

# Key challenges for the sustainable development of ports and ongoing work by IAPH



The International Maritime Transport & Logistics Conference, MARLOG 12

**14 March 2023**

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Founded in 1955, IAPH is the global port alliance, representing today around 170 port regular members and 126 associate members linked to ports in 87 countries. Together, IAPH port members handle more than one third of global maritime traffic and more than 60% of container traffic.

IAPH has a consultative status and represents the interests of world ports at IMO and additional UN agencies such as the ILO, UNCITRAL, UNCTAD (UN Conference on Trade and Development), UNEP (UN Environment Program) and the UN Global Compact.

IAPH works closely with the World Bank, and World Customs Organization, the Global Maritime Forum, and World Economic Forum.

Three strategic focus areas: Climate and Energy, Data Collaboration, Risk and Resilience



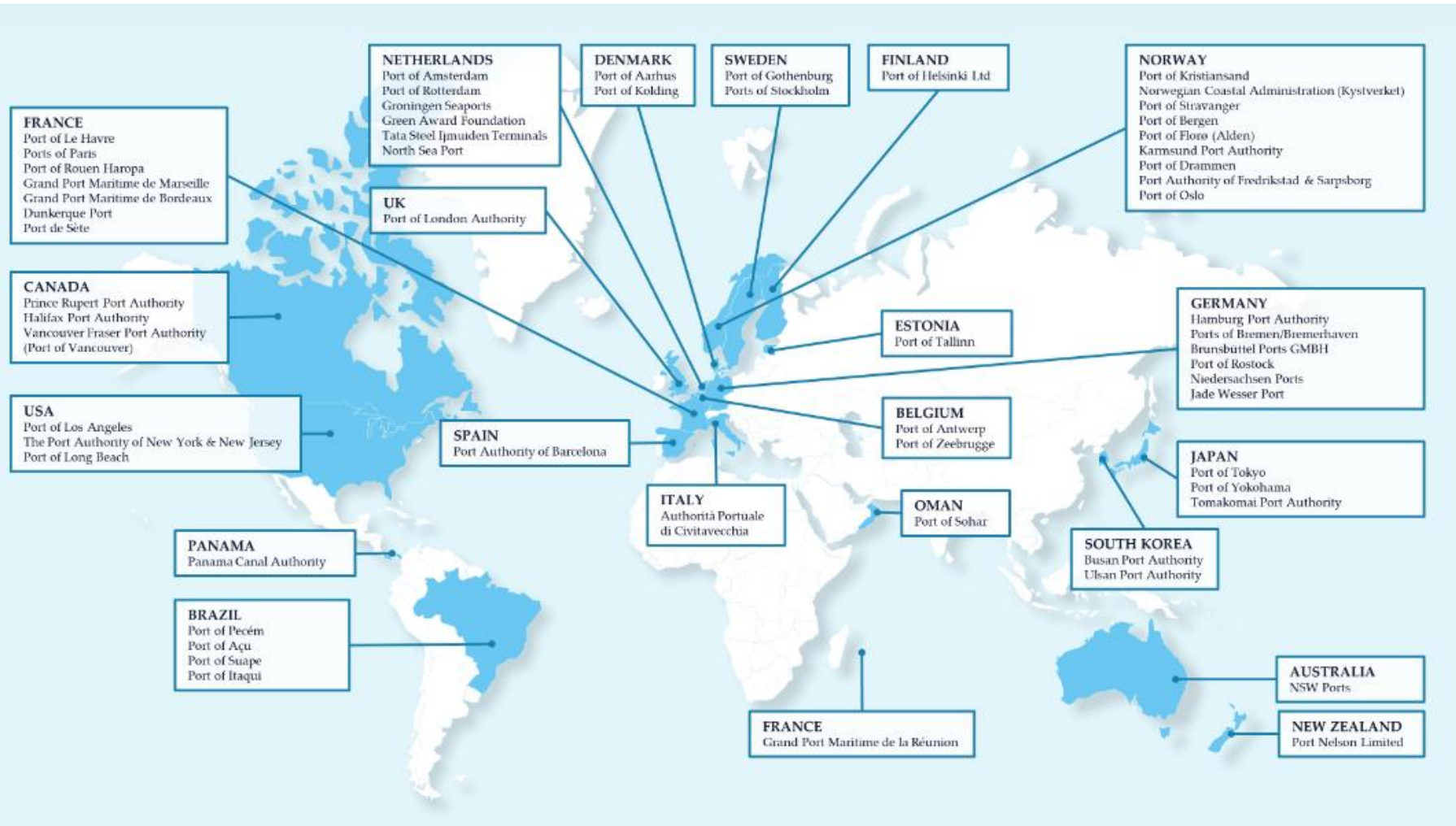


# Ports as decarbonisation hubs

<p><b>1</b></p> <p>Electrification of port-connected activities</p> 	<p><b>2</b></p> <p>Fuel switch for maritime transport</p> 	<p><b>3</b></p> <p>Electrification of industry</p> 	<p><b>4</b></p> <p>Integration of offshore wind</p> 	<p><b>5</b></p> <p>Energy system integration</p> 
<p><b>6</b></p> <p>Hydrogen as feedstock and energy vector</p> 	<p><b>7</b></p> <p>Phase-out of fossil fuelled power plants</p> 	<p><b>8</b></p> <p>Carbon capture and storage</p> 	<p><b>9</b></p> <p>New regulations</p> 	<p><b>10</b></p> <p>Circular and bio-based economy</p> 

Source: DNV-GL and Eurelectric (2020)

# IAPH Environmental Ship Index (ESI)



- The standard Index used by ports worldwide for the provision of incentives to best performing vessels
- 7000 vessels
- 60 Incentive providers
- **ESI 2.0 + ESI at berth**

<https://www.environmentalshipindex.org>

# IAPH Clean Marine Fuels (CMF) working group

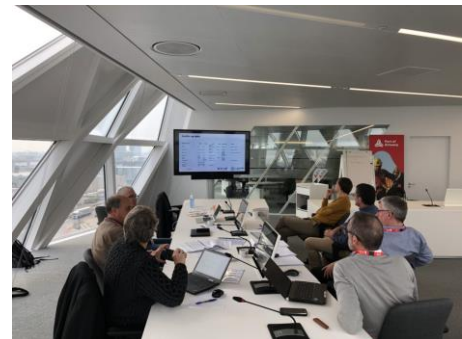


About the program

Submit your project



Areas of Interest ▾ Portfolio ▾ Platform Events News Reference Documents



## Clean Marine Fuels

About

LNG as a fuel

Hydrogen as a fuel

Methanol as a fuel

Ammonia as a fuel

Database of reports and report reviews on alternative marine fuels

# Clean Marine Fuels



<https://sustainableworldports.org/clean-marine-fuels/>





- Digitalisation of the maritime sector is still lagging behind, lack of trust between stakeholders in data sharing is the prime barrier to overcome.

# WINDOW OF OPPORTUNITIES



## MARITIME SINGLE WINDOW 2024

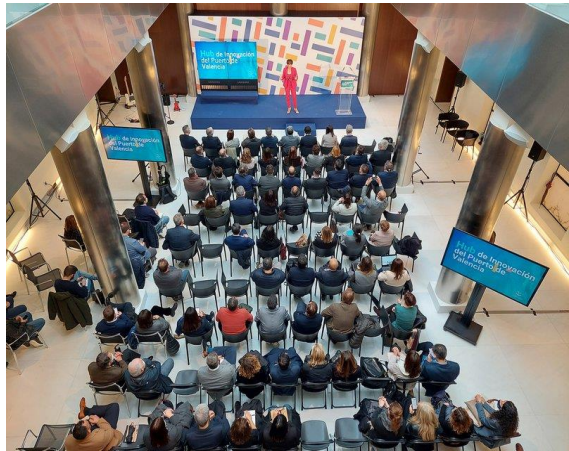






## IAPH Cybersecurity Guidelines for Ports and Port Facilities

- Helping ports and port facilities to assess their readiness to prevent, stop and recover from a cyber-attack.
- Endorsed by the International Maritime Organization (IMO) and recognized as the industry standard



The mindset  
shift towards

innovation

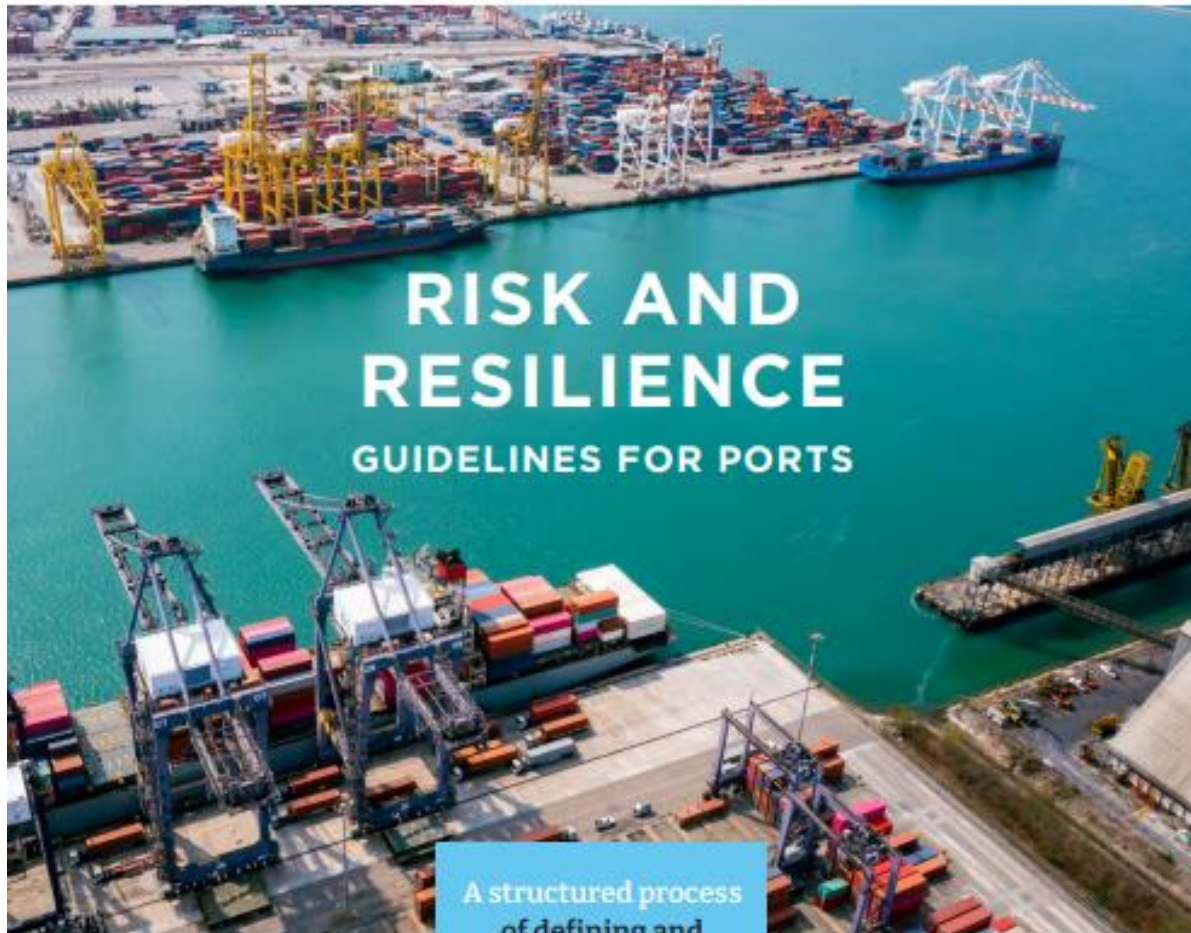


A set of  
guidance fact sheets  
for ports

<https://sustainableworldports.org/wp-content/uploads/IAPH-The-mindset-shift-towards-Innovation-White-Paper.pdf>



➤ Disruption is becoming 'business as usual'. Resilience management and business continuity planning are a must for critical infrastructures such as ports.



# RISK AND RESILIENCE

## GUIDELINES FOR PORTS

A structured process  
of defining and  
inventorising risk,  
managing  
stakeholders and  
building a resilient  
operational model

Guiding ports to:

- Define and inventorise risk
- Manage stakeholders
- Set an organizational resilience model

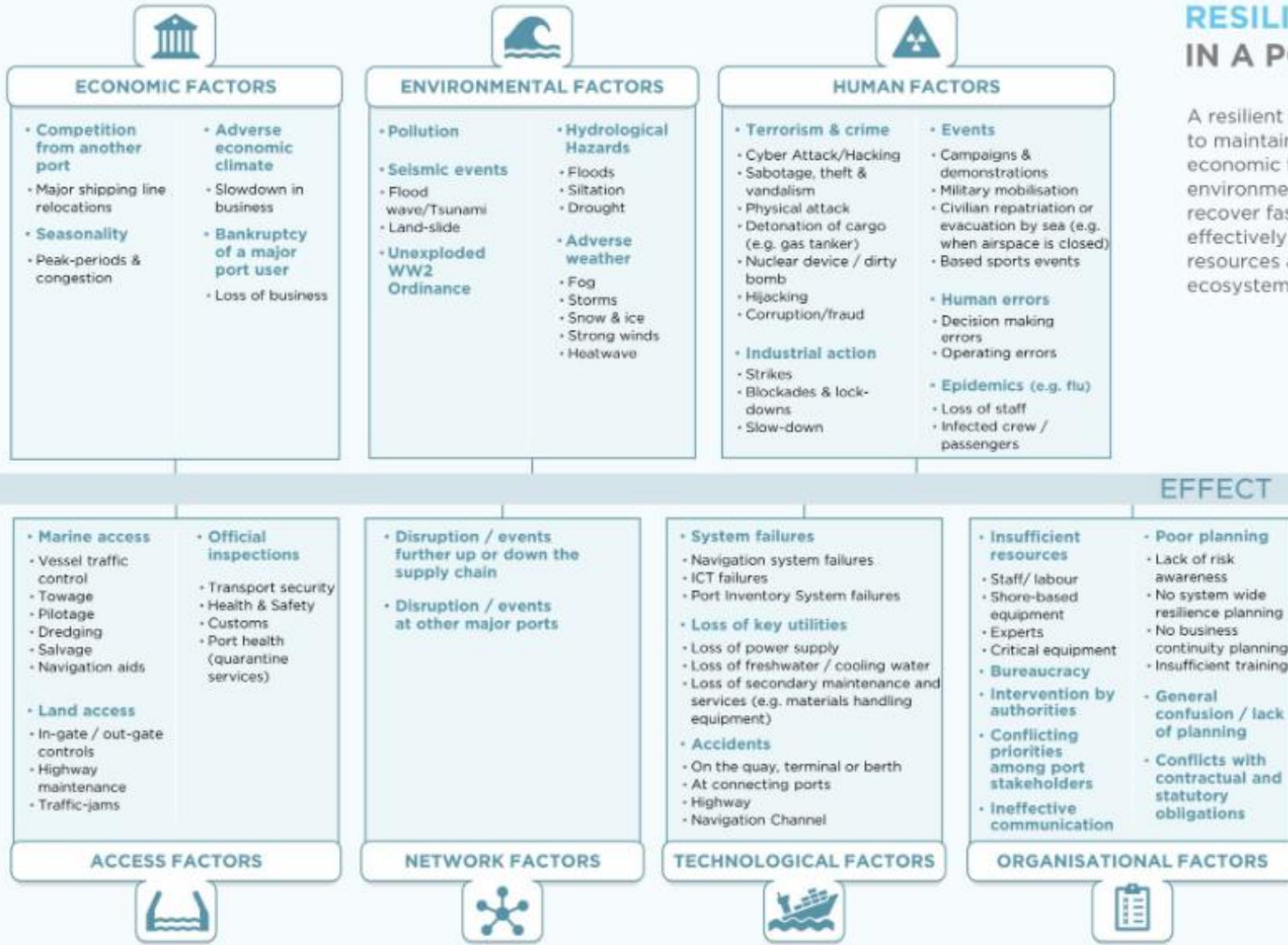
<https://sustainableworldports.org/wp-content/uploads/IAPH-Risk-and-Resilience-Guidelines-for-Ports-BD.pdf>

## RESILIENCE IN A PORT CONTEXT

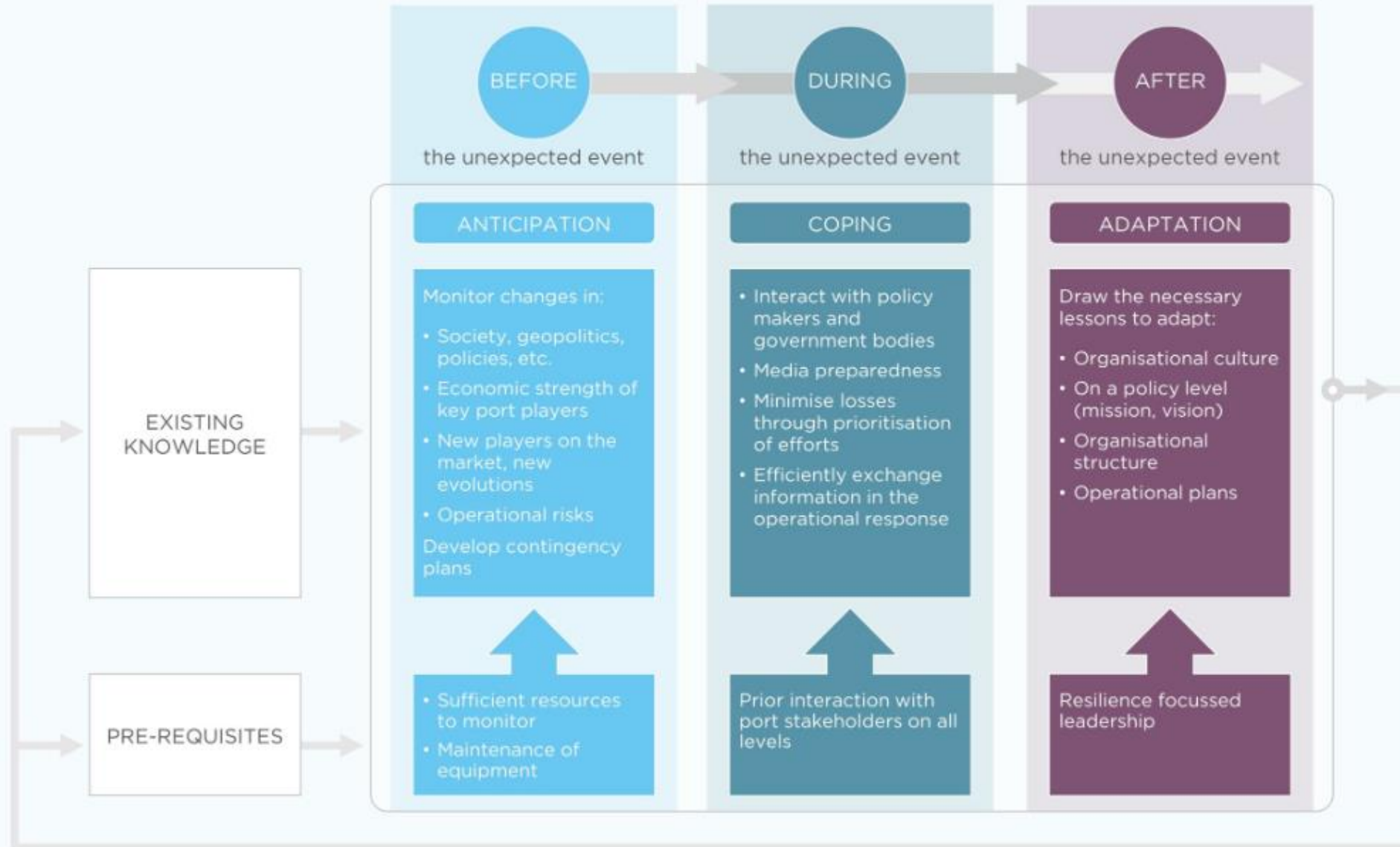
A resilient port is a port that is able to maintain its logistic, industrial and economic functions in a dynamic environment and which is able to recover fast from disruptions by effectively mobilising the necessary resources available within its ecosystem.

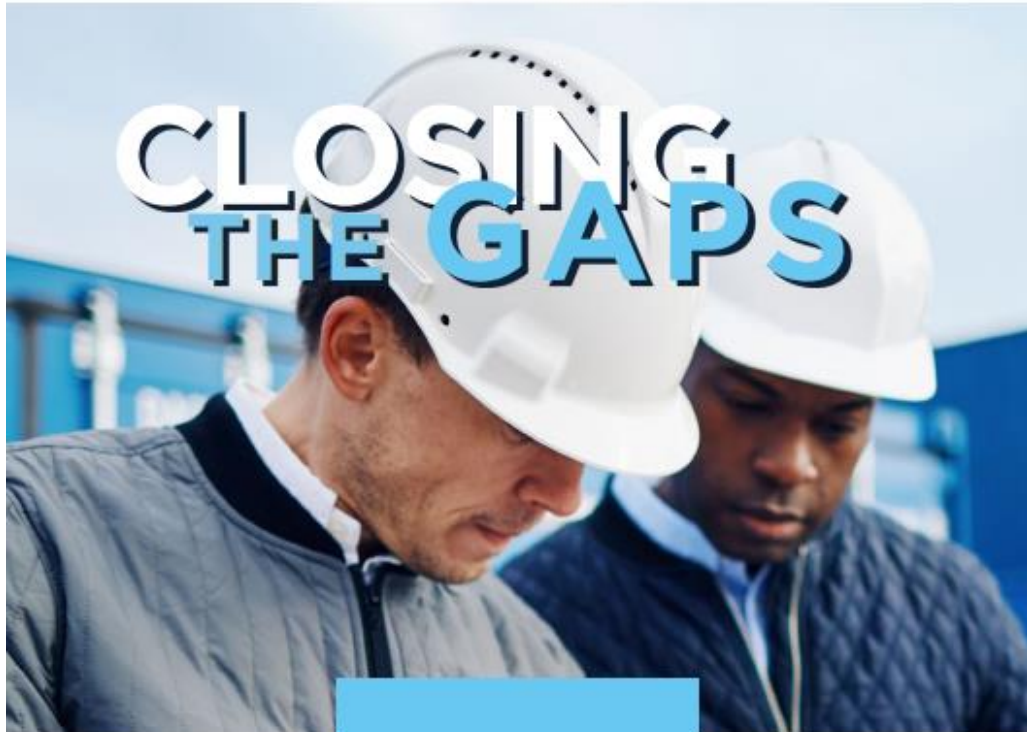


EFFECT →



## ORGANISATIONAL RESILIENCE MODEL FOR PORT AUTHORITIES





**Key Actions in  
Digitalization,  
Decarbonization  
and Resilience  
in the Maritime  
Sector**



<https://sustainableworldports.org/wp-content/uploads/IAPH-World-Bank-CloseTheGaps-Report.pdf>

# World Ports Sustainability Program



[www.sustainableworldports.org](http://www.sustainableworldports.org)

Mission : To integrate the 17 UN SDGs in port governance





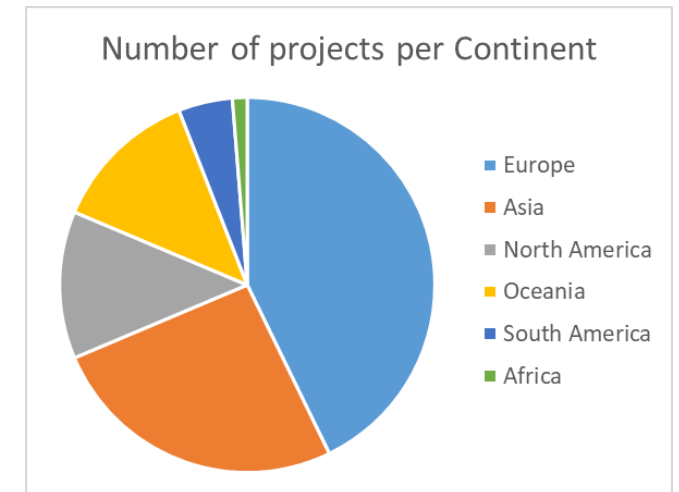
# WPSP Database of sustainability projects



✓ **240 projects**

✓ **110 ports**

✓ **47 countries**



# IAPH Sustainability Awards



 <b>#IAPH2022 SUSTAINABILITY AWARDS FINALISTS</b> 	
<b>CLIMATE &amp; ENERGY</b> 	<b>DIGITALIZATION</b> 
<ul style="list-style-type: none"> <li>• Fiji Ports - Green Port Initiative</li> <li>• Port of Colombo - GHG Emission Reduction Project</li> <li>• DP World Posorja - Mangrove Reforestation Project</li> </ul>	<ul style="list-style-type: none"> <li>• Collaborative project - MAREMIS</li> <li>• Port of Antwerp - Automated drones to prevent pollution</li> <li>• Collaborative project - PASSport</li> </ul>
<b>ENVIRONMENTAL CARE</b> 	<b>HEALTH SAFETY &amp; SECURITY</b> 
<ul style="list-style-type: none"> <li>• Port of Seattle - Ocean Acidification Action Plan</li> <li>• Port of Tacoma - Lower Wapato Creek Habitat Project</li> <li>• Hamburg Port Authority - SeaClear Project</li> </ul>	<ul style="list-style-type: none"> <li>• Port of Montreal - CargO2ai</li> <li>• Port of Amsterdam - Multi fuel Port / Spatial Safety</li> <li>• Northport (Malaysia) Bhd - Journey towards HSE excellence</li> </ul>
<b>INFRASTRUCTURE</b> 	<b>COMMUNITY BUILDING</b> 
<ul style="list-style-type: none"> <li>• Port of Rotterdam - Flood Risk Management Programme</li> <li>• Port of Vigo - Living Ports</li> <li>• Vancouver Fraser Port Authority - Maplewood Marine Restoration Project</li> </ul>	<ul style="list-style-type: none"> <li>• Solomon Islands Ports Authority - Renewable Energy for a Sustainable Community</li> <li>• Freeport of Riga Authority - Ghetto Games street sports and culture movement</li> <li>• Johor Port Authority - Community Empowerment through Science and Research</li> </ul>

- Call for projects for the 2023 edition
- Deadline 26 May

<https://sustainableworldports.org/submit-your-project/>

# Port Endeavor: a port journey to SDGs

- Knowledge base concept was created at a joint UNCTAD-IAPH workshop in Geneva HQ in April 2019
- Blueprint of ports' contribution to each of the 17 SDGs
- Development game dynamics and content by IAPH and experts from Port of Antwerp Bruges
- Real life examples from the WSPSP database of 240+ projects and best practices from 110 ports from 38 countries
- Offered in partnership with: APEC – Antwerp & Flanders Port Training Centre and UNCTAD TrainForTrade



<https://sustainableworldports.org/iaph-launches-port-endeavor-game-to-share-port-projects-applying-un-sustainable-development-goals-in-practice/>

Thank you!

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