CIRCULAR PORTS

Keywords: Circular Economy (CE) and ports; port development; sustainability strategies.

The presentation will focus on the concept of circularity, the role and potential of ports in implementing circular economy principles, and the overall impacts of CE on seaport ecosystems. Seaports play a crucial role in global trade and economic development. As sustainability concerns gained traction, the circular economy has emerged as a transformative concept that redefines traditional linear supply chain practices by adding feedback mechanisms.

The Circular Economy (CE) emphasizes reducing waste and promoting resource efficiency through recycling, reusing, and remanufacturing. Its principles, namely reduce, reuse, recycle, and remanufacture, align well with the port industry's objectives to minimize environmental impact, conserve resources, minimize its footprint, and optimize operations. These principles promote a closed-loop system, encouraging seaports to adopt sustainable practices and rethink their role in emerging circular global supply chains. Thus, there is a need to properly assess and contextualize the expected benefits of CE principles for ports. CE presents a paradigm shift for seaports, transforming them into actors more actively involved in sustainability and resource efficiency. By addressing the challenges and seizing the opportunities, seaports can establish themselves as vital contributors to a circular global economy, promoting resilience and sustainability.

The presentation aims to analyze current practices, development trends, challenges, opportunities, and initiatives adopted by seaports worldwide to transition toward a more sustainable and resilient system. It provides an evidence-based perspective of the circular port concept by looking at realistic prospects concerning terms that might otherwise be unsubstantiated. The scope is to understand the dimensions of the CE on ports and maritime supply chains, the transformation from linear to circular economics principles, the motives and impediments towards circularity, and how ports can play a role in setting circular supply flow principles in terms of materials, energy, land, and waste management. This informs the second goal, which is an analysis of the key parameters of CE implementation strategies – including suggestions for adjustments of port governance practices.
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