



Adapting waterborne transport infrastructure to climate change

Stakeholder engagement and monitoring good practice

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Navigating a Changing Climate

- A Marrakech Partnership Global Climate Action Initiative
- **PIANC-led**, 8 international partners, c. 40 supporter organisations
- Action Plan has **four themes**
 1. Raise awareness of climate-related issues
 2. Promote action to reduce GHG emissions
 3. Improve preparedness, strengthen resilience, promote adaptation **includes PIANC Working Group 178: Guidance on Climate Change Adaptation**
 4. Encourage integrated solutions



WG178 Good practice stakeholder engagement

- Internal stakeholders: **climate change** is **not only an environmental issue**; it affects many departments
- External stakeholders: ports/waterways cannot operate effectively in isolation; many **interdependencies**
- Limited benefit in raising, strengthening and defending infrastructure if the port has no power or access roads are flooded and the workforce cannot get to work
- Climate change is a common problem; identify others with common goals; common goals can lead to **shared responsibilities** and contribute to shared costs
- Similar issues for other transport sectors



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What to monitor and why (1)

- **State** of physical assets. Why? Informs decisions on maintenance requirements: maintenance is critical to resilience and preparedness for extreme events
- **Condition** of critical assets. Why? Helps inform decisions on when adaptation action is needed
- Operational **performance**. Why? Informs decisions on when change is needed
- Local **rates of change** in key climate parameters and processes. Why? Understand critical threshold exceedance; helps inform decisions on when adaptation action is needed



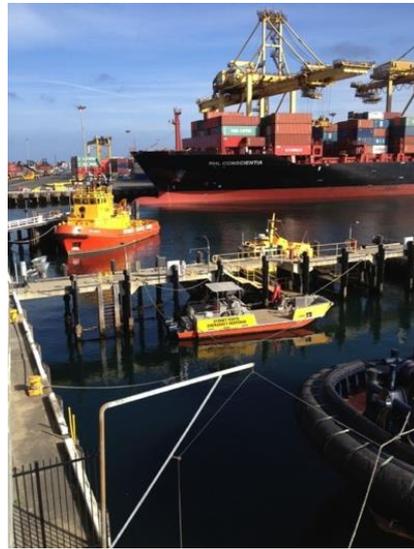
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What to monitor and why (2)

- **Costs** and **consequences** of **extreme events**. Why? Understanding the 'cost of inaction' helps to justify the incremental investment needed to strengthen resilience
- **Effectiveness** of implemented adaptation measures. Why? Generates knowledge to support future decisions on which measures to use
- **Performance** of implemented measure against pre-defined thresholds. Why? Trigger action in adaptive management or decision on phased adaptation pathway
- Effective **management** of data vital to realise benefits!
- Similar issues for other transport sectors



Thanks for listening!



<http://navclimate.pianc.org/>