



PIANC

The World Association for Waterborne
Transport Infrastructure

PIANC, sostenibilidad y descarbonización

Presented by

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PIANC IS

A **worldwide network** of professionals,

Providing **expert advice**
on **cost-effective and sustainable**
waterborne infrastructure,

And the **leading partner**
for governments and the private sector
in the design, development and
maintenance of ports,
waterways and coastal areas

...

SINCE 1885!



WHAT PIANC DOES

- Deliver **high-quality technical reports** within our International Commissions and Working Groups
- Create a **worldwide network of the best international experts**, both public and private, on technical, economic and environmental issues pertaining to waterborne transport infrastructure
- Support **Young Professionals and Countries in Transition**
- Keep the network connected through **PIANC's international/regional/local events**

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

OUR MEMBERS

THE PIANC MEMBERSHIP CONSISTS OF:

- **43** Qualifying Members (QM) of which **27** have a National Section (NS)
- About **1,800** Individual Members
- More than **500** Corporate Members
 - port authorities
 - professional associations
 - universities
 - public- and private-sector organisations
 - ...
- **12** Platinum Partners





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MarCom WG Report
n° 159 - 2019



RENEWABLES AND ENERGY
EFFICIENCY FOR MARITIME PORTS

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MarCom WG Report
n° 161 - 2018



INTERACTION BETWEEN OFFSHORE
WIND FARMS AND MARITIME NAVIGATION

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Managing Climate Change Uncertainties
in Selecting, Designing and Evaluating Options
for Resilient Navigation Infrastructure



Permanent Task Group for Climate Change
Technical Note No. 1 - 2022



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EnviCom Task Group
n° 193 - 2020



RESILIENCE OF THE MARITIME AND INLAND
WATERBORNE TRANSPORT SYSTEM

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EnviCom WG Report
n° 178 - 2020



CLIMATE CHANGE ADAPTATION PLANNING
FOR PORTS AND INLAND WATERWAYS

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EnviCom WG Report
n° 188 - 2019



CARBON MANAGEMENT FOR PORT
AND NAVIGATION INFRASTRUCTURE

The World Association for Waterborne Transport Infrastructure



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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SUSTAINABLE INLAND WATERWAYS

A Guide for Inland Waterway Managers
on Social and Environmental Impacts



InCom Working Group Report N° 203 - 2023



PIANC y los nuevos combustibles verdes (I)



RECOMMENDATIONS FOR THE DESIGN
AND ASSESSMENT OF MARINE OIL, GAS
AND PETROCHEMICAL TERMINALS



MarCom Working Group Report N° 153B – 2022

- **WG 153-2016** Diseño y evaluación del terminales de hidrocarburos líquidos y productos petroquímicos
- **WG 172-2016** Diseño de terminals GNL pequeñas a medianas incluyendo bunkering
- **MoU OCIMF**
- **WG 153B-2022 153 + terminales de gas**

PIANC y los nuevos combustibles verdes (II)

- **TdR WG 153C (aprobados 2023) 153B + nuevos combustibles verdes:**
 - Cambio de fase de LCO_2 : formación de hielo
 - Amoníaco: peligrosidad en la manipulación
 - Hidrógeno: riesgo de escapes
 - Metanol
- **Diferencias entre los combustibles:**
 - Atributos físicos
 - Exigencias de seguridad
 - Procesos a bordo, en atraque y en tierra

WG en marcha relacionados con la descarbonización

Nº	Comisión	Nombre
217	RecCom	The Impacts of Alternative Fuel Propulsion Systems for Recreational Vessels on Marina Design and Management
234	InCom	Infrastructure for the Decarbonisation of IWT
245	ReCom	Carbon management for Marinas and Boat Harbours

Cambio climático e incertidumbre



PIANC Declaration on Climate Change

The climate is changing. The evidence is unequivocal. Climate change represents a significant risk to business, operations, safety and infrastructure – and hence to local, national and global economies. However, a positive, proactive response, now and into the future, can both reduce these risks and bring business opportunities. Uncertainties remain, but these can be addressed and are not reasons for delay. It is time to reinforce the message and upscale prudent action.

Waterborne transport infrastructure will be adversely affected by climate change. In addition to playing their role in decarbonisation (i.e. moving to 'net zero' greenhouse gas emissions), owners and operators need to take urgent action to strengthen resilience and adapt – both to gradual changes in parameters such as temperature and sea level, and to the expected increase in the frequency and severity of extreme meteorological, hydrological or oceanographic events.

PIANC recognises the importance of the climate change challenge and will actively pursue the sustainable future of the waterborne transport industry by supporting its members in addressing this challenge. PIANC and its members will strive to:

- develop approaches to decarbonise the operation of port and navigation infrastructure (i.e. move to net zero emissions), whilst at the same time enabling the reduction of greenhouse gas emissions from vessels by providing the necessary facilities, infrastructure and, where appropriate, incentives
- prioritise inspection and maintenance to optimise the resilience of existing infrastructure
- apply monitoring systems and effective data management to inform and support timely climate change action
- strengthen operational resilience by developing risk assessments, contingency plans and warning systems
- collaborate with energy and water suppliers, onward transport providers and others involved in the supply chain to understand interdependencies and reduce exposure to associated risks
- seek win-win opportunities, including through nature-based solutions such as PIANC's Working with Nature programme
- consider a range of climate change scenarios when developing adaptation strategies and include an appropriate combination of structural, operational and institutional measures set out in phased adaptation investment pathways
- focus on flexible and adaptive infrastructure, systems and operations to allow for future modification and to avoid 'locking in' to solutions that prove inappropriate as conditions change
- promote engineered redundancy to improve resilience.

PIANC will continue to support ports, harbours, marinas and inland waterways by facilitating knowledge sharing and preparing practical technical guidance to help them manage the climate change challenge through effective risk management.

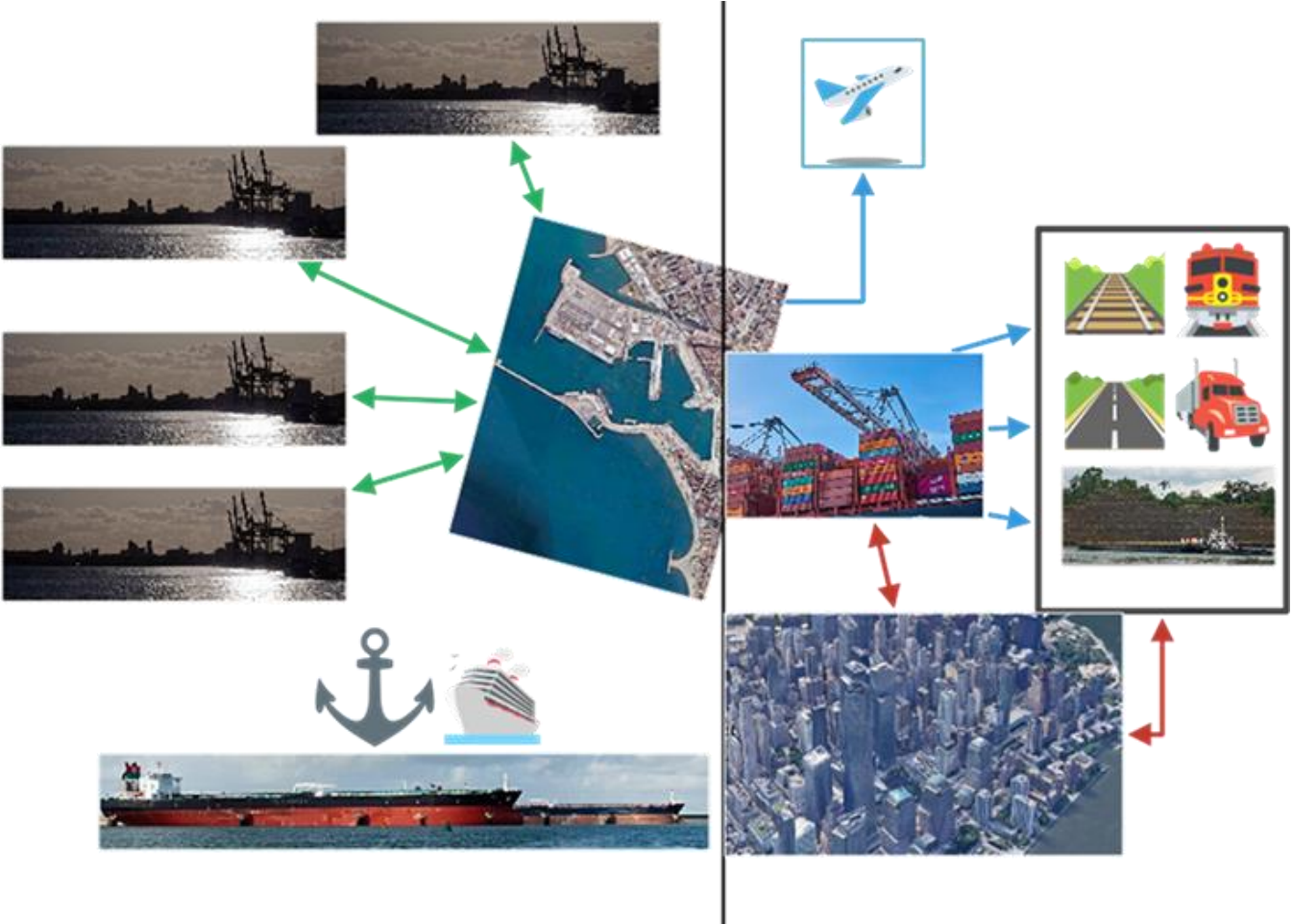
PIANC will also contribute to the global discussion to ensure that waterborne transport infrastructure interests are properly acknowledged, and to disseminate key messages to its members and the wider port and navigation community, through implementation guidelines where appropriate.

PIANC and its members will join forces with other waterborne transport infrastructure stakeholders to meet these new challenges, explore opportunities and contribute to a responsible, informed and sustainable way forward.

PIANC – The World Association for Waterborne Transport Infrastructure - www.pianc.org

- **MITIGACIÓN + ADAPTACIÓN + RESILIENCIA**
- **INCERTIDUMBRE DE LOS MODELOS**
 - Modelos climáticos a largo plazo
 - Efecto de las reducciones de emisiones de carbono
 - Paso de modelos globales a condiciones locales
 - Cambios sociales y económicos
 - Evolución de la tecnología e interferencias
- **GESTIÓN DE LA INCERTIDUMBRE**
- **SOSTENIBILIDAD:**
 - Medioambiental
 - Social
 - Económica

La Comunidad Portuaria



- **MUCHOS AGENTES CON INTERESES COMUNES Y CONTRAPUESTOS:**

NECESIDAD DE UN ENTENDIMIENTO COMÚN

Suministro eléctrico al buque: retos e incertidumbres

- Contacto con EOPSA: European Onshore Power Supply Association
- Incertidumbres y obstáculos:
 - Normalización:
 - En tierra
 - En el buque
 - Demanda eléctrica: RoRo – Cruceros – Portacontenedores
 - Generación y transporte
 - Infraestructura de distribución y conexiones
 - Financiación



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Thank you for your attention.

For more information visit us at

www.pianc.org

