



Arab Academy
for Science Technology & Maritime Transport

The International Maritime
Transport and Logistics Conference
"Marlog 11"

Francisco Esteban Lefler

President of PIANC



Towards a SUSTAINABLE **BLUE**
ECONOMY

20 - 22 March, 2022
Hilton Green Plaza Hotel

WHAT PIANC STANDS FOR



The global organisation providing guidance for sustainable waterborne transport infrastructure for ports and waterways

- PIANC is the forum where professionals from around the world join forces to provide expert advice on cost-effective, reliable and sustainable infrastructure to facilitate the growth of waterborne transport.
- Established in 1885, PIANC is the longest-standing organisation in its field, and continues to be the leading partner for governments and private sector in the design, development and maintenance of ports, waterways and coastal areas.



WHAT PIANC STANDS FOR

To remain the leading international source of waterborne transport-related information in the 21st century

To provide expert guidance and technical advice

- Bringing together the best international experts
- High-quality Technical Reports
- International Commissions and Working Groups

To keep the international waterborne transport community connected

- Four-yearly **PIANC World Congresses**
- Four-yearly **PIANC-COPEDEC International Conferences**
- Two-yearly **PIANC-SMART Rivers Conferences**
- To support **Young Professionals**

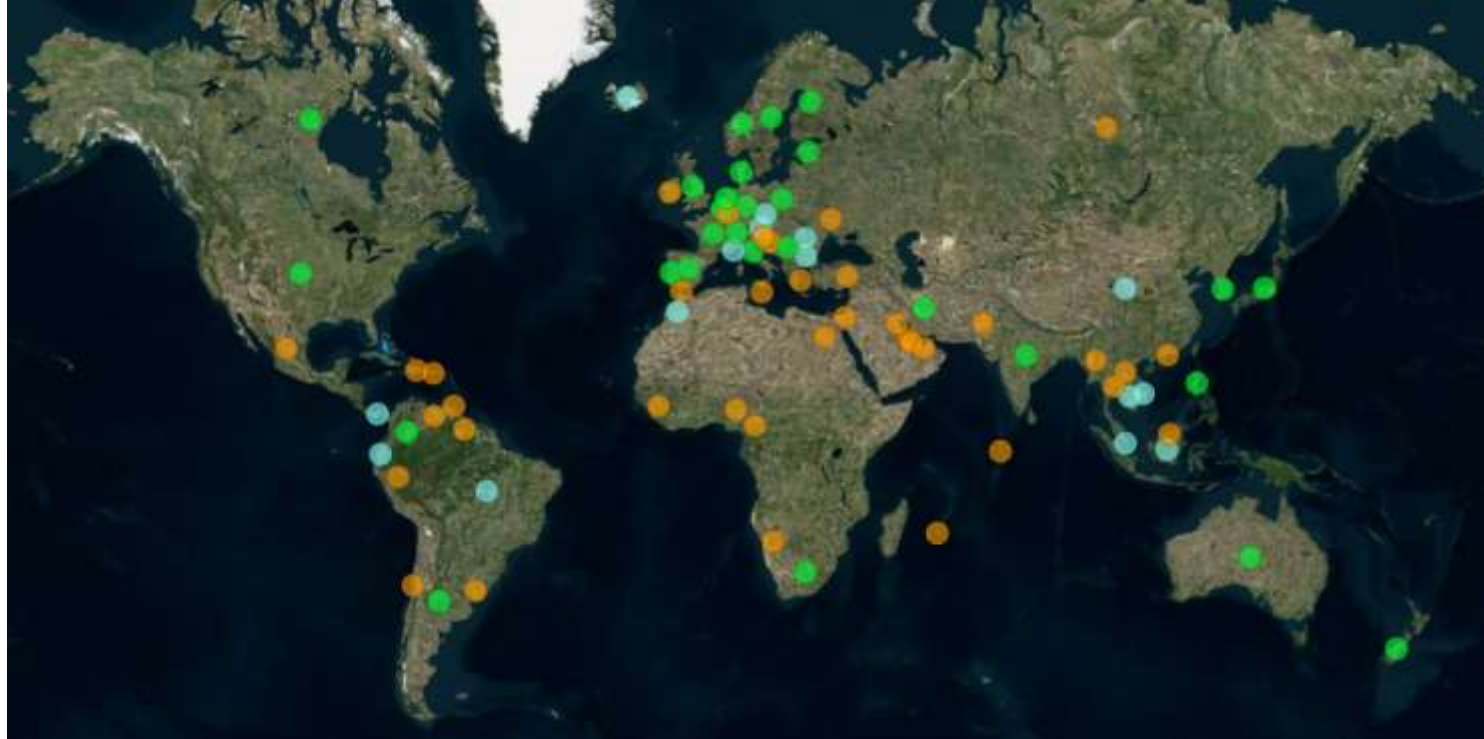




The 1926 Congress In Cairo was the first Congress held In Africa.



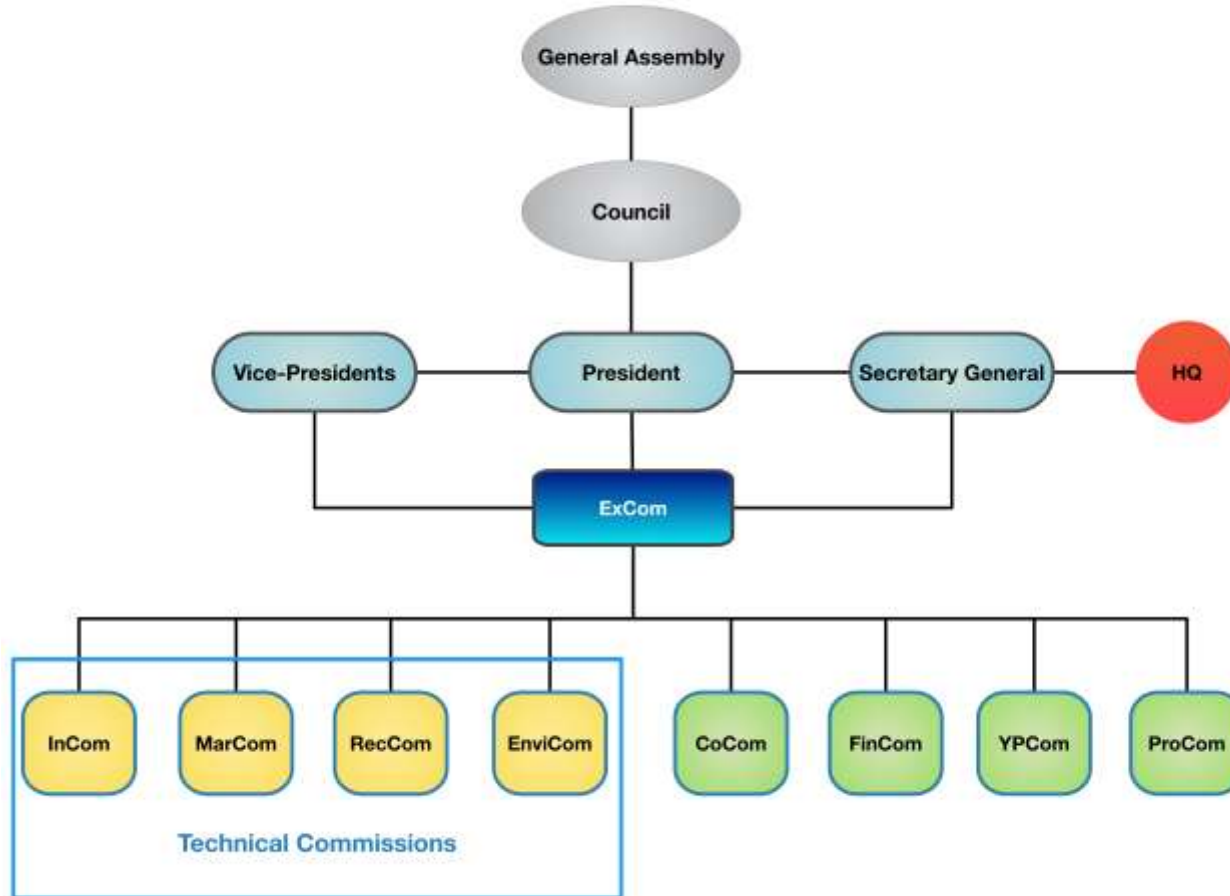
OUR MEMBERSHIP



- Members
- Qualifying Member + Members
- Qualifying Member + National Section + Members



PIANC ORGANISATION CHART





OUR SISTER ASSOCIATIONS

- PIANC co-operates regularly with many other national and international organisations, including the International Maritime Organisation (IMO), the United Nations Environment Programme (UNEP) and international dredging organisations (IADC, CEDA, WODA).
- PIANC has also signed Memorandums of Understanding with fifteen **SISTER ASSOCIATIONS**:

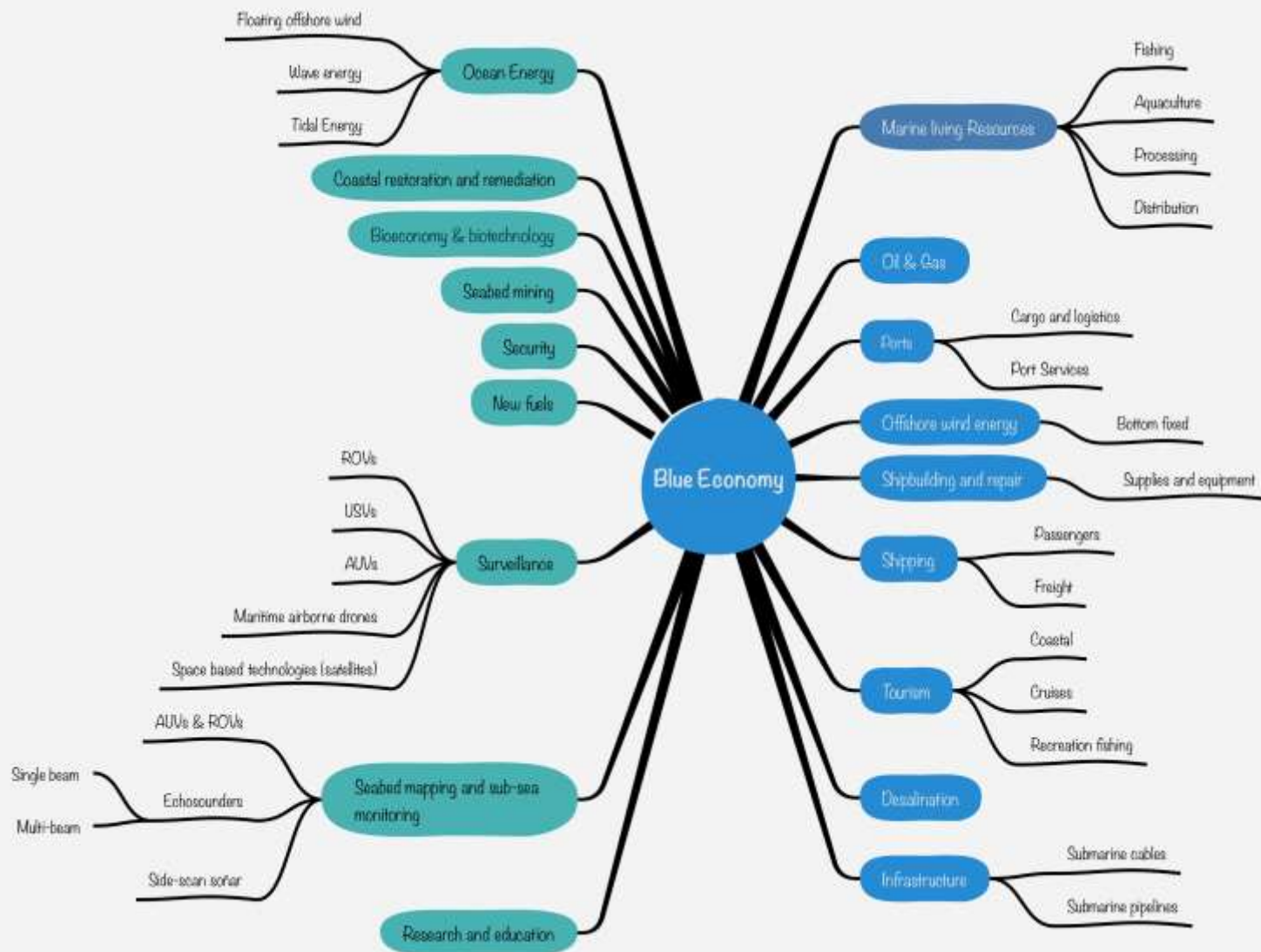




What do we understand as Blue Economy?

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VOLUME OF BLUE ECONOMY

OECD 2016:

- 2010: 1 Tr.USD
- 2030: > 3 Tr.USD

DRIVERS OF BLUE ECONOMY

- Population growth
- Rising urbanisation
- Increased GDP share of Developing Countries
- Growing energy consumption
- Growing volume of trade and changing patterns
- Extreme weather and climate change
- Food and water supply challenges
- Needs of SIDS (Small Island Developing States)



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ACTIVITIES OF BLUE ECONOMY

- Marine-based
- Marine-related:
 - Port activities
 - Fish and Seafood processing and distribution
 - Port connected logistics
 - Technologies and equipment

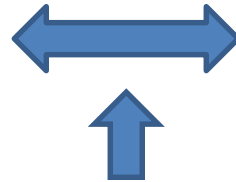


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CHALLENGES OF BLUE ECONOMY (I)

BALANCE

Exploitation
of natural
resources



Protection of
health and
diversity of
resources

Technology



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CHALLENGES OF BLUE ECONOMY (II)

Marine Spatial Planning:

- Compatibility /Interaction
- Efficiency
- Sustainability

Reduce emissions without
negative impact on
revenues/trade output

Aquaculture:

- Right environmental conditions
- Monitoring
- Protection of surrounding environment
- Threats: storm, sea lice
- Facing the future: submerged, far from coast
- Increased output



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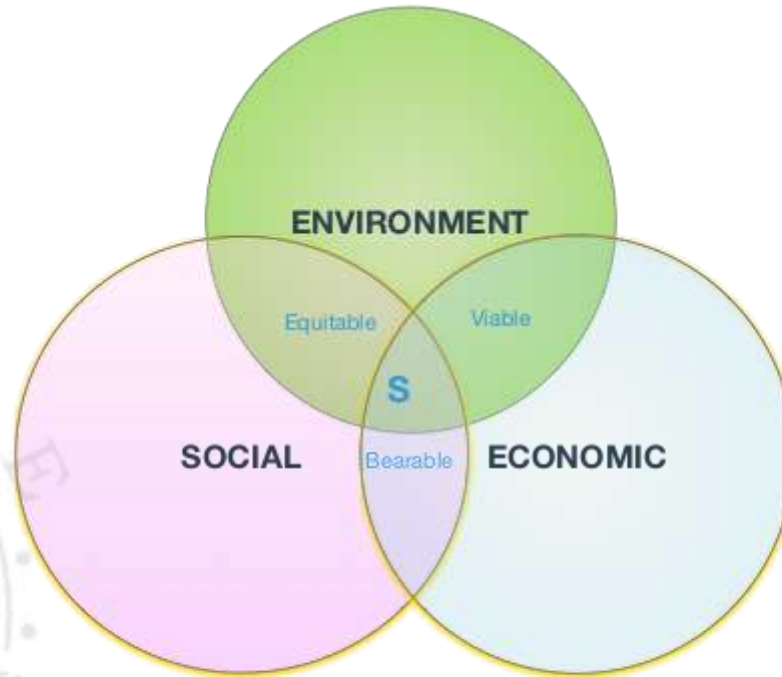
CHALLENGES OF SIDS

- Climate change: sea level rise
- Extreme weather events:
 - Hurricanes
 - Tsunamis
- Shortage of economic resources
- Dependence on:
 - Tourism
 - Fisheries
 - Marine natural resources



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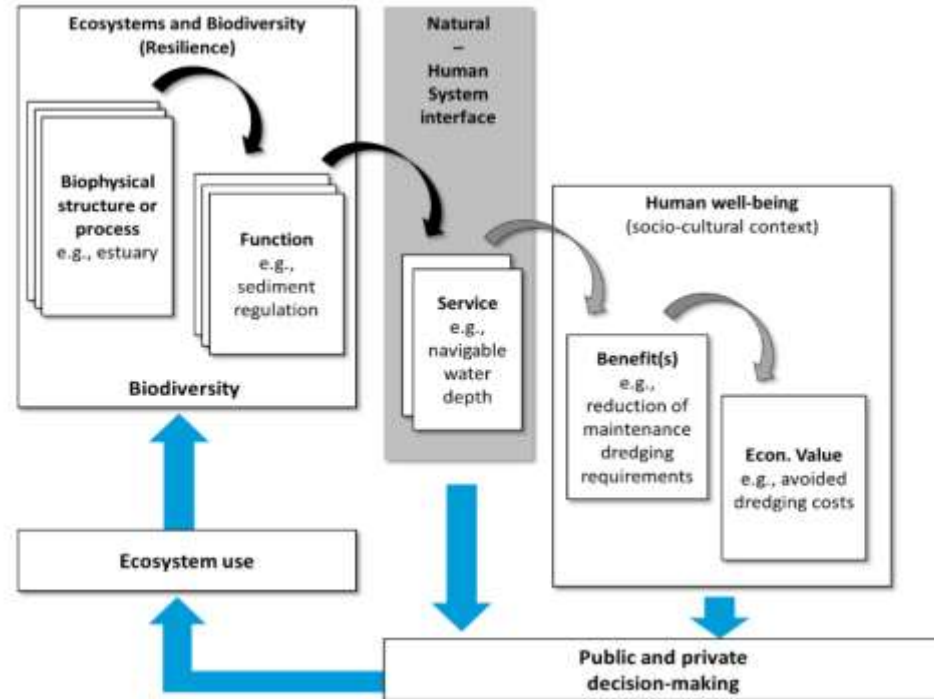
FROM SUSTAINABILITY APPROACH



“Marlog 11” TO ECOSYSTEM SERVICES

Ecosystem services:
Benefits that mankind
derives from nature

- Need to provide growing resource demands in a changing environment
- Protect and improve ecosystems in harmony
- Adapt to increasing global, regional and local stresses and changes



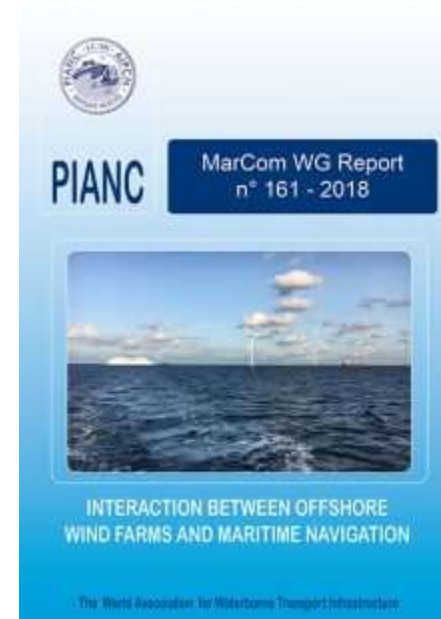
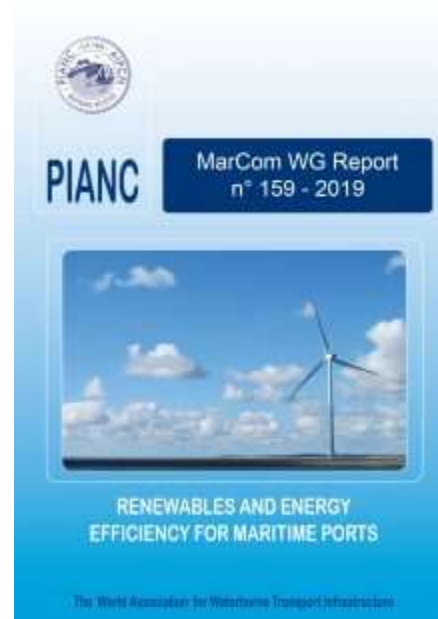
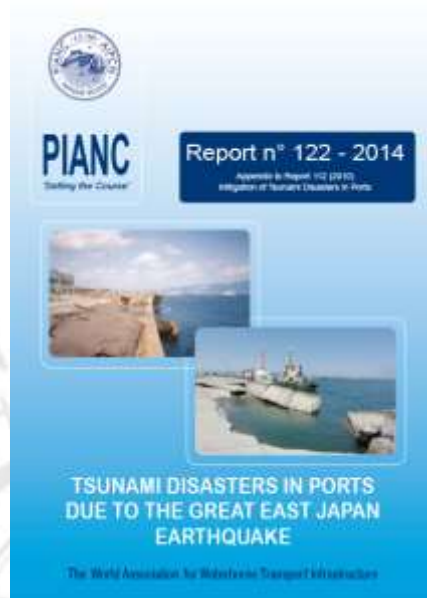
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CLASSIFICATION RELATED TO WTI

Classification Ecosystem Services	ES categories	Relationships to the WTI sector (examples)
Provisioning services	Food	Fisheries, aquaculture
	Water	Navigation
	Raw materials	Dredged material as resource
Regulating and maintenance services	Water purification	Dredging and maintenance; projects impact contaminant dynamics; design can optimise this function
	Air quality regulation	Nature-based Solutions ³ , footprint reduction
	Coastal and riverine protection	Coastal development; bank design and maintenance
	Climate and weather regulation	Design can minimise C footprint; provide surge and storm protection; wet nature can store C (mangroves, marshes)
	Ocean nourishment	Nature-based solutions
	Lifecycle maintenance	Nature-based Solutions
	Biological control	Nature-based Solutions
	Regulation and maintenance by natural physical structures and processes (air, water, substrate)	Navigation; design and infrastructure of waterways/ports; sediment management (incl. handling of dredged material); Nature-based Solutions
Cultural services	Symbolic and aesthetic values	Coastal tourism; bank design and maintenance; Design and infrastructure of waterways/ports; Nature-based Solutions
	Recreation and tourism	
	Cognitive effects	



“Marlog 11” RELATED PIANC PUBLISHED REPORTS



“Marlog 11” RELATED PIANC PUBLISHED REPORTS



PIANC
Setting the Course

Report n° 150 - 2014



'SUSTAINABLE PORTS'
A GUIDE FOR PORT AUTHORITIES

The World Association for Waterborne Transport Infrastructure



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EnviCom WG Report
n° 175 - 2019



**A PRACTICAL GUIDE TO ENVIRONMENTAL
RISK MANAGEMENT (ERM) FOR NAVIGATION
INFRASTRUCTURE PROJECTS**

The World Association for Waterborne Transport Infrastructure



PIANC

EnviCom WG Report
n° 176 - 2018



**GUIDE FOR APPLYING WORKING WITH NATURE
TO NAVIGATION INFRASTRUCTURE PROJECTS**

The World Association for Waterborne Transport Infrastructure



“Marlog 11” RELATED PIANC PUBLISHED REPORTS



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EnviCom WG Report
n° 178 - 2020



CLIMATE CHANGE ADAPTATION PLANNING
FOR PORTS AND INLAND WATERWAYS

The World Association for Waterborne Transport Infrastructure



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EnviCom WG Report
n° 188 - 2019



CARBON MANAGEMENT FOR PORT
AND NAVIGATION INFRASTRUCTURE

The World Association for Waterborne Transport Infrastructure



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EnviCom Task Group
n° 193 - 2020

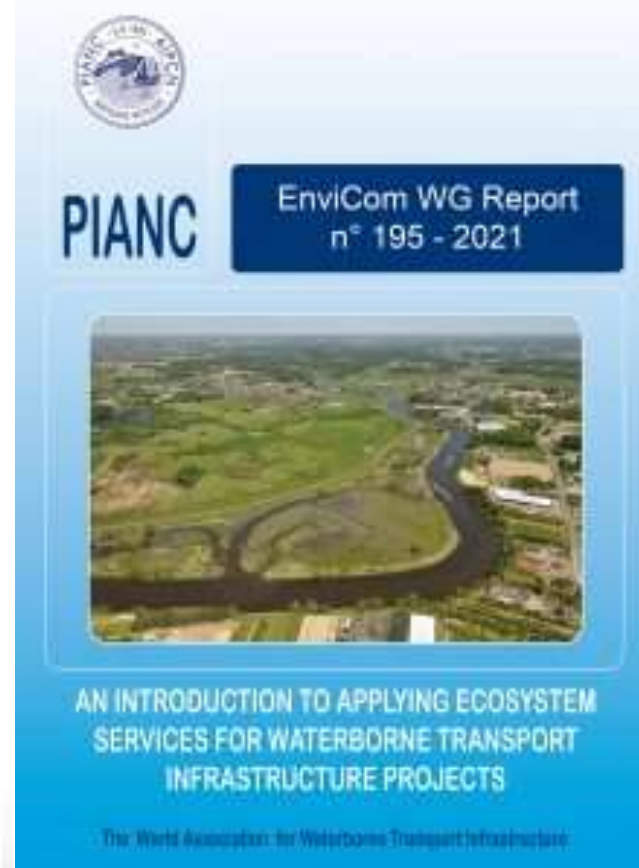


RESILIENCE OF THE MARITIME AND INLAND
WATERBORNE TRANSPORT SYSTEM

The World Association for Waterborne Transport Infrastructure



“Marlog 11” RELATED PIANC PUBLISHED REPORTS





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RELATED PIANC ONGOING WORKING GROUPS

WG	TITLE
MarCom WG 187	Protection of Undersea Pipelines and Cables in Navigable Areas
EnviCom WG 230	How to attract Green Funding for Nature-Based Navigation Infrastructure
MarCom WG 239	Mitigation of Tsunami Disasters in Ports
MarCom WG 240	Guidance for Ports in Small Island Countries

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Thank YOU

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