# IAPH work on the decarbonization of ports and shipping



international association of ports and harbors

MIAL Maritime Decarbonisation Summit- 12 October 2022 Antonis Michail, Technical Director IAPH / WPSP





Founded in1955, 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 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: Risk and Resilience, Data Collaboration, Climate and Energy



### World Ports Sustainability Program





Mission : To integrate the 17 UN SDGs in port governance



iaph





WORLD PORTS SUSTAINABILITY PROGRAM

www.sustainableworldports.org

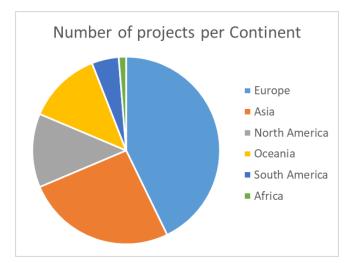
### WPSP Database of sustainability projects



#### ✓ 240 projects

#### ✓ 110 ports

#### ✓ 47 countries





sustainableworldports.org/portfolio/type/port-projects/



### IAPH Sustainability Awards – 2022 winners





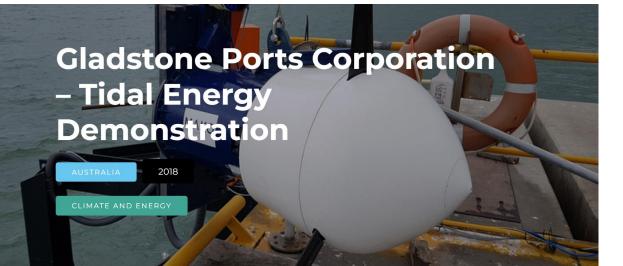


WPSP SUSTA	#IAPH: INABILI FINAL	ITY AWARDS
CLIMATE & ENERGY		
<ul> <li>Fiji Ports - Green Port Initiative</li> <li>Port of Colombo - GHG Emission Reduct</li> <li>DP World Posorja - Mangrove Reforesta</li> </ul>	-	<ul> <li>Collaborative project - MAREMIS</li> <li>Port of Antwerp - Automated drones to prevent pollution</li> <li>Collaborative project - PASSport</li> </ul>
ENVIRONMENTAL CARE		HEALTH SAFETY & SECURITY
<ul> <li>Port of Seattle - Ocean Acidification Acti</li> <li>Port of Tacoma - Lower Wapato Creek H Project</li> <li>Hamburg Port Authority - SeaClear Proj</li> </ul>	abitat	<ul> <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>
INFRASTRUCTURE		
<ul> <li>Port of Rotterdam - Flood Risk Managen Programme</li> <li>Port of Vigo - Living Ports</li> <li>Vancouver Fraser Port Authority - Mapl Marine Restoration Project</li> </ul>		<ul> <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>



### WPSP Portfolio – Climate and Energy





### Flinders Port Holdings – Climate Adaptation Strategy

CLIMATE AND ENERGY		
	INFRASTRUCTURE	
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Solomon Islands Ports Authority – Renewable Energy for a Sustainable Community



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

### Hydrogen related projects – CEM Coalition





Port of Vienna – H2 meets H2O project



Port of Gothenburg – Hydrogen production facility and filling station



Port of London Authority – Hydrogen Highway project





Port of Amsterdam – Multi Fuel Port: Spatial Safety



Port of Los Angeles – Zero Emissions Pathway Technology Demonstrations





#### https://sustainableworldports.org/global-ports-hydrogen-coalition/?fuel=hydrogen

### IAPH Technical Committee on Climate and Energy

- IMO political process on GHG emission reduction from ships
- 2. Own IAPH initiatives (ESI, CMF)
- 3. Coordination of and contribution
   to the various initiatives on
   decarbonizing ports and shipping



INTERNATIONAL MARITIME ORGANIZATION



www.sustainableworldports.org









Getting to Zero Coalition

GLOBAL MARITIME FORUM





### Decarbonisation of shipping – Resolution MEPC.323(74)

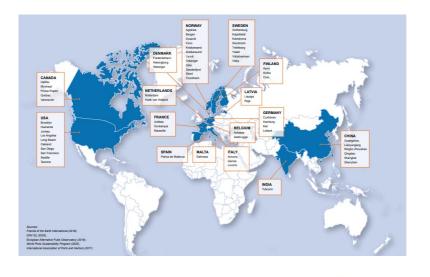
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#### Voluntary cooperation between ports and shipping on GHG emission reduction from ships

- Onshore Power Supply
- Safe and efficient bunkering of low/zero carbon fuels
- Port incentives
- Port call optimization and JIT



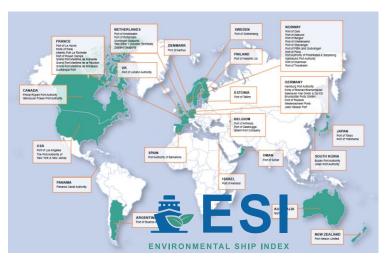




AUDIT TOOL

Clean Marine Fuels WPSP

11



#### International Taskforce



#### **Port Call Optimization**



### Port initiatives on decarbonising shipping





ESI ENVIRONMENTAL SHIP INDEX





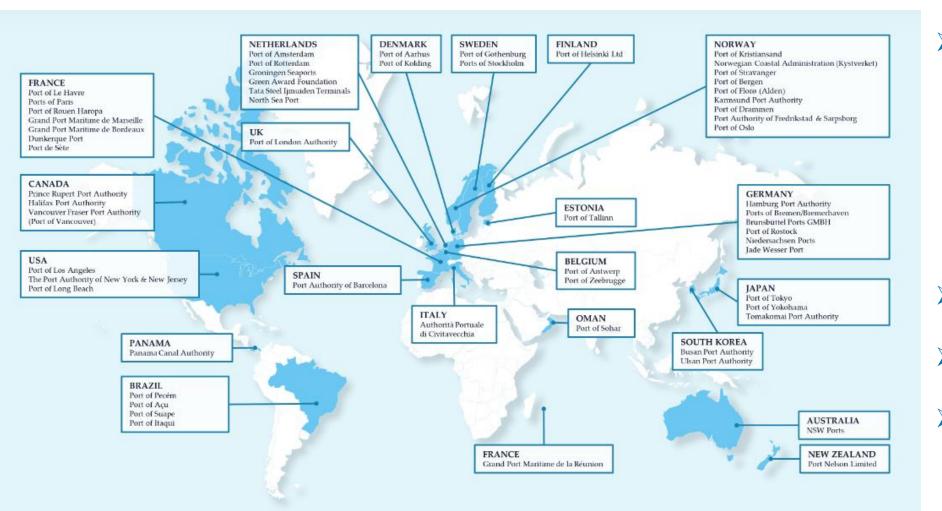
#### Port Call Optimization



Area of work	Global port initiatives	Green
A. Port incentives to address GHG	IAPH Environmental Ship Index	2 0
emissions from vessels	IAPH Cruise emissions at berth	
	World Ports Climate Action Program - WG2	
	International Collaboration on Ship Emission	ENVI
	Reduction	
B. Bunkering of low and zero	IAPH Clean Marine Fuels WG	
carbon fuels	World Ports Climate Action Program - WG4	WP
	Global Ports Hydrogen Coalition / IAPH	
C. Onshore Power Supply from	World Ports Climate Action Program - WG3	
renewable sources	GreenVoyage2050 / IAPH	
	International Taskforce on Port Call Optimization	
D. Ship voyage and port call	World Ports Climate Action Program - WG1	
optimisation	IAPH Data collaboration committee / World Bank	

### 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 WG



Areas of Interest - Portfolio - Platform Events News

News Reference Documents

Submit your project

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iaph international association of ports and harbors



WPSP

www.sustainableworldports.org







**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**

About the program



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



### Who are we?

We are an IAPH network of Port Authority engineers acquiring unique insights into alternative clean marine fuels and how to apply them in practice for bunkering at ports.





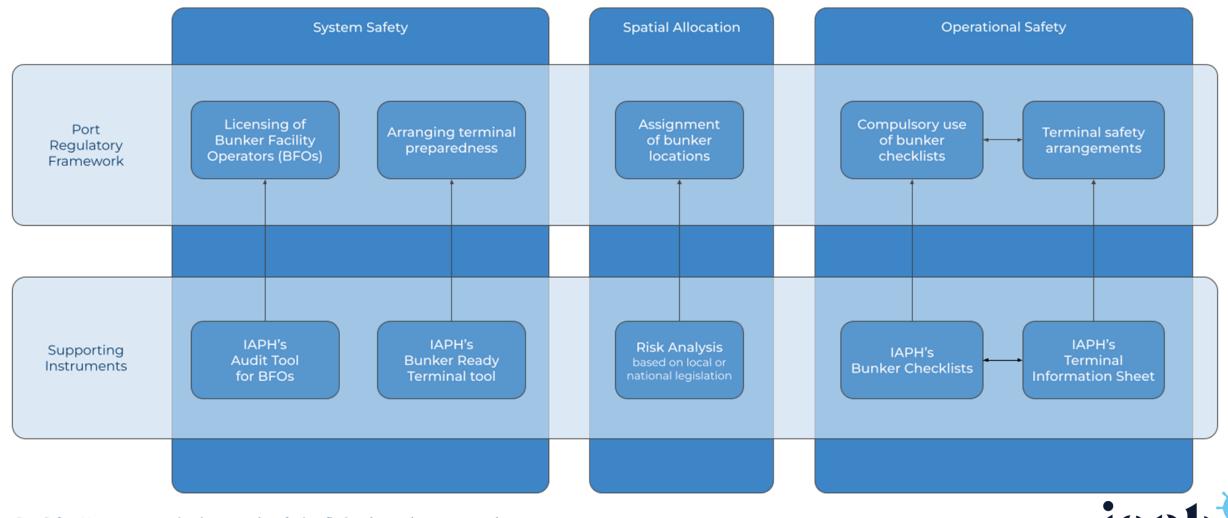
### What do we do?

Empowering ports to facilitate, stimulate and regulate the supply of new clean marine fuels by providing expertise and guidance on safe and efficient bunker operations



### Toolkit for the safe and efficient bunkering of low carbon fuels





Port Safety Management on bunker operations for low flash point marine energy carriers



### IAPH views on key topics on the IMO agenda

- WORLD PORTS SUSTAINABILITY PROGRAM WWW.SUSTAINABILITY PROGRAM
- 1. IAPH calls for an early implementation, by 2025, of a global MBM to bridge the price gap between conventional and low- and zero-carbon fuels and hence stimulating the very substantial investments needed in the supply and value chains of such fuels and making them commercially viable.
- 2. IAPH calls for setting a 2050 level of ambition of zero emissions for the international shipping sector in the revised IMO GHG Strategy
- 3. IAPH argues that the strategic allocation of MBM generated revenues can contribute to an equitable energy transition of shipping.





## Thank you!

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17