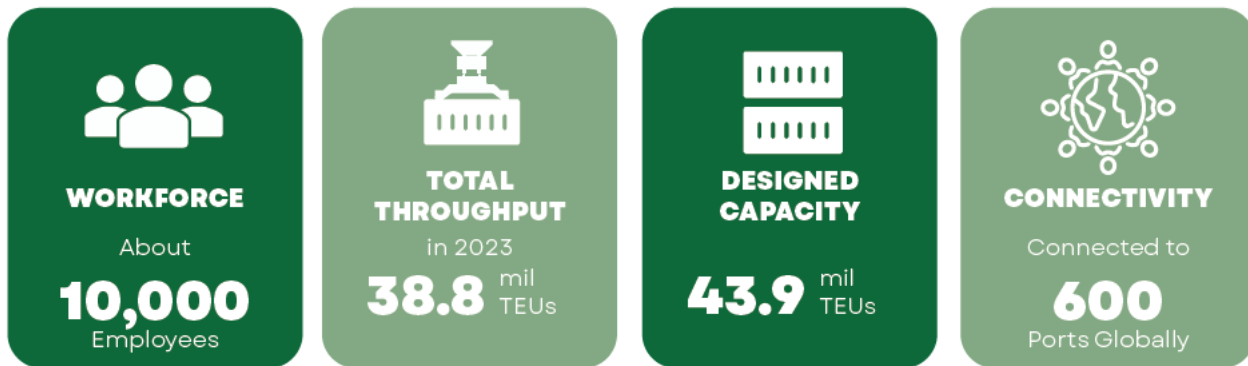
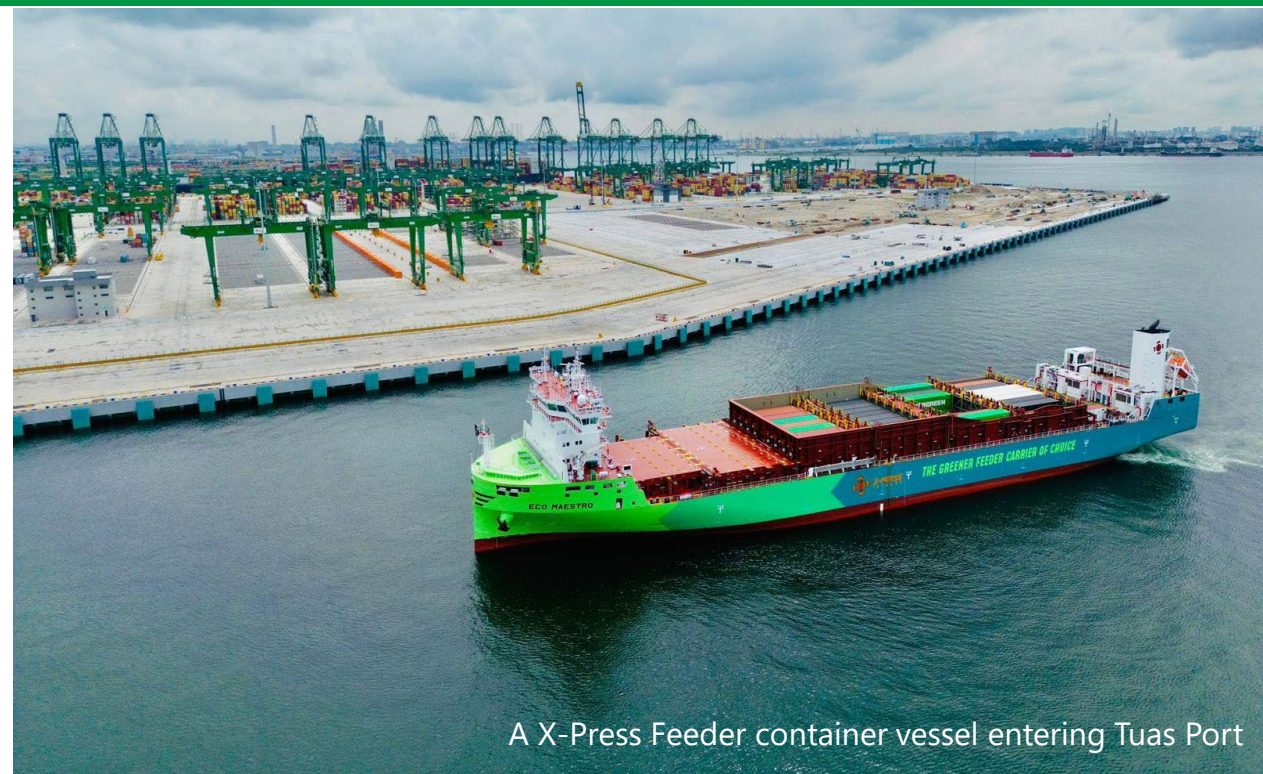
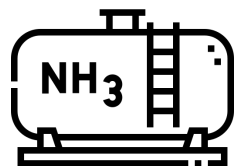
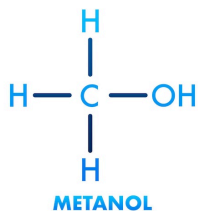


Key Figures of PSA Singapore



PSA Singapore's Objectives

- Support maritime decarbonisation to reduce emissions and achieve sustainability goals
- Be future ready by supporting early adopters to gain insights and experience for scaling up
- Multi green fuel bunkering (SIMOPS) to support Singapore as a global bunkering hub



A X-Press Feeder container vessel entering Tuas Port

PSA SG's SIMOPS Experience

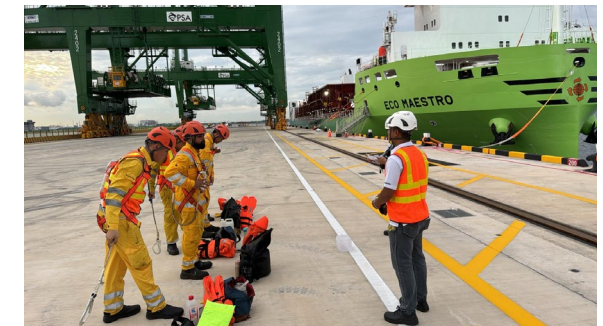
- Mar 2021 : 1st LNG bunkering SIMOPS (CMA CGM Scandola)
- Aug 2023 : 1st LNG bunkering SIMOPS for a Car Carrier (NYK Jasmine Leader)
- May 2024 : 1st Methanol bunkering SIMOPS (X-Press Eco Maestro)

Key Learning Points

- Safety for Port Users and workers
 - Allocation of berth
 - Safety zones
 - Establish SIMOPS procedures with Risk Assessment and Safe Work Procedures
- Trained Emergency Response team (liaise with SCDF)
- Close monitoring during SIMOPS

Moving forward

- Standardise safety zones computation and safety measures to minimize impact to operations
- Review and streamline processes to scale up
- Experience learnt can be applied for other green fuel SIMOPS in future



Safety measures and briefing before start of SIMOPS