

Abstract

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Green Shipping Corridor Challenges and Policy Tasks from Korea

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Greenhouse gas emissions from the shipping sector have been increasing globally, and the IMO is strengthening its phased reduction strategy to achieve net-zero emissions by 2050. Within this context, global Green Shipping Corridor initiatives have accelerated international cooperation, rapidly increasing from 22 cases in 2022 to 57 cases in early 2024.

Korea is also advancing the establishment of green shipping corridors through cooperation with Australia, Singapore, Denmark, and others, including the Busan-Seattle route. However, structural challenges remain, including high costs of alternative fuels, insufficient bunkering and storage facilities, inadequate technology and safety regulations, and gaps between major and small-to-medium shipping companies. Additionally, the lack of long-term strategies for fuel transition, infrastructure investment, and international standards compliance has been identified as a limitation.

To address these issues, government-led comprehensive support systems and multilayered policies are necessary. Specifically, key solutions include legislation for green shipping transition, securing funding and establishing funds, introducing regulatory sandboxes for innovative technology demonstration, building global cooperation alliances, and fostering specialized human resources through industry-academia-research partnerships. This presentation aims to discuss the direction and implementation strategies for Korea's shipping decarbonization transition, focusing on these policy challenges.