The Surabaya Green Logistic Innovation Corridor (SGLIC): An Integrated Framework for Sustainable Logistics and SME Business Acceleration

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Abstract. Indonesia's logistics costs, although declining, remain high at 14.29% of GDP (2023), compared to Singapore (8%) and Malaysia (13%). Key challenges include prolonged dwell time (3–4 days), reliance on major ports, and fragmented distribution systems. This study proposes the Surabaya Green Logistic Innovation Corridor (SGLIC) as an integrated strategy to transform Tanjung Perak Port into a sustainable and efficient logistics gateway. Using a qualitative literature-based approach, the research analyzes secondary data from official reports, academic journals, and industry publications. The SGLIC framework integrates four pillars: (1) green infrastructure and digital technology (e.g., IoT-based ILH, smart port systems), (2) a Digital Trade Corridor for streamlined documentation, (3) an SME Acceleration Trail to enhance market access, and (4) multi-stakeholder governance. Expected outcomes include a reduction in dwell time to 2–2.5 days, a 10–25% decrease in logistics costs for SMEs, lower emissions through electrification and renewable energy, and improved export competitiveness—particularly in fisheries via enhanced cold chain infrastructure. The SGLIC aligns with the national vision of "East Java as the New Gateway of the Archipelago" by strengthening regional connectivity, supporting SME integration into global supply chains, and promoting sustainable logistics practices. Further empirical validation and feasibility studies are recommended.

Keywords: Green Logistics, Digitalization, SME Empowerment, Tanjung Perak Port, Sustainable Supply Chain