

**Global Supply Chain Forum
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Parallel Session A8

**Climate change adaptation, resilience-
building and disaster risk reduction for
ports**

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Climate Change Adaptation, Resilience-Building and Disaster Risk Recovery for Ports



>> The Need for Resilient and Climate-Adapted Infrastructure

Comprehensive Understanding of Infrastructure Systems:



It is not enough to build resilient infrastructure
we must also understand how these systems operate and interact with each other



Governments, and particularly SIDS, have to **prepare for properly planned, funded, and constructed transport infrastructures** while understanding how to maximize the efficiency of the supply chain end-to-end



A comprehensive approach involves integrating transport infrastructure with other critical sectors such as energy, water, and communications.

>> About UNOPS

UNOPS' mandate: infrastructure, procurement and project management for a more **sustainable world**. A key agency for **transport infrastructure** within the United Nations system.

USD 2,000 M
in Infrastructure works

+USD 500 M
in Transport
Infrastructure

Strengthen infrastructure ecosystem through **sustainable, resilient and inclusive solutions to accelerate the progress towards Agenda 2030**

USD 7,300 M
in Procurement

Support countries in the **improvement of their supply chain** through **sustainable procurement**

>> Delivering Responsibility in Vendor Engagement program



Sustainability areas



>> Enhancing global supply chains through strategic sustainable procurement initiatives

- Enhancing **global supply chains** with a focus on **sustainable development**
- Ensuring our suppliers are **active partners in our mission for a sustainable**, inclusive and resilient **future**

>> Tackling funding and capacity challenges: Strategic infrastructure planning through comprehensive evaluations and actionable recommendations

- Shaping **resilient, climate-adapted futures** is crucial for nations;
- Accounting for future climate scenarios to **develop adaptable and resilient infrastructure** is a necessity;
- Building a resilient, climate-adapted future for SIDS requires **well-planned, funded, and constructed infrastructures.**



UNOPS case studies in the Caribbean

1. Fostering evidence based Infrastructure (St. Lucia)

National infrastructure database for evidence-based decision making

Cross-sector analysis and impact forecasting

Infrastructure planning based on present and anticipated needs, integrating climate considerations

Sustainable Infrastructure Financing Tool (SIFT)

2. Enhancing road transportation improving safety and connectivity (Curacao)



Road assessments through traffic gauging campaigns and traffic collision data compilation



Analysis of the impacts of hazards on road networks and access to core services



Recommendations on road system design and the planning of road maintenance activities

Building Information Modeling (BIM)

>> **BIM enhances efficiency and sustainability in port management and construction, preparing them for future challenges**

>> The use of **BIM** in port infrastructures **has proven crucial for building resilient port**

Savings and operational efficiency
15% - 20 %

Reduction in construction costs and improvements in coordination
20-25 %

Decrease in Greenhouses gas emissions
20 %



Design optimisation
increasing precision and efficiency



Coordination and Collaboration
Facilitating execution



Simulation and Analysis
To mitigate issues and delays



Climate resilience
To reduce impact of extreme weather

>> For a resilient, climate and adapted future:

Building sustainable and resilient transportation networks is essential for long-term prosperity and adaptation to climate change:



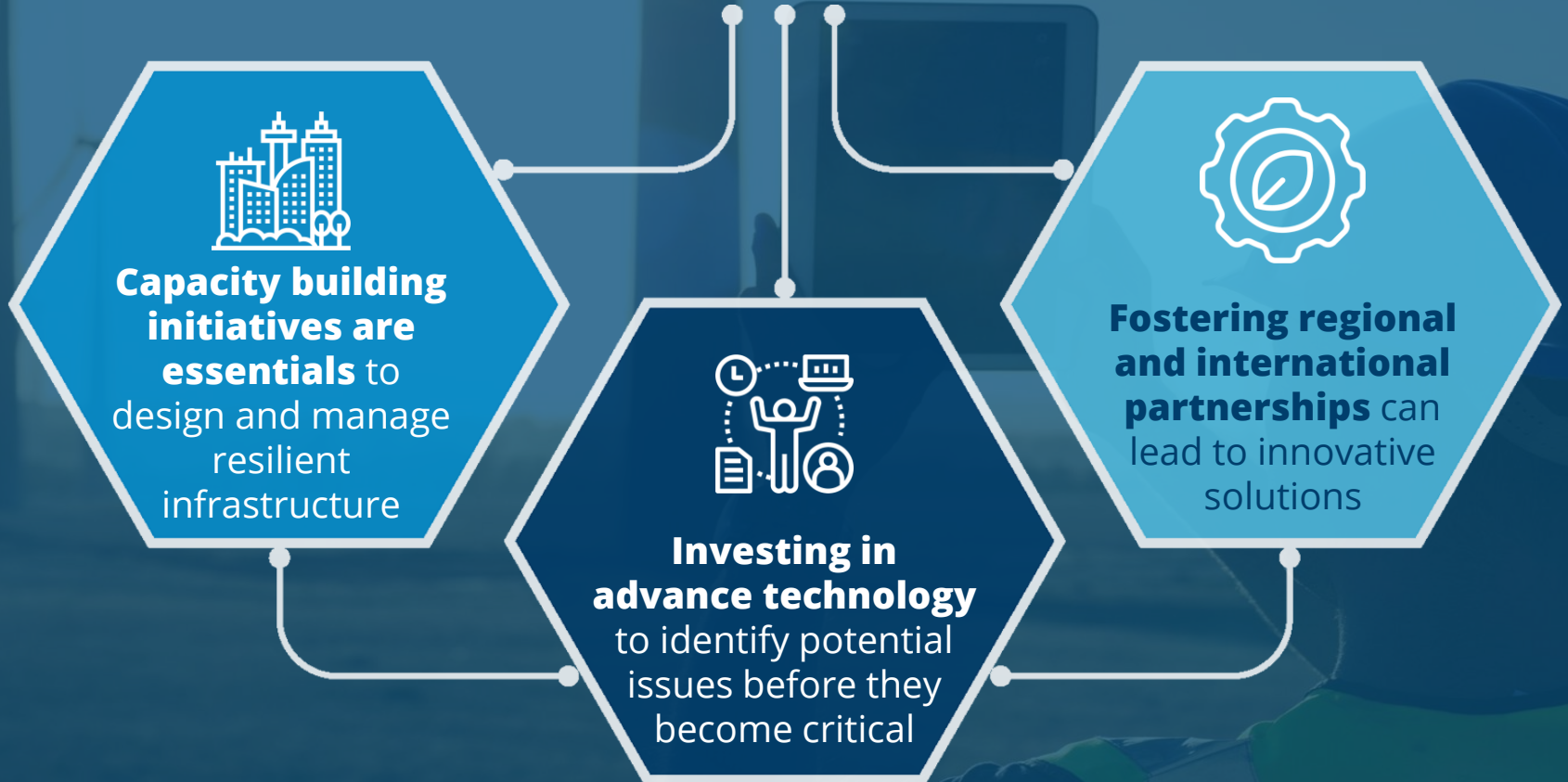
- **Shift the debate towards infrastructure as a system.** This holistic perspective allows for better planning, more efficient use of resources, and greater overall resilience;



- Adopt a **supply-chain perspective to address challenges associated with the efficient management** of custom clearances, and thus the operations of port infrastructure



>> Call to Action





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Thank you