Webinar on Transport in the Balkan and Black Sea region:
Advancements in the port sector

A snapshot of European ports greening and sustainability efforts

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Contents

Introduction

- Environmental ESPO survey has been conducted regularly since 1996
- This has allowed to monitor EU environmental performance and create an excellent European benchmark
- The data for this study has been obtained from the responses of 97 EU ports to the EcoPorts Self Diagnosis Method (SDM)
- The 2020 results are then compared with those from 2019, 2018, 2017, 2016, 2013, and variations and trends over time are highlighted

Sample of respondent ports

Table 1: List of countries represented in the sample and number of participating ports

Country	Number of ports	Percentage (%)
United Kingdom	15	15.5
Spain	14	14.4
France	10	10.3
Germany	10	10.3
Netherlands	9	9.3
Denmark	7	7.2
Greece	6	6.2
Sweden	5	5.2
Finland	5	5.2
Ireland	3	3.1
Italy	3	3.1
Norway	2	2.1
Portugal	2	2.1
Bulgaria	2	2,1
Lithuania	1	1.0
Latvia	1	1.0
Estonia	1	1.0
Romania	1	1.0

Source: ESPO, 2020

Sample of respondent ports

TONNAGE CHARACTERISTICS OF THE SAMPLE

<5
38.9%

5<15
22.2%

15<50
22.2%

>50
16.7%

Source: ESPO, 2020, units: million tons/year

Sample of respondent ports

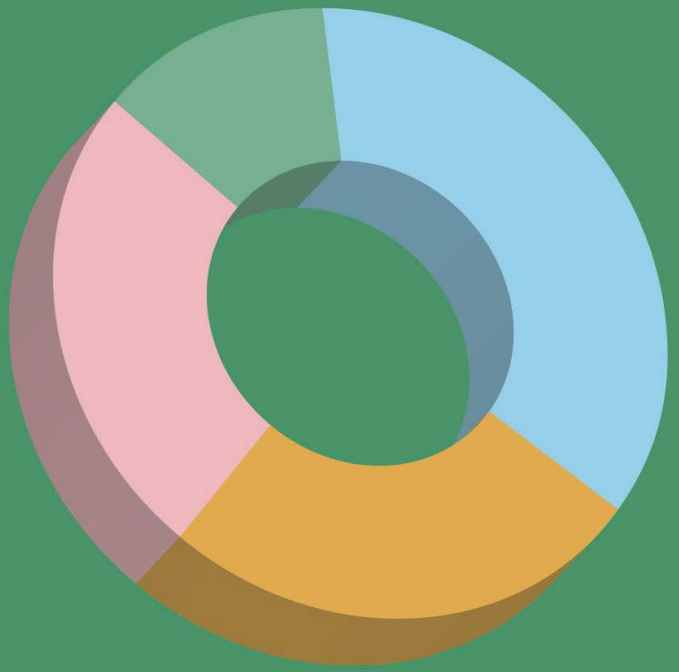
GEOGRAPHICAL CHARACTERISTICS OF THE SAMPLE

Embayment, Protected Coast, Marine Inlet
36.2%

Estuary
26.0%

Engineered Coastline
25.2%

River
12.6%



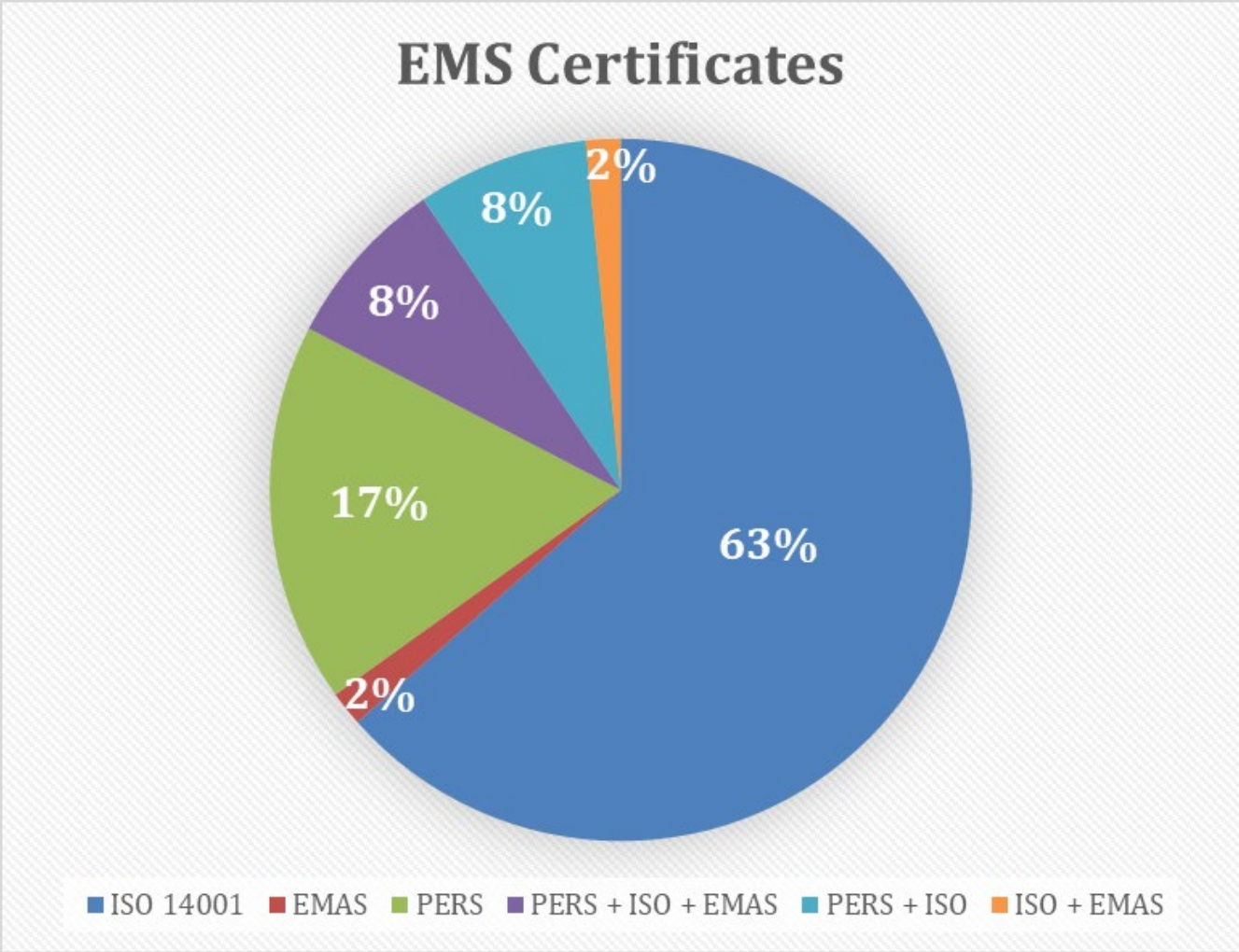
Source: ESPO, 2020

Environmental Management Indicators

Table 2: Percentage of positive responses to the environmental management indicators

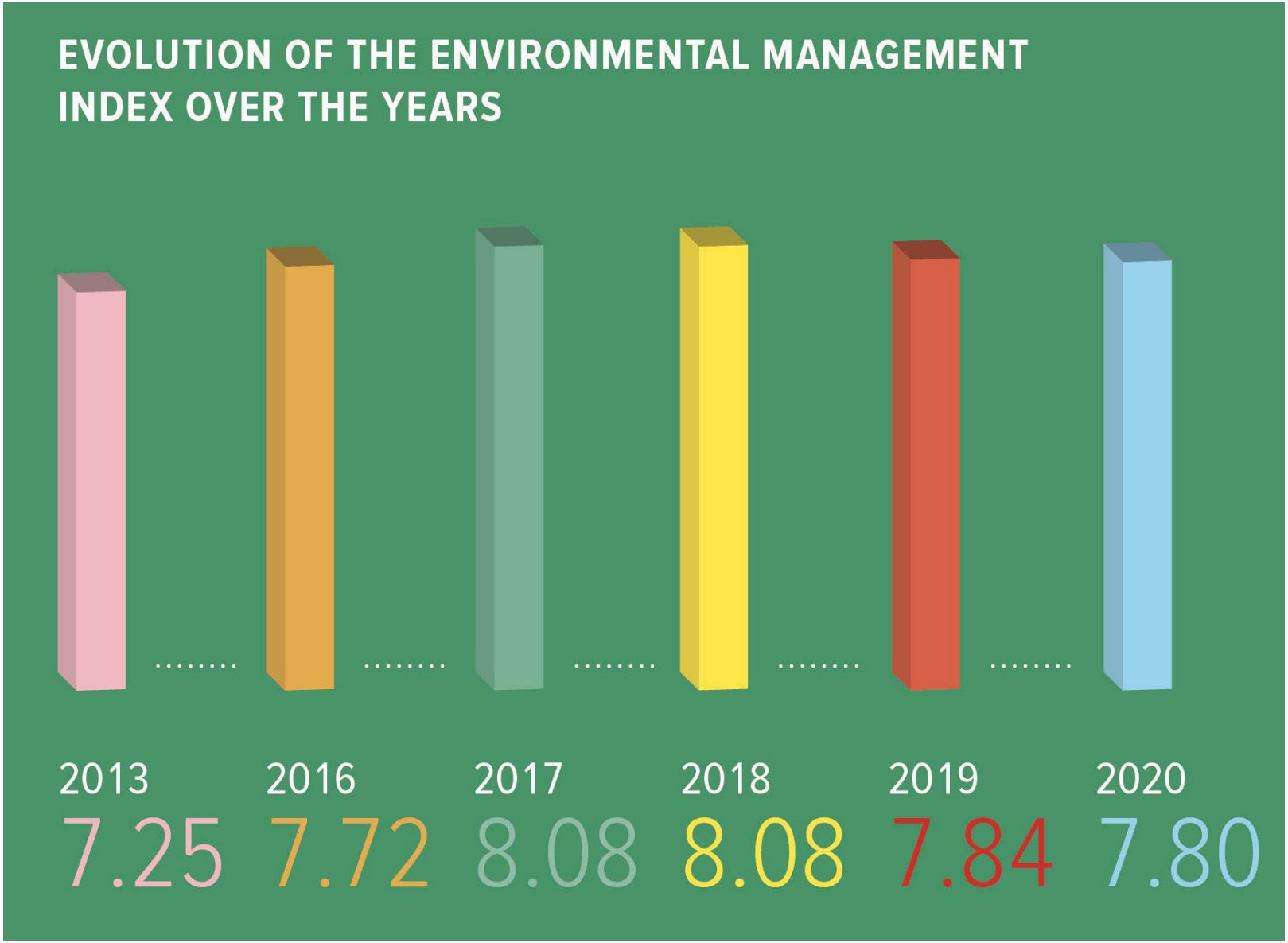
	Indicators	2013 (%)	2016 (%)	2017 (%)	2018 (%)	2019 (%)	2020 (%)	% change 13-20
A	Existence of a certified Environmental Management System (EMS) – ISO, EMAS or PERS	54	70	70	73	71	65	+11
B	Existence of an Environmental Policy	90	92	97	96	95	96	+6
C	Environmental Policy makes reference to ESPO's guideline documents	38	34	35	36	38	43	+5
D	Existence of an inventory of relevant environmental legislation	90	90	93	97	96	91	+1
E	Existence of an inventory of Significant Environmental Aspects (SEA)	84	89	93	93	89	92	+8
F	Definition of objectives and targets for environmental improvement	84	89	93	93	90	88	+4
G	Existence of an environmental training program for port employees	66	55	68	58	53	55	-11
H	Existence of an environmental monitoring program	79	82	89	89	82	81	+2
I	Environmental responsibilities of key personnel are documented	71	85	86	86	85	85	+14
J	Publication of a publicly available environmental report	62	66	68	68	65	69	+7

Environmental Management Indicators



Source: ESPO, 2020

Environmental Management Indicators



23rd of March 2021

Source: ESPO, 2020

Environmental Monitoring Indicators

Table 3: Percentage of positive responses to environmental monitoring indicators

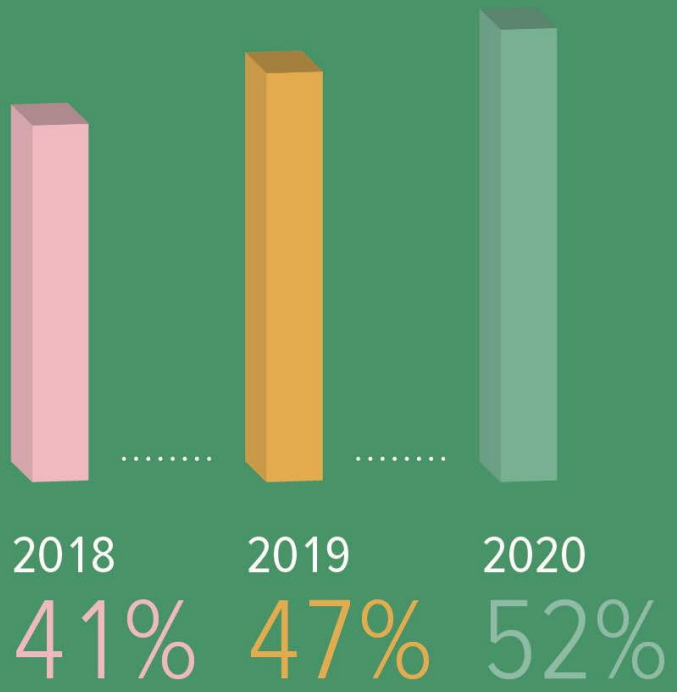
Indicators	2013 (%)	2016 (%)	2017 (%)	2018 (%)	2019 (%)	2020 (%)	% change 2013-2020
Port waste	67	79	88	84	79	79	+12
Energy efficiency	65	73	80	80	76	75	+10
Water consumption	58	62	71	72	68	69	+11
Water quality	56	70	75	76	71	67	+11
Air quality	52	65	69	67	62	67	+15
Sediment quality	56	63	65	58	54	59	+3
Noise	52	57	64	68	57	54	+2
Carbon Footprint	48	47	49	47	49	52	+4
Marine ecosystems	35	36	44	40	40	46	+11
Terrestrial habitats	38	30	37	38	37	41	+3
Soil quality	42	44	48	38	32	41	-1

Source: ESPO, 2020

Environmental Monitoring Indicators

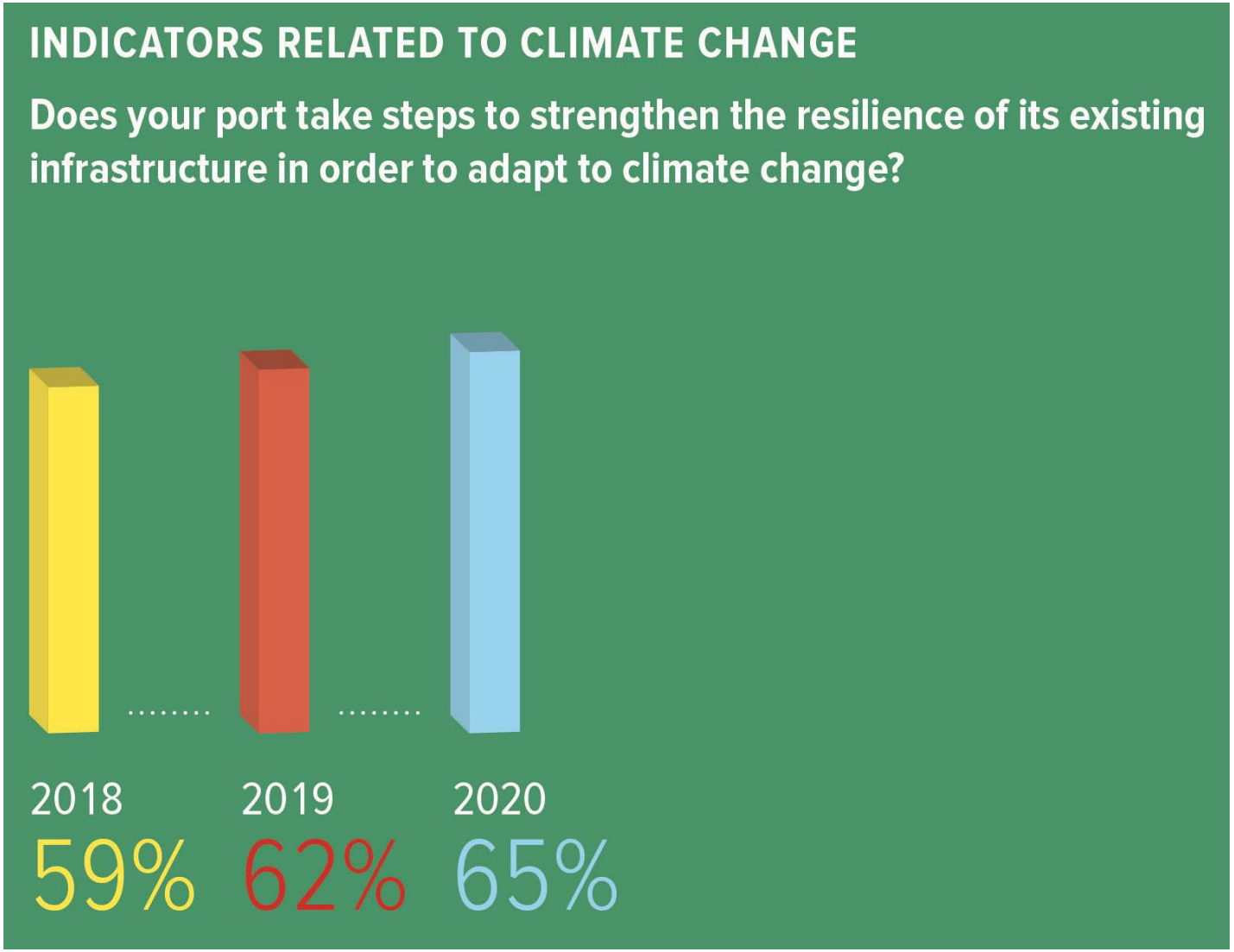
INDICATORS RELATED TO CLIMATE CHANGE

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)?



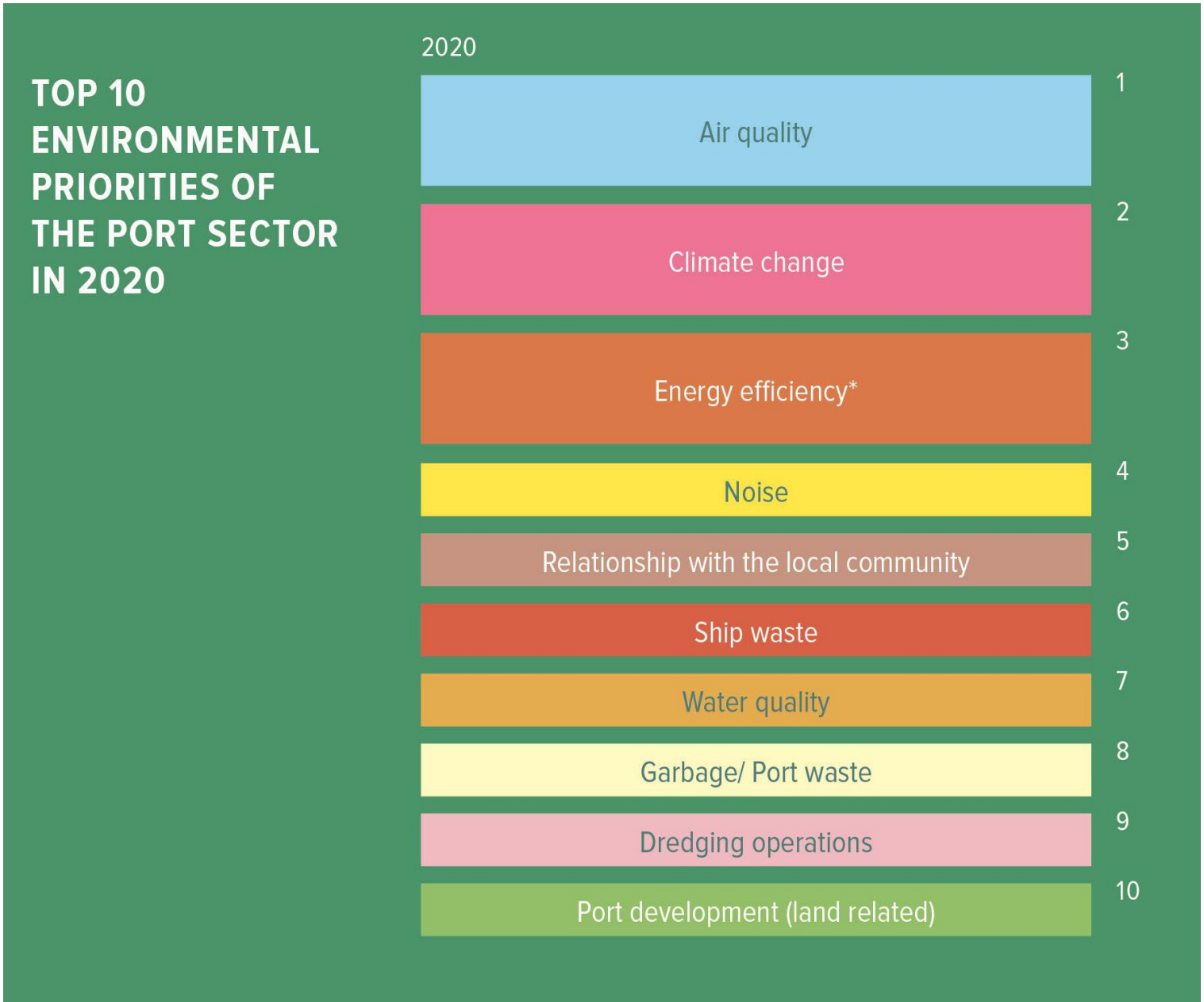
Source: ESPO, 2020

Top ten environmental priorities



Source: ESPO, 2020

Top 10 Environmental priorities



Top 10 Environmental priorities

	1996	2004	2009	2013	2016	2017	2018	2019	2020
1	Port Development (water)	Garbage / Port waste	Noise	Air quality	Air quality	Air Quality	Air quality	Air quality	Air quality
2	Water quality	Dredging: operations	Air quality	Garbage/ Port waste	Energy Consumption	Energy Consumption	Energy Consumption	Energy Consumption	Climate change
3	Dredging disposal	Dredging disposal	Garbage / Port waste	Energy Consumption	Noise	Noise	Noise	Climate change	Energy efficiency
4	Dredging: operations	Dust	Dredging: operations	Noise	Relationship with local community	Water quality	Relationship with local community	Noise	Noise
5	Dust	Noise	Dredging: disposal	Ship waste	Garbage/ Port waste	Dredging: operations	Ship waste	Relationship with local community	Relationship with local community
6	Port Development (land)	Air quality	Relationship with local community	Relationship with local community	Ship waste	Garbage/ Port waste	Port development (land related)	Ship waste	Ship waste
7	Contaminated land	Hazardous cargo	Energy consumption	Dredging: operations	Port development (land related)	Port development (land related)	Climate change	Garbage/ Port waste	Water quality
8	Habitat loss / degradation	Bunkering	Dust	Dust	Water quality	Relationship with local community	Water quality	Port development (land related)	Garbage/ Port waste
9	Traffic volume	Port Development (land)	Port Development (water)	Port development (land)	Dust	Ship waste	Dredging: operations	Dredging: operations	Dredging: operations
10	Industrial effluent	Ship discharge (bilge)	Port Development (land)	Water quality	Dredging: operations	Climate change	Garbage/ Port waste	Water quality	Port development (land related)

Source: ESPO, 2020

Services to shipping

IS ON-SHORE POWER SUPPLY (OPS) AVAILABLE AT ONE OR MORE BERTHS?

58%

IN 2020

53%	48%	51%	53%	58%
2016	2017	2018	2019	2020

23rd of March 2021

Source: ESPO, 2020

Services to shipping

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

33%

IN 2020

22%	22%	30%	32%	33%
2016	2017	2018	2019	2020

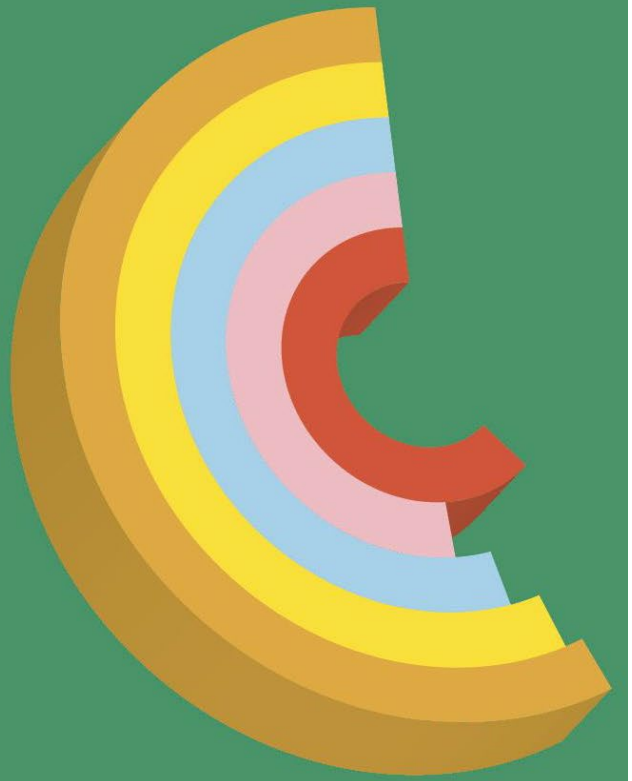
Source: ESPO, 2020

Services to shipping

DOES THE PORT OFFER DIFFERENTIATED DUES FOR "GREENER" VESSELS?

57%

IN 2020



62% 2016
51% 2017
54% 2018
56% 2019
57% 2020

23rd of March 2021

Source: ESPO, 2020

Conclusions

- Despite COVID-19, European ports show a general trend of being **proactive** in terms of environmental improvement
- Most ports have an **Environmental Policy** and an inventory of **Significant Environmental Aspects**
- Further evidence of expanding good practice is the number of ports with **environmental monitoring programme** to measure and manage their environmental aspects
- **Port waste and energy efficiency** are the most monitored aspects by European ports
- However, there is room for improvement for aspects probably affected by the pandemics such as **environmental training** and the number of **certified EMS**

Conclusions

- Concerning the Top-10 issues, **Air quality** remains the highest priority since 2013
- However, **Climate change** has climbed in the list to the 2nd position when it became a new entrance in 2017
- Ports are continuing to encourage the **greening of shipping**: OPS, differentiated fees and LNG bunkering
- In conclusion, the European port sector is able to provide **substantive evidence** of improvement of its environmental performance despite the restrictions we have been submitted due to pandemics

Thank you very much

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