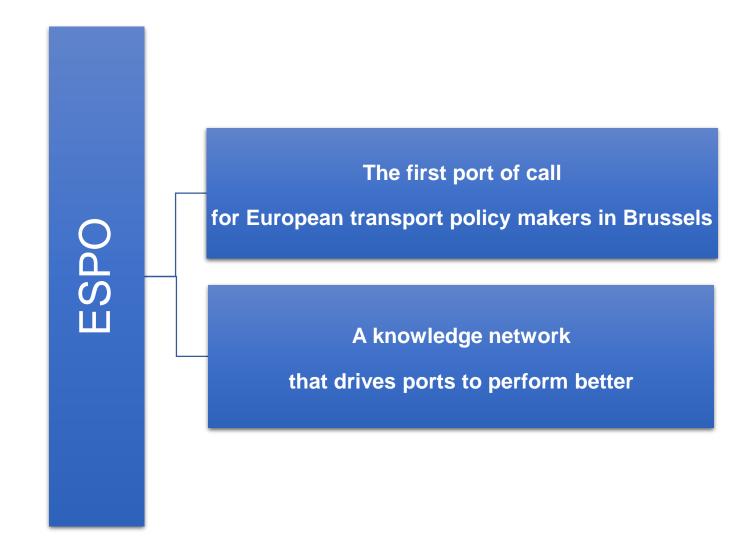
ESPO represents the port authorities, port associations and port administrations of the seaports of 22 Member States of the European Union and Norway at EU political level.

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



Introduction: European Sea Ports Organisation (ESPO)



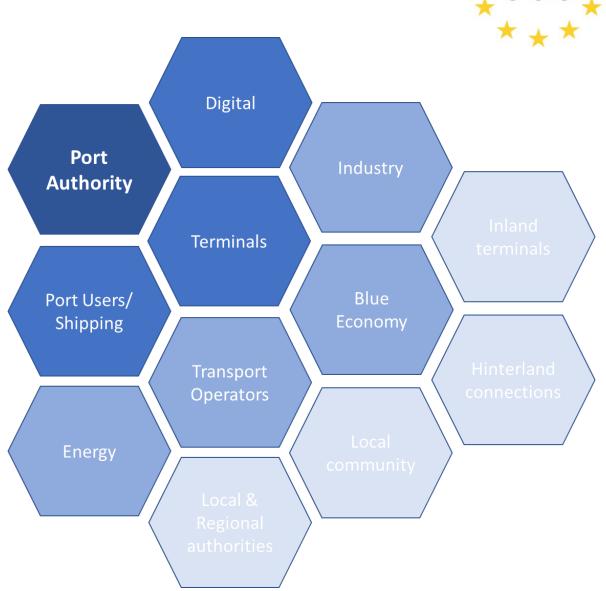


Port Governance – the different actors operating in the port area

ESPO ESPO

Greening the maritime sector requires a differentiated approach

-> Involving the port authority itself and the different stakeholders in the port area.



Environmental issues are on top of the agenda for European port authorities



2021 **TOP 10** Air quality **ENVIRONMENTAL PRIORITIES OF** THE PORT SECTOR Climate change IN 2021 Energy efficiency Noise Water quality Ship waste 8 Dredging operations Garbage/ Port waste

Ports are partners in the green transition – the greening of shipping is a priority



European ports support the European Green Deal ambitions ESPO welcomes the Fit for 55-package published in July 2021

- A comprehensive package of policy proposals (new legislation and revisions of existing rules)
- Intended to deliver 55% GHG reductions by 2030 -> making the EU "Fit for 55"
- All sectors of the EU to contribute to emission reductions
- -> Crucial to making the Green Deal ambitions a reality



Central message: Ports are partners in the green energy transition

Ports as hubs of renewable energy

Green transition: ports are part of the solution



Hubs of energy

- On average 40% of throughput of European ports are sources of energy
- Ports will play an equally important role in the production, supply, import, export and storage of clean energies and technologies

Unique landing points for blue economy

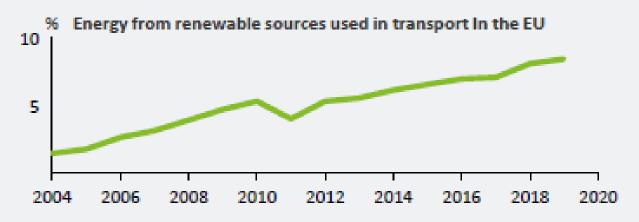
 All blue economy sectors, in particular the offshore renewable energy need a port (supply of the offshore, bringing on land and conversion of the energy)

Renewables are increasingly being used in transport



Rise of renewable fuels

Technological development and regulatory/societal pressures is making renewable fuels (economically) interesting. Non-fossil fuels are increasingly becoming of importance in the energy mix. The cost of renewables has fallen since 2010 and is expected to continue to fall until 2040.



Source: Eurostat, EU-28 countries plus the EEA countries Iceland, Norway and Turkey

How are ports positively contributing to the energy transition?

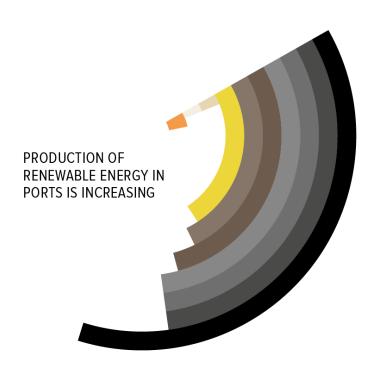


Ports are contributing in a positive way to greening Europe's economy, and society as a whole.

- Ports are important producers and providers of clean energy solutions;
- They are key players in the blue economy (offshore, sustainable cruise);
- Ports are hubs for circular economy;
- Ports are committed to strengthening port-city relationships.

State of play for energy in ports: Trends in EU Ports Governance 2016

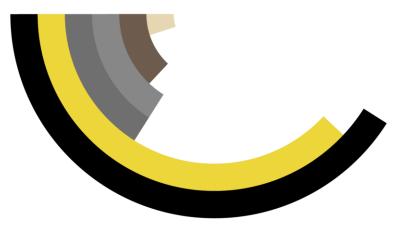




ENERGY SOURCES FOR ENERGY PRODUCTION IN PORTS

- 38% Wind
- 31% Oil/petroleum
- 31% Coke and Coal
- 31% Solar
- 29% Natural gas/LNG
- 26% Biomass
- 24% Waste incinerator
- 2% Wave
- 2% Nuclear
- **5**% Other

38% of Port Authorities are facilitators of Renewable energy production in the Port



ROLE OF PORT AUTHORITY IN THE PRODUCTION OF RENEWABLE ENERGY

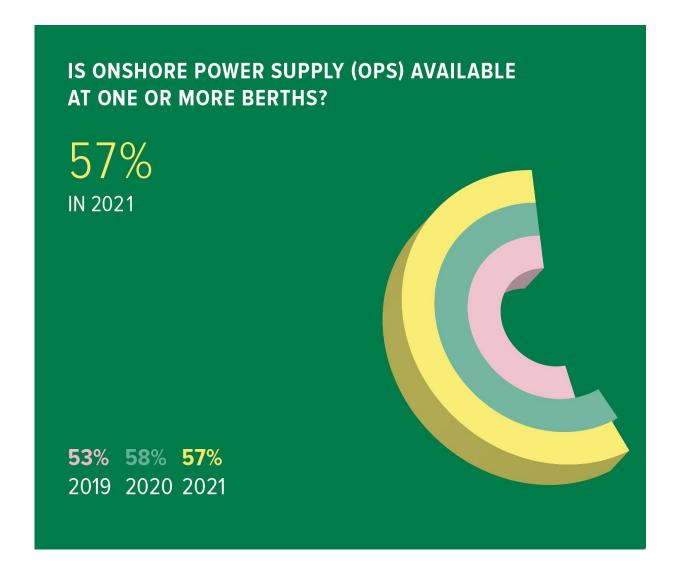
- **41%** Provider of land
- 38% Initiator/facilitator
- **16**% Logistics support
- 16% Investor/

co-investor

- 13% Operator of the facilities
- 5% Other roles

State of play: OPS available in majority of surveyed European ports, and more is underway





State of play: LNG is available in many European ports, and more is underway



IS LIQUEFIED NATURAL GAS (LNG) BUNKERING AVAILABLE IN THE PORT TODAY?

31%

IN 2021



32% 33% 31% 2019 2020 2021

State of play: LNG is available in many European ports, and more is underway



ARE THERE CURRENTLY ONGOING LNG BUNKERING INFRASTRUCTURE PROJECTS IN THE PORT?

22% IN 2021



24% 22% 22% 2019 2020 2021

State of play: LNG is available in many European ports, and more is underway



DO PLANS EXIST FOR THE DEVELOPMENT OF LNG BUNKERING FACILITIES DURING THE NEXT TWO YEARS?*

26% IN 2021



_ _ 26%

2019 2020 2021

*The question on development of LNG in the next two years was added in the current format for the first time in 2021.

Current infrastructure availability (ammonia, methanol)



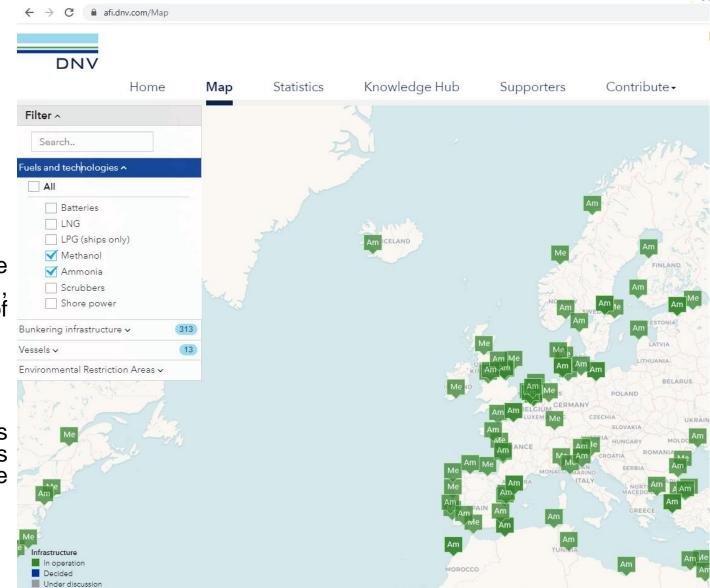
Lack of disaggregated data on hydrogen, ammonia, and methanol use by vessels.

2021 EU MRV Report:

Vast majority of vessels use conventional fuels (HFO, MGO), methanol-propelled ships part of 'other' categories.

Fourth IMO GHG Study (2020):

Neither hydrogen fueled engines nor ammonia fueled engines applicable to ships of larger size have been developed yet.



Re-calling the central message:

Ports are partners in the green energy transition



Thank you!

Valter.selen@espo.be



Empresas participantes:





































