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Climate Change Adaptation for Seaports in Support of the 2030 Agenda for Sustainable Development

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Climate Change Adaptation and Resilience Building for Ports in the Arctic: Opportunities and Challenges

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Climate Change Adaptation and Resilience Building for Ports in the Arctic: Opportunities and Challenges

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Arctic Ports and Infrastructures
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The Major Challenges for Arctic Ports

- Isolation and physical harsh conditions
- Serious lack of capacity for even the most basic facilities
- Exist ‘politically’ rather than ‘socio-economically’
- Established to achieve non-local/regional objectives

Effects of Remoteness and Sparse Markets on Public Sector’s Involvement

- Trade to Travel Economy
- Necessitate ‘Cradle to Grave’ Economy
- Feasibility of Competitive Markets
- Lack of Scale and Market Failure

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Appropriate Approaches to develop Arctic Ports

• **A clear vision for the Arctic Area (AA):** There are pressing needs for decision-makers (e.g., Canadian Federal and Territorial Governments) and right holders (e.g., northern indigenous communities) to develop and possess clear short- and long-term visions on how AA's economy and society could/should be re-shaped by Arctic shipping, including any installation of ports and infrastructures. For example, how should ports and infrastructures transform the connections between the AA and the global economy, while also preserving the traditional society?

• **Bottom-up approach and small-scale start-up:** Initial involvement of foreign parties should be incremental, where collaboration should take care of both 'global' and 'local' interests. For any external investments, the investors should strive to thoroughly understand the unique characteristics, and thus the demands, of the local communities before making any commitments. Any commitments should be ‘target-oriented’ on specific objectives that are defined under such vision.

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Appropriate Approaches to develop Arctic Ports

• **Ports should be treated as system components:** Ports form important components of ‘operational’ (e.g., part of a transport network) and ‘regional’ systems (e.g., part of a local community). Hence, any planning and establishment of ports and infrastructures should not only be treated just as ‘isolated projects’, where facilities should be planned and installed based on the ‘systems’ that both the government and the right holders strive to establish.

• **Re-evaluation of the planning process of ports and its governance system:** There is a strong need to re-evaluate the process of port and infrastructural planning in this area, especially on whether the current planning paradigm fits the Arctic context. Also, there is a need for a new management and governance system so that (future) Arctic ports and infrastructures will be operated in a way that fulfills diversified interests and achieves the vision. A ‘balanced consortium’ should be created that can meaningfully involve the voices, interests, and concerns of the public sector, private operator/investors, and the local community (i.e., the people). **See diagram in the next slide.**
Appropriate Approaches to develop Arctic Ports

- **Capacity building for further communication, education, and training**: Different countries (e.g., Arctic vs. non-Arctic) still have diversified, sometimes conflicting, interests on the AA. Thus, meaningful collaboration requires not just cameo, but continuous, communications. The unique physical, economic, and social circumstances in the AA also imply that dedicated education and training programs that involve both local (e.g., indigenous) and overseas knowledge are necessary for the effective and efficient planning, management, and governance of the Arctic ports. The establishment of such capacities (e.g., Joint AA Forum, bilateral training programs for Arctic shipping) will be good initiatives.
THANK YOU FOR YOUR ATTENTION

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