Keys Drivers in Achieving Port Operations Efficiency
The Johor Port Experience

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ASEAN PORTS AND SHIPPING
27 October 2022

Malaysia's Premier Infrastructure Group

PORTS & LOGISTICS

Port of Tanjung Pelepas
- Transshipment Hub
- 70% shareholding
- 30% owned by APMT

Johor Port Berhad
- Multi-purpose Port
- 100% shareholding

Northport (Malaysia) Bhd
- 99% shareholding

Penang Port Sdn Bhd
- 100% shareholding

Tg Bruas Port Sdn Bhd
- 70% shareholding

Andaman Port Sdn Bhd
- LNG & Crude Oil STS Operations
- 70% shareholding

Red Sea Gateway Terminal
- 20% shareholding

Kontena Nasional Berhad
- 99% shareholding

ENERGY & UTILITIES

Malakoff Corporation Berhad
- Power and Water Generation co.
- Associate - 38.45%* shareholding

Alam Flora Sdn Bhd
- Solid Waste Management and Public Cleansing
- Subsidiary of Malakoff, owned 97.37%

Gas Malaysia Berhad
- Natural Gas Distribution co.
- Associate - 30.9% shareholding

Aliran Ihsan Resources Berhad[1]
- Wholly-owned by MMC
- A Water Treatment Specialist

ENGINEERING

MMC-GAMUDA
- PDP for elevated and Main contractor for underground KVMRT Line 1
- Main contractor for entire package of KVMRT Line 2

SMART Tunnel
- First of its kind, dual purpose tunnel
- 50% shareholding

MMC Pembetungan Langat Sdn Bhd
- Wholly-owned by MMC
- Langat Centralized Sewage Treatment.

MMC Engineering
- Wholly-owned by MMC
- Langat 2 Water Treatment Plant

OTHERS

Senai Airport Terminal Services Sdn Bhd[1]
- Wholly-owned by MMC
- Airport operations

MMC Land Sdn Bhd

Senai Airport City[1]
- Wholly-owned by MMC

Seaport Worldwide
- Wholly-owned by MMC

Northern Technocity[1]
- Wholly-owned by MMC

[1]Financial contributions are reported in Others under the Group's financial reporting

** Excluding treasury shares*

MMC PORTS - MALAYSIA'S LARGEST PORT OPERATOR

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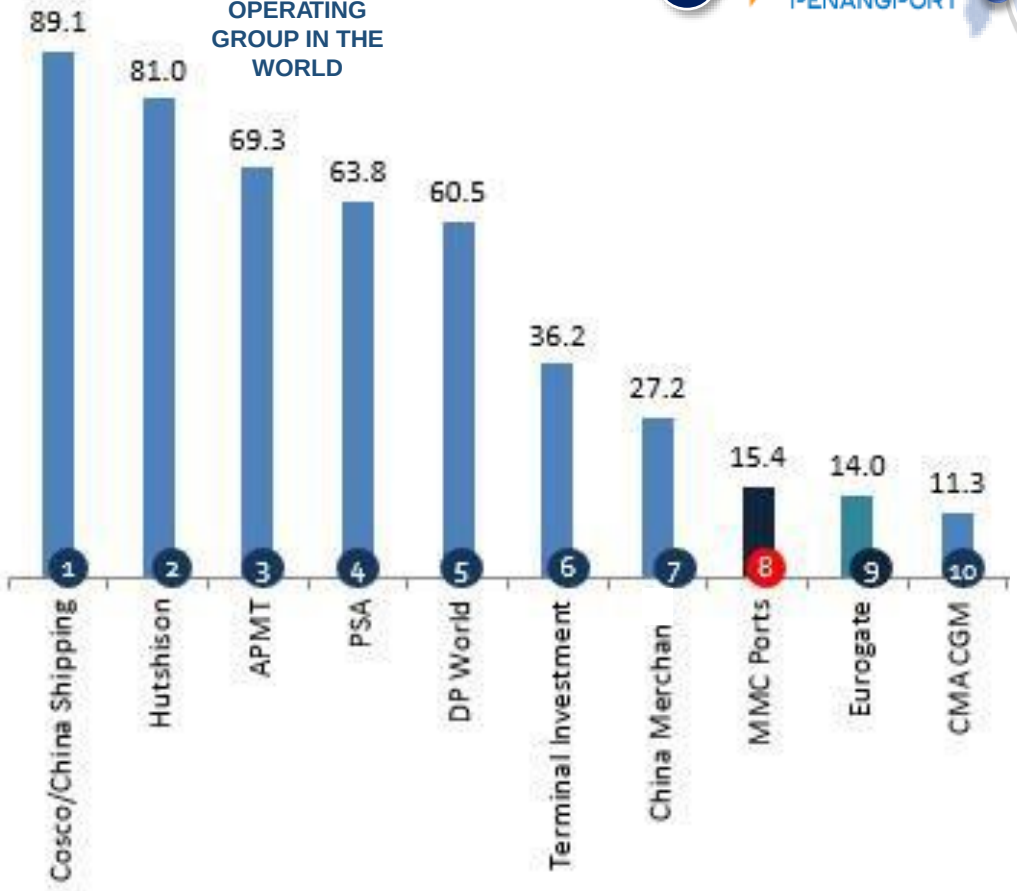
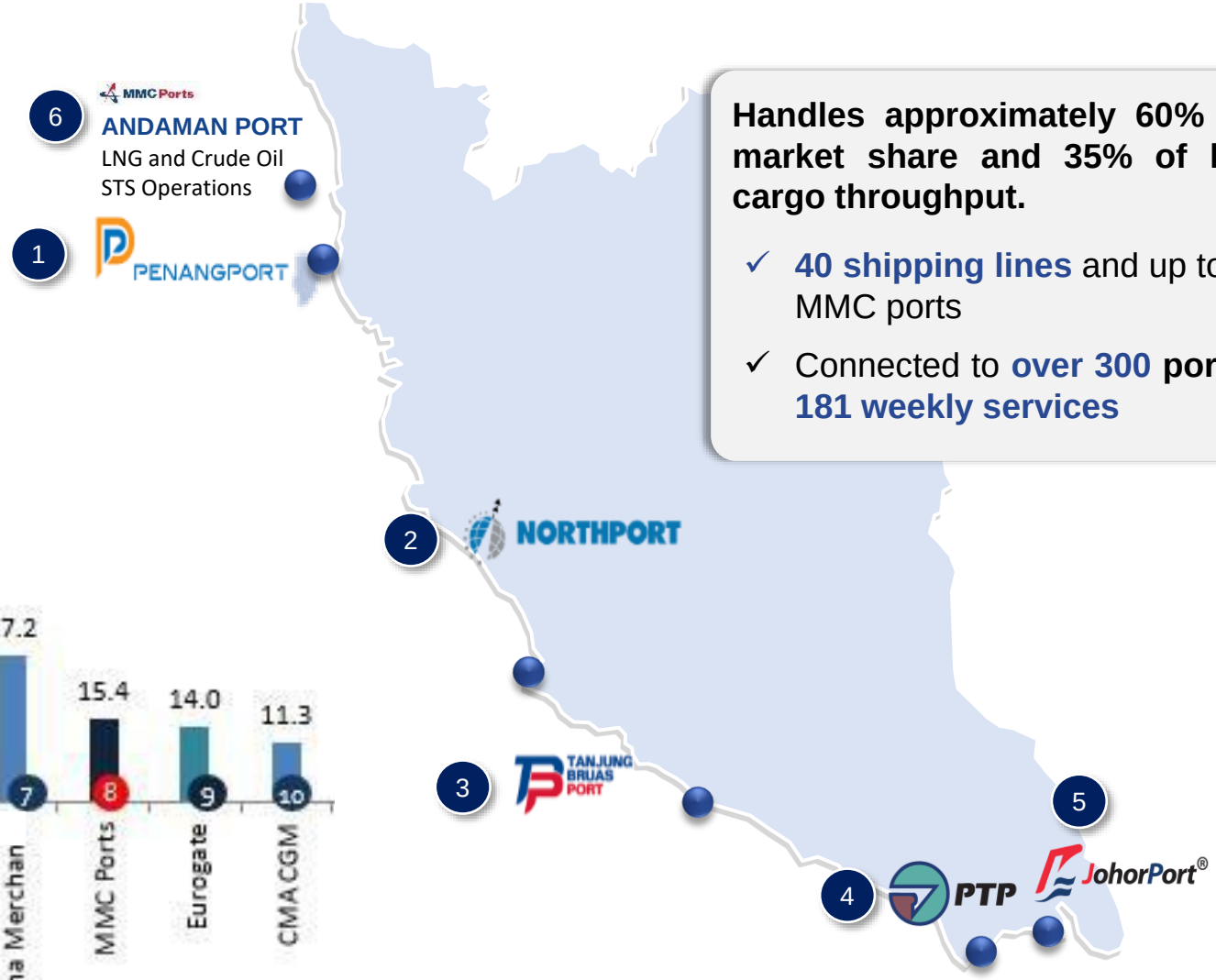
MMC Ports

8th

LARGEST PORT OPERATING GROUP IN THE WORLD





Handles approximately 60% of Malaysian Container market share and 35% of Malaysia's Conventional cargo throughput.

- ✓ **40 shipping lines** and up to **45 box operators** calling MMC ports
- ✓ Connected to **over 300 ports** of calls with **more than 181 weekly services**

محطة بوابة البحر الأحمر
RED SEA GATEWAY TERMINAL

WINNER OF PRIME MINISTER AWARD
WINNER OF INDUSTRY EXCELLENCE AWARD
MINISTRY OF INTERNATIONAL TRADE AND INDUSTRY MALAYSIA

STRATEGICALLY LOCATED AT THE SOUTHERN TIP OF PENINSULAR MALAYSIA

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MALAYSIA'S SOUTHERN GATEWAY MULTI-PURPOSE PORT

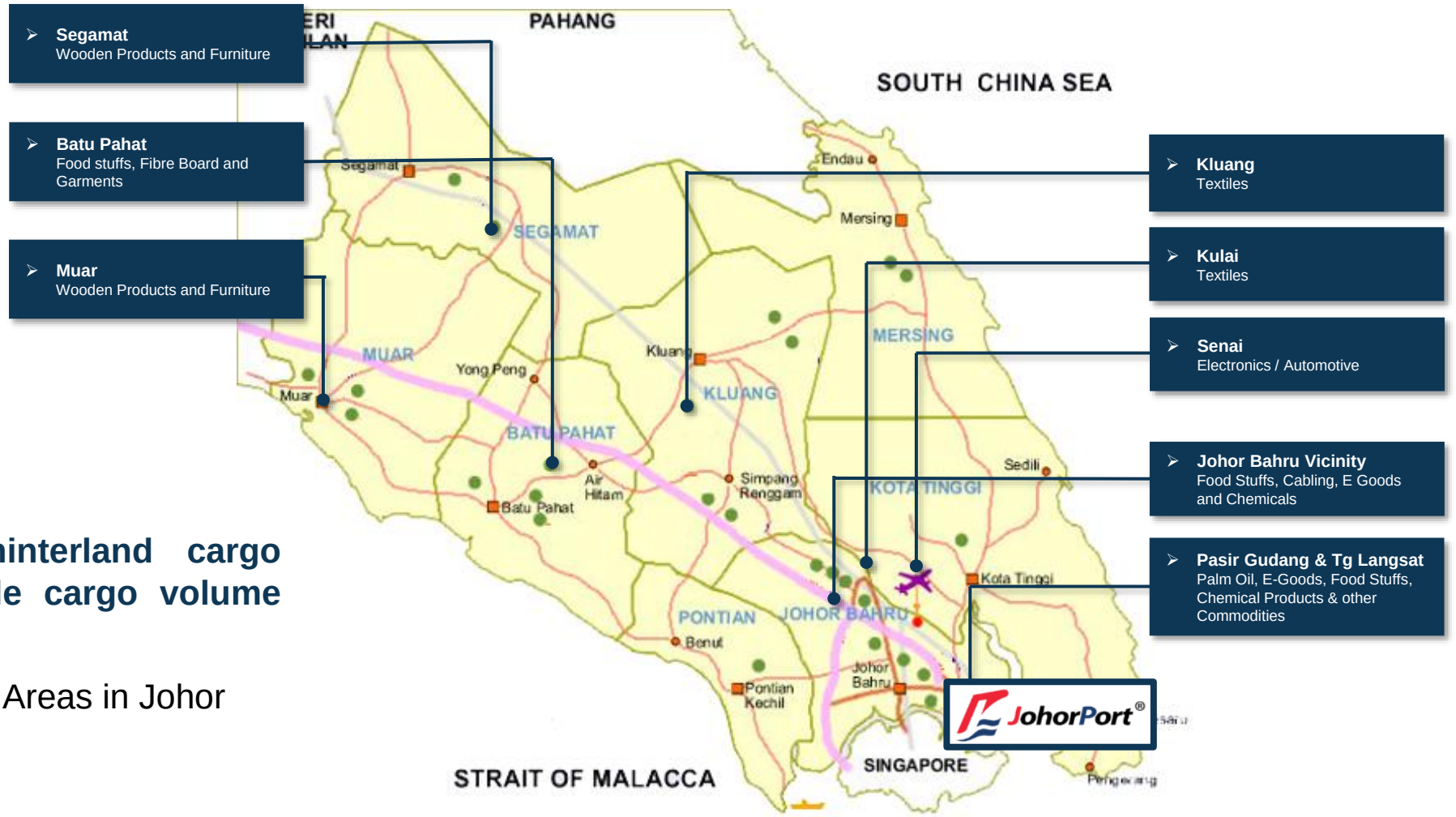
JOHOR PORT TODAY

28
INDUSTRIAL AREAS
38,710 ACRES

RANKED
5th
in the world
as an LME location

24 services
to Intra Asia
22 shipping lines
operating
55 ports
direct connectivity

GATEWAY FOR DIVERSIFIED HINTERLAND INDUSTRIES



Diversified hinterland cargo provide stable cargo volume to the Port

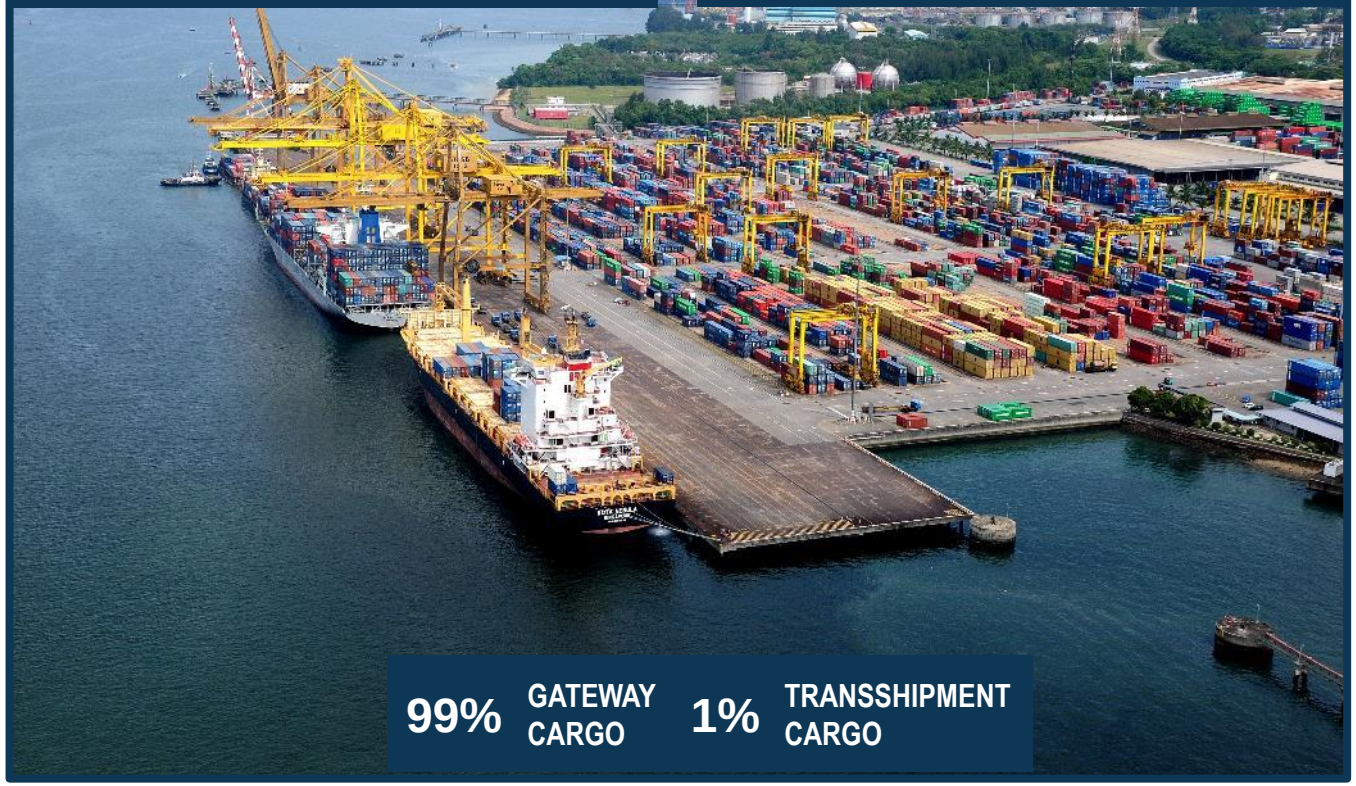
- 28 Industrial Areas in Johor

CONTAINER TERMINAL

1.45	**MILLION TEUs** ANNUAL CAPACITY
3	**BERTHS**
730m	**QUAY LENGTH**
12m	**MAX DEPTH**
1.8	**MILLION TEUs** YARD CAPACITY
9	**QUAY CRANES**
30	**RUBBER-TYRED GANTRY CRANES**
6	**REACH STACKERS**
56	**PRIME MOVERS**

24 SERVICES TO INTRA ASIA WITH
22 SHIPPING LINES OPERATING

60% MAIN LINE OPERATORS **40%** FEEDERS



99% GATEWAY CARGO **1%** TRANSSHIPMENT CARGO

INTRA ASIA CONNECTIVITY

CONVENTIONAL TERMINAL

LIQUID CARGO

15	MILLION FWT ANNUAL CAPACITY
13	BERTHS
2,292m	QUAY LENGTH
13.5m	MAX DEPTH

DRY BULK CARGO

7	MILLION FWT ANNUAL CAPACITY
4	BERTHS
818m	QUAY LENGTH
13.5m	MAX DEPTH

BREAK BULK CARGO

2	MILLION FWT ANNUAL CAPACITY
4	BERTHS
935m	QUAY LENGTH
13.5m	MAX DEPTH

WAREHOUSING

> 2.5 mill sq ft of storage space for LME cargo, Conventional cargoes including Soft Commodities (Cocoa, Fertilizer, Rice) and Transit Cargoes

OFF SHORE INSPECTION MAINTENANCE & REPAIR (OIMR)

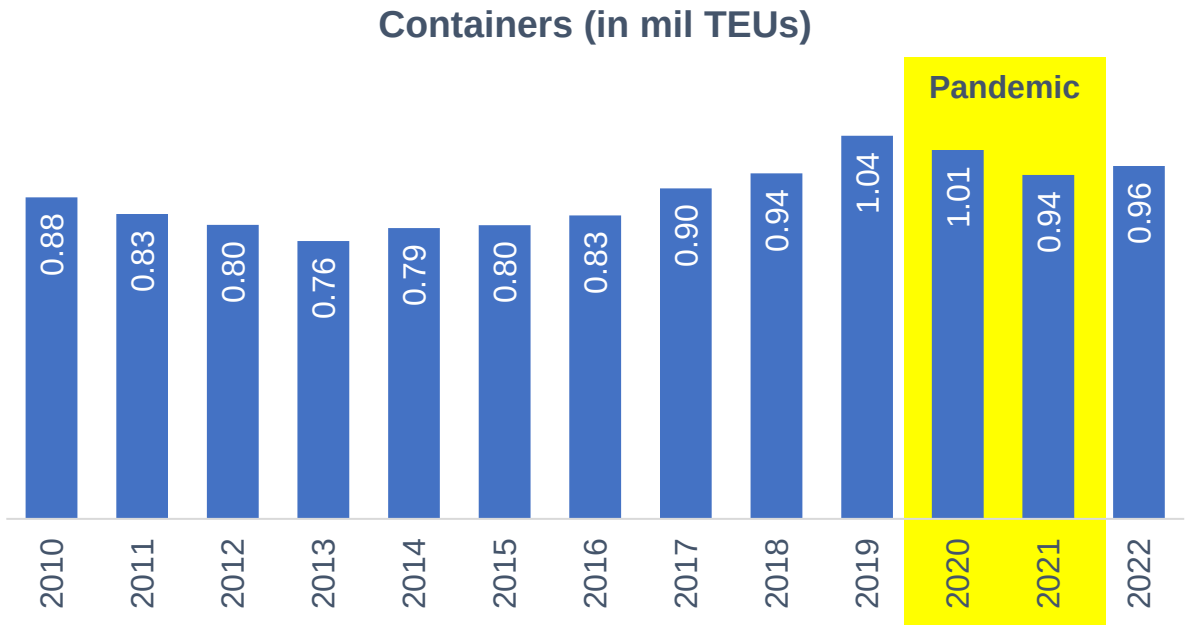
A dedicated Offshore Inspection, Maintenance & Repair facility

3	**BERTHS** **W9, W10 & W11**
630m	**QUAY** **LENGTH**

COVID-19 IMPACT TO CONTAINER VOLUME

2020 and 2021 volume were impacted by operational restriction imposed on manufacturing factories during the Malaysian Movement Control Order (MCOs) & National Recovery Plan (NRP) Phase 1 to 4 and global Containerized Supply Chain disruption.

VOLUME GREW AT CAGR OF 5.5% FROM 2013 TO 2019 (PRE-PANDEMIC).



** 2022 - Forecast*

Pre-Pandemic Container volume was improving at a high rate surpassing the 1 Mil TEUs milestone.

- MLOs deployed their Intra Asia fleets to the **Transpacific Trade Lanes** which generated better revenue. This has resulted in Shipping Lines depending on Feeder Operators to connect their Containers to the nearest Transshipment Hub.
- China's **Zero-COVID Policy** created new Supply Chain hurdles to the Shipping industry.
- Constant **vessel delays** and **poor schedule integrity** resulted in constant **omissions** and **blank sailings** by the Shipping Lines.

CONTINUOUS & SUSTAINABLE FLOW OF CARGO

Diversified hinterland cargo provide continuous and sustainable flow of cargo to the Port.

STABLE VOLUME @ CAGR 1.5% (2010 – 2021)

** 2022 - Forecast*

Johor Port's position as a Multi-Purpose Port with its diversity of cargo enabled the Port to weather the fallout from the COVID-19 pandemic.

- The pandemic in 2020 & 2021 had impacted **industrial products** (lesser importation due to factories closure), **Clinkers** (lesser construction activities) and **Petroleum** (for domestic consumption due to lesser movement activities and SG-MY border closure) volume.

- However essential products / commodities i.e. **Food & Plantation (Coconut Oil, Wheat, Maize)** remain strong. **Palm Oil & Fertilizer** volume recorded strong growth of 15% & 62% YoY in 2021 respectively.

PORT OPERATIONAL EFFICIENCY

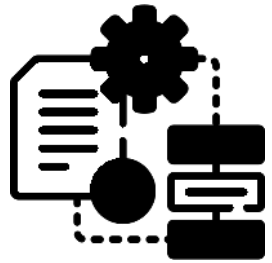
Port Operational Efficiency is derived from the right fusion of

HARDWARE + SOFTWARE

INFRASTRUCTURE & EQUIPMENT

+

PEOPLE, PROCESSES & SYSTEM



JOHOR PORT'S JOURNEY TOWARDS ACHIEVING OPERATIONAL EFFICIENCY STARTED IN 2012

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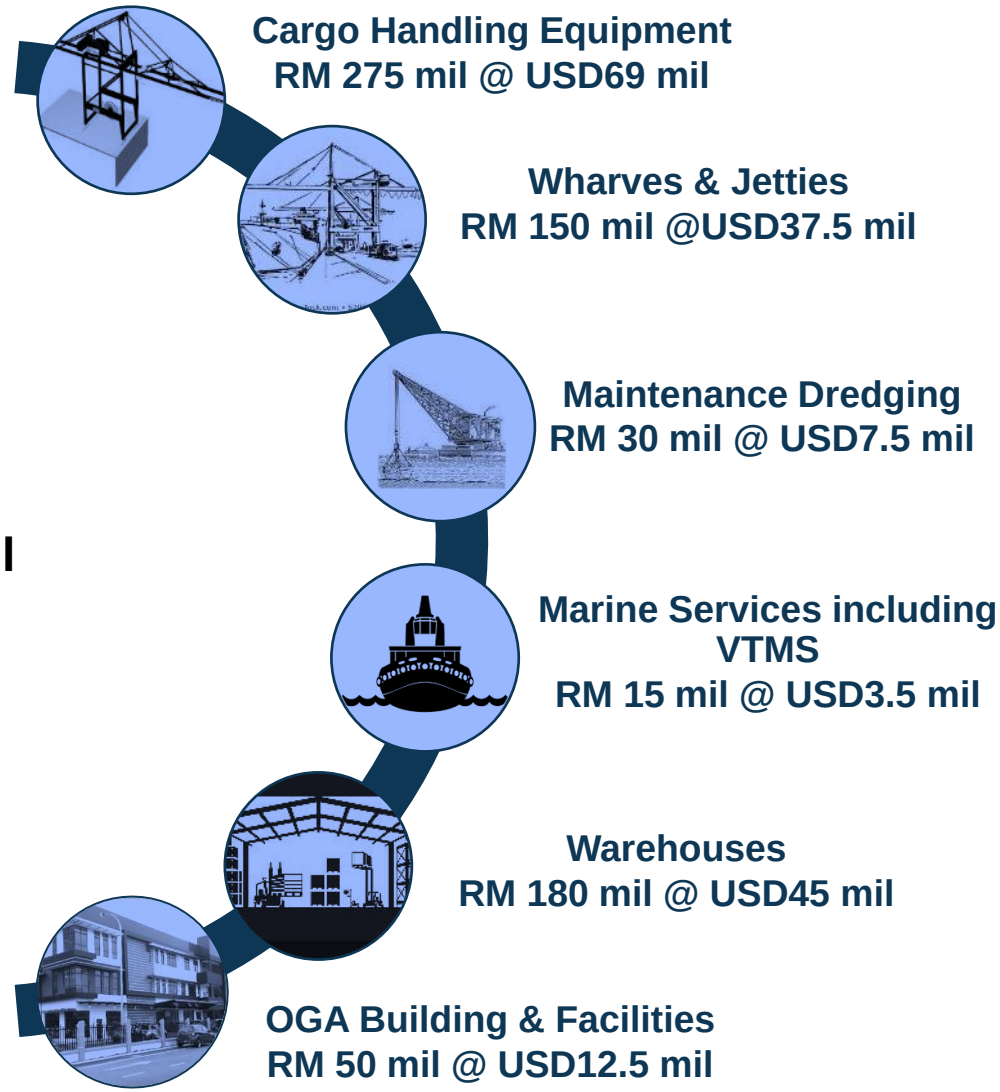
2012 - 2019

RM700 mil @ USD175 mil

CAPEX investment



Cargo Handling Equipment
RM 275 mil @ USD69 mil

Wharves & Jetties
RM 150 mil @USD37.5 mil

Maintenance Dredging
RM 30 mil @ USD7.5 mil

Marine Services including VTMS
RM 15 mil @ USD3.5 mil

Warehouses
RM 180 mil @ USD45 mil

OGA Building & Facilities
RM 50 mil @ USD12.5 mil

Catering for present and future business needs.

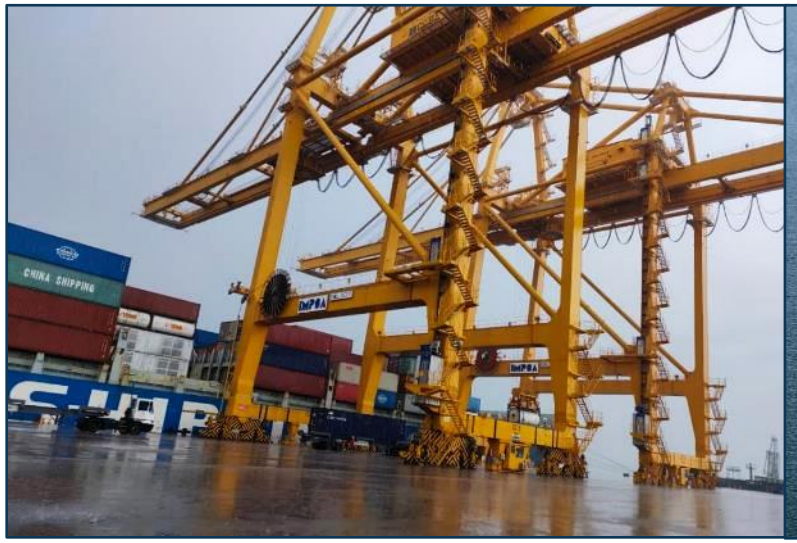
Timely investment in the expansion and modernization of Infrastructure and Facilities helped JPB to attain Operational Efficiencies and avoid Capacity bottlenecks.

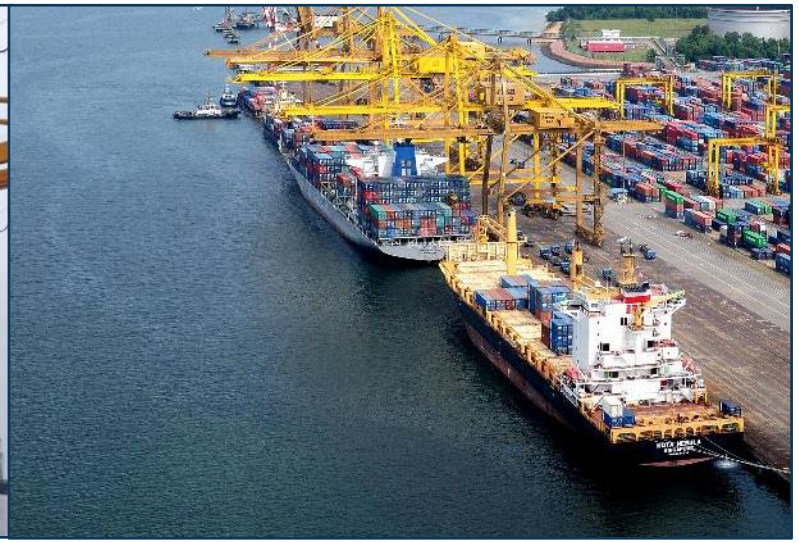
EQUIPMENT - CONTAINER TERMINAL

QUAY CRANES

Increase QCs from 7 – 8

- 2014 – 2 Post Panamax QCs
- 2017 – 2 Post Panamax QCs with twin lift capabilities
- 2018 – 1 Post Panamax QC



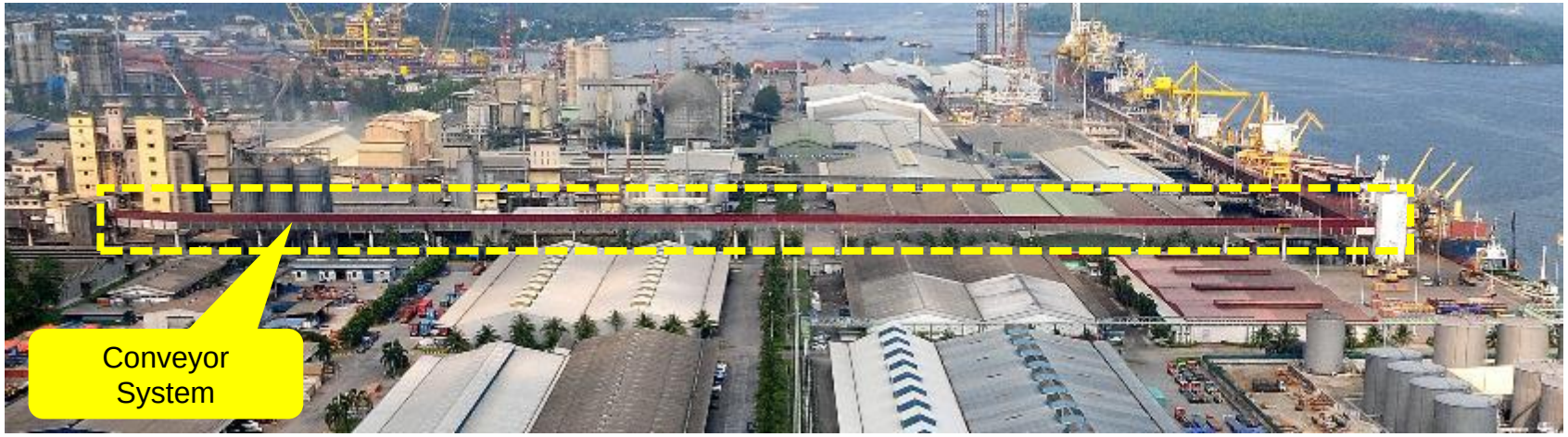


RUBBER-TYRED GANTRY

Increase RTGs from 19 – 30

- 2015 – 2 units
- 2017 – 3 units
- 2019 – 2 units
- 2020 – 4 units

EQUIPMENT - CONVENTIONAL TERMINAL



Installation of new Conveyor Belt for Cereal Conveyor System at W4, W5, W6 & W7 & connected to LL1, LL2, LL3 and BG1.

Arrival of 2 Level Luffing Cranes in Q4 2015

WHARVES & JETTIES

2014

- Rehabilitation of Container Yard surface
- Maintenance, Repair and Supply of New Fenders

Rehabilitation of Container Stacking Beam

Installation of new Chain System

2017

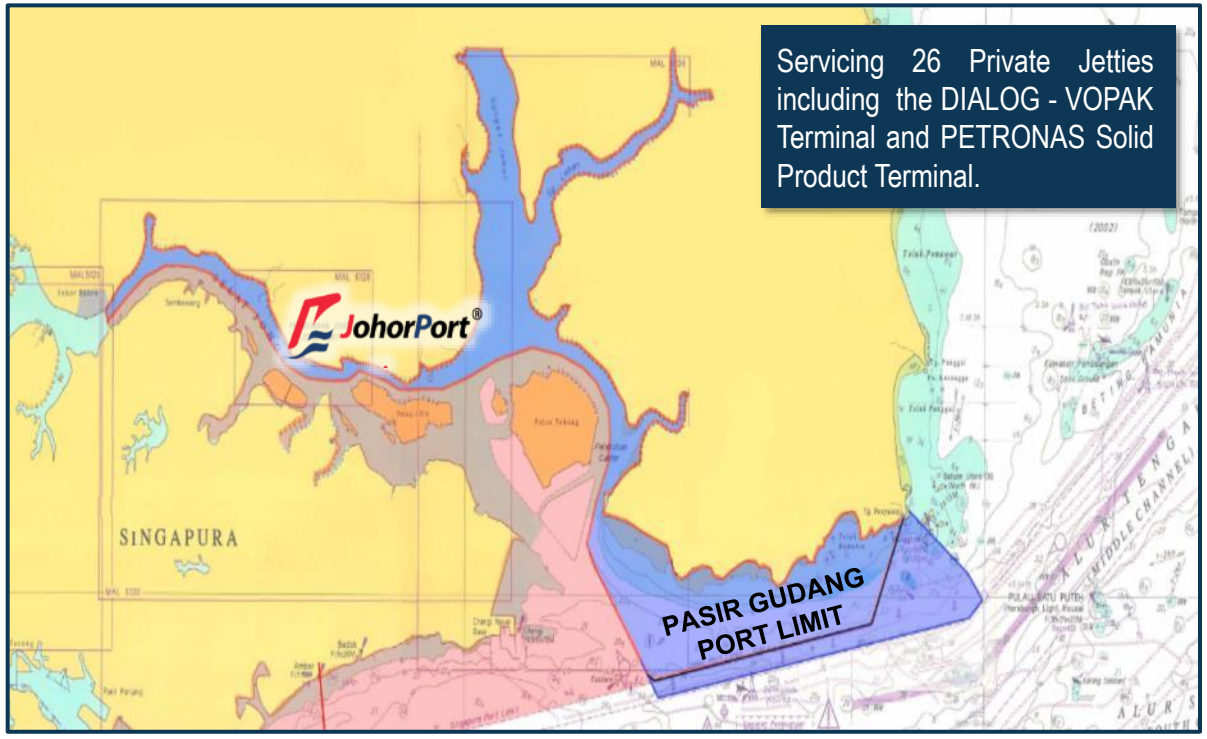
- Rehabilitation of BT1, BT3 & BT4 completed in May 2017

2019

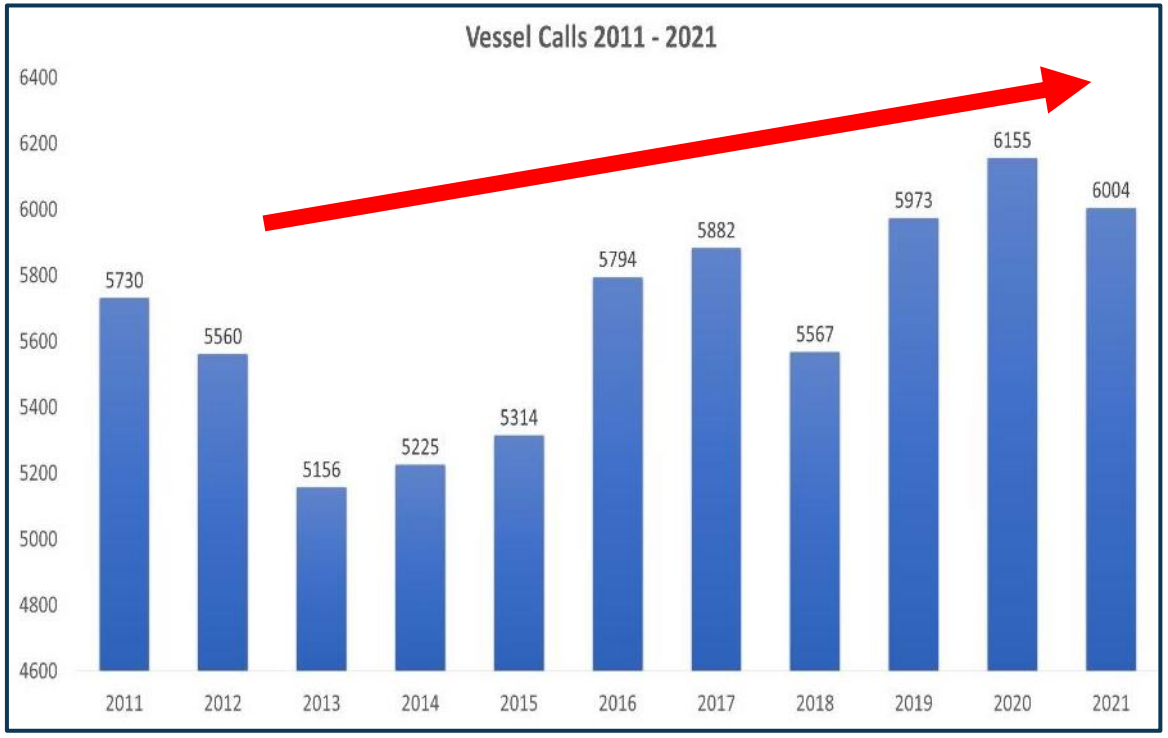
- Rehabilitation BT9, BT2, W5 and W6 completed in August 2019

Wharves Rehabilitation

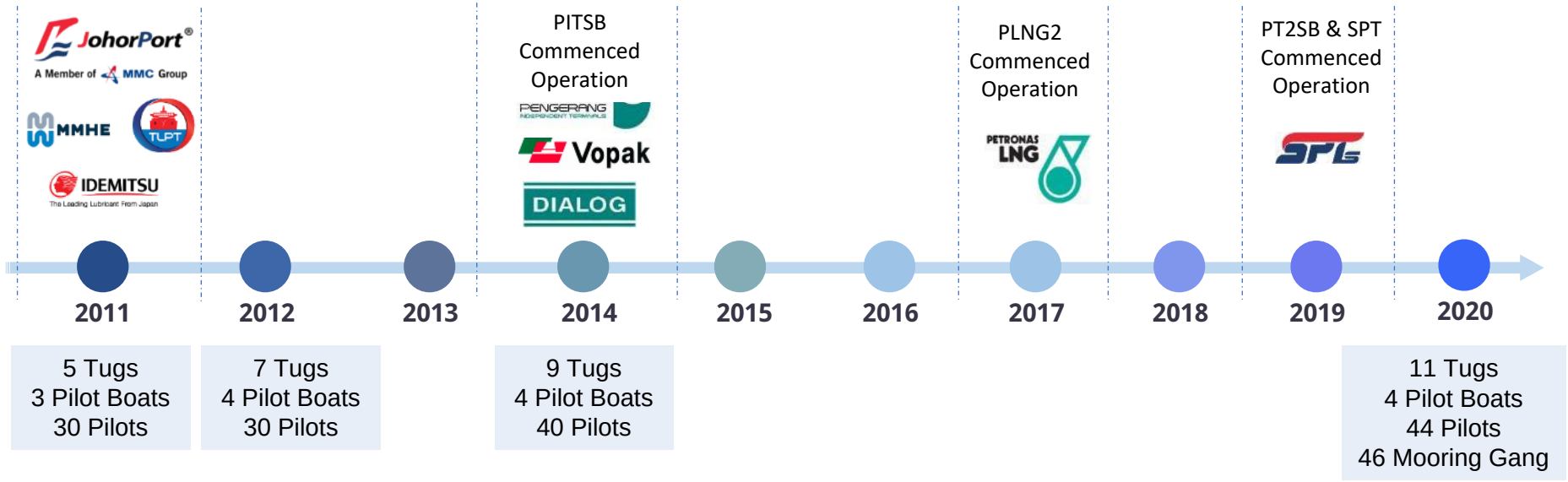
JOHOR PORT'S AREA OF COVERAGE FOR MARINE SERVICES

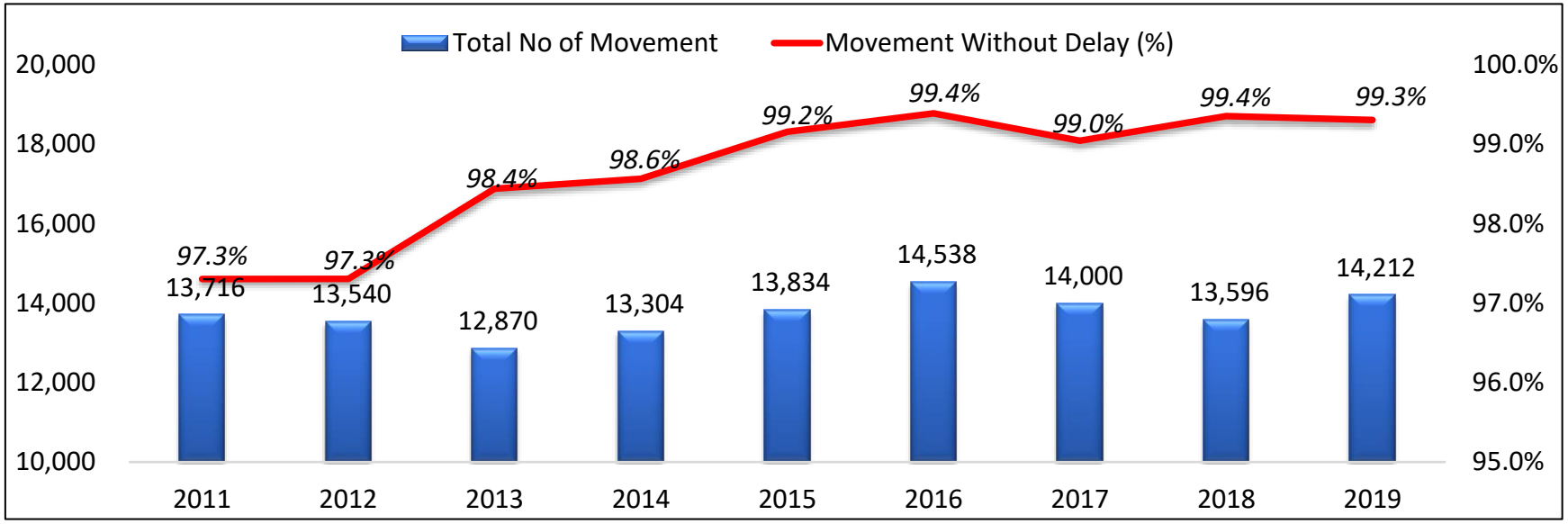


GROWING NUMBER OF VESSELS



INCREASE # OF PILOT & TUGBOATS FOR BETTER EFFICIENCY





2020 : WHEN COVID HIT THE WORLD

Supply Chain Disruption

- Shortage of Containers, constant vessel delays, poor schedule integrity, constant omissions and blank sailing.
- Operational disruption with increase in vessels omissions & blank sailings due to Shipping lines facing shortages of equipment which lead to cancellation of bookings.
- Some Shipping Lines withdrew their vessels from Intra Asia trade and deployed them to the long-haul sectors due to better freight rates.

2 Big Questions

1. Do we pull handbrake and slow down on next phase of development / improvements, especially the Container Terminal expansion plans.

2. What can we do in terms of Operational Efficiency to meet the current Supply Chain demands.

JPB Decided To Proceed

- Relook processes to further improve operational efficiency

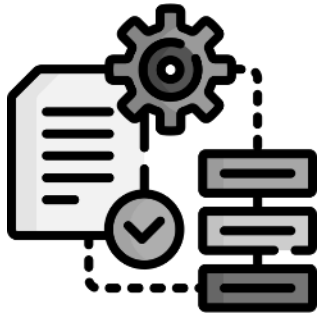
- Container Terminal - take advantage of downtime from lower volumes due to COVID-19 to proceed with the Terminal expansion. Able to implement a forced shutdown of Blocks and Wharves for the Works.

- Conventional Terminal - prepare and gear up to accommodate more volumes.

2nd PHASE OPERATIONAL EFFICIENCY IMPROVEMENT PLAN

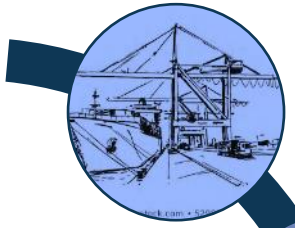
2020 - 2028

RM1.3 bil @ USD325 mil CAPEX Plan



Processes

Systems
RM 400 mil @ USD100 mil



Container Handling Capacity
RM 350 mil @ USD 87.5 mil

Conventional Handling Capacity & Berth Expansion
RM 250 mil @ USD62.5 mil

Liquid Jetty Maintenance & Expansion
RM 200 mil @ USD50 mil

Warehouse Expansion & Satellite Terminal
RM 100 mil @ USD25 mil

PROCESSES : CONTAINER TERMINAL DEVELOPMENT PLAN

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Q2 2020

- ✓ **Shift Change**
- ✓ **Focus Vessel Program**
- ✓ **Yard Strategy**
- ✓ Quick Start / Quick Sail
- ✓ Vessel Exchange (reduce idle time)
- ✓ Marking Cone
- ✓ Forklift Cage

Q3 2020

- ✓ Lean Program
- ✓ Quay Side Lane
- ✓ New Shift Pattern
- ✓ Incentive Revision
- ✓ Pinning Station
- ✓ Staff Appreciation Program
- ✓ Shift Team Structure
- ✓ PM & RTG Dispatcher

Q4 2020

- ✓ Lashers Training
- ✓ Prime Route Optimization Plan (manual)
- ✓ Traffic Management
- ✓ Dual Cycle Operation
- ✓ Main Gate Operations Process
- ✓ Alignment with M&R on PM scheduling VS demand

Q1 2021

- ✓ Organization Structure
- ✓ Twin Lift RTG Study
- ✓ Top performers reward scheme
- ✓ Mini Kaizen to further improve operational efficiency
- ✓ Bottom 10% called in for PIP program
- ✓ Program to improve QC Operator Skill

Q2 2021

- ✓ Introduce "Standard Work"
- ✓ Incentive Scheme
- ✓ Staff Exchange Program

- **30 initiatives identified**
- **Duration of 15 months**
- **Achieved soft savings in terms of opportunity loss on idling time**

PROCESSES : SHIFT CHANGE

- Longer Shift Change at Container Terminal resulting in equipment idling time, longer port stay and longer waiting time at the anchorage.
- Average of 30 minutes per Shift
  - 9 QCs
  - 3 x Shift Changes per day - (1) 0700 hrs (2) 1500 hrs (3) 2300 hrs

Changes made

- Visible Operation Management team to monitor shift change at quayside
- IT intervention – Live reporting during Shift Change to enable dynamic monitoring of Shift Change.
- Expand the monitoring to PM and RTG.
- Split Shift Change between QC Operators, RTG Operators and Contractors in different timing.
  - QC and RTG at 0700 hrs, PM and Contractors at 0800 hrs

Shift Change improved from average of 30 minutes to 8 minutes

PROCESSES : FOCUS VESSEL PROGRAM AND YARD STRATEGY

- Profile of vessels calling Johor Port - 60% MLO & 40% Feeder Vessels
- Operation previously used to focus on Feeder Vessels
- Longer Port Stay for MLOs
  - 1,000 moves require 24 to 30 hours
  - Longer Vessel Waiting Time at Anchorage (up to 26 hours)
- The practice has always been to deploy max of 3 cranes on 240 meter vessels due to Wharf structure/design
  - Resistance from the Operation staffs to deploy more than 3 cranes due to safety reasons
  - External Consultant conducted study on Deck strength - each slab of 80m can accommodate 2.5 cranes
  - Technically, 240m vessels can accommodate 7.5 cranes
  - Engagement with QC Operators to clear their concerns and MLOs to improve their Stowage Plan (CI)
- Unable to achieve the desired Target despite additional QC deployment
  - Yard operation not supporting Quayside operation
  - Existing practice – all Export boxes per vessel stacked in one Block for easier monitoring and execution by Ops Team
  - 3 RTGs vs 4 - 6 QCs

Changes made

- Spread out the Export boxes into few Blocks to distribute the load and deploy more RTGs to support Quayside
  - Maximum 3 RTGs per Block
  - Utilizing more Blocks allow us to deploy more RTGs to support Quayside operations
- Unable to spread out to many Blocks due to space constrains
  - Change from the norm of stacking 3 high to 5 high
  - Resistance from Equipment Operators to go higher
  - Training provided to accommodate changes

Currently we are stacking 4 - 6 high depending on weight class
MLO Port Stay has reduced from 24 - 30 hours to average 15 hours
Vessel waiting time has reduced from maximum 26 hours to average 1.5 hours

PROCESSES : CONVENTIONAL TERMINAL IMPROVEMENT PLAN

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Q4 2020

- ✓ Stevedore Training
- ✓ Maximum POW
- ✓ Consignee Receiving Point
- ✓ Multi-skilled Crane Operator
- ✓ Truck Delays
- ✓ Quick Start & Quick Sail
- ✓ Evaluate/Study Existing Equipment

Q1 2021

- ✓ **Cargo Stowage Plan**
- ✓ MPTS network coverage & 2.0
- ✓ Prompt Shift Change
- ✓ Centralization of Weighbridge
- ✓ Monthly staffs appreciation
- ✓ Maximize berth utilization BT1 & CT3A

Q2 2021

- ✓ **Focus on major customers**
- ✓ Maximize Grab & Hopper utilization
- ✓ Portable Conveyor
- ✓ Centralization of BBT Team at 3E
- ✓ Sampling cargo at anchorage
- ✓ Outsourcing Forklift

Q3 2021

- ✓ **Trimming Process**
- ✓ Encourage Indirect Operation
- ✓ Redesign Gate C
- ✓ Safety Enhancement Program
- ✓ Lean and Kaizen
- ✓ Staff Exchange Program

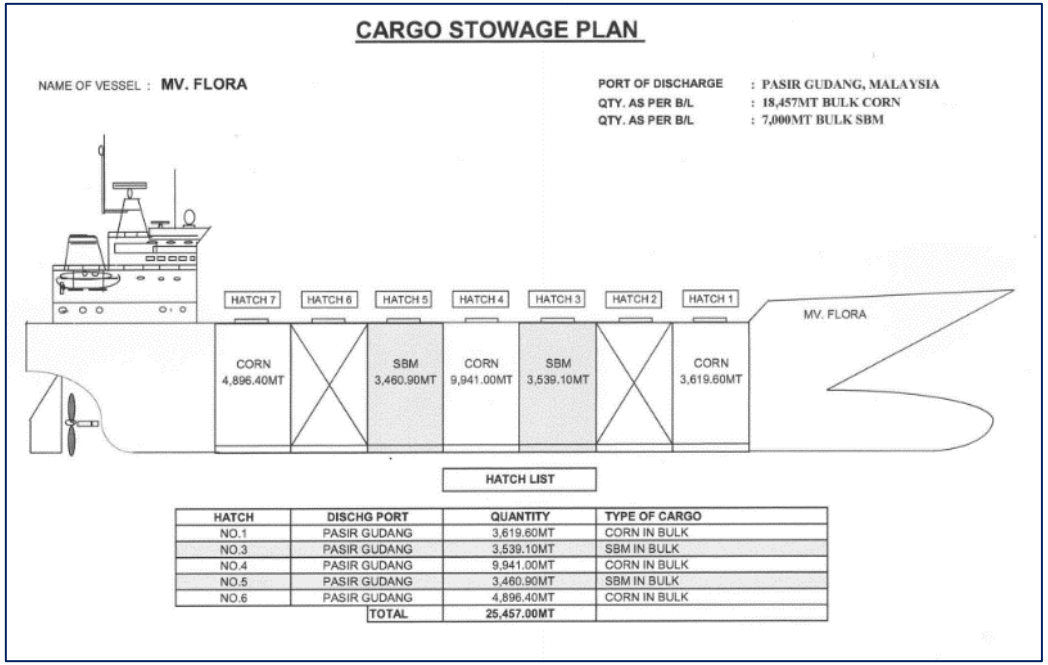
Q4 2021

- ✓ Evaluate/Study possibility of realigning BBT cranes
- ✓ Evaluate/Study possibility of realigning rail span for Wharf 4 and Wharf 5
- ✓ Study on possibility of upgrading Conveyor capacity

- **30 initiatives identified**
- **Duration of 15 months**
- **Achieved soft savings in terms of opportunity loss on idling time**

PROCESSES : CARGO STOWAGE PLAN

- Submission of cargo stowage plan prior to arrival is important.
  - Operations Team able to make arrangements for deployment of manpower, crane, equipment and gears.
  - Able to plan with Consignees on preparation of Receiving Points
  - Discussion time between the Chief Officer and Port Supervisor can be shortened by an average of 30 minutes enabling works to commence faster
- Prior to 2020, submission of cargo Stowage Plan before vessel arrival was never practiced and enforced
  - Some of the Shipping Agents only submit the Stowage Plan at the last minute or do not have complete information about the Stowage Plan during the pre-ops meeting
  - This will make it difficult for the Operations Team to pre-book, plan and optimize the resources



CARGO STOWAGE PLAN

NAME OF VESSEL : MV. FLORA

PORT OF DISCHARGE : PASIR GUDANG, MALAYSIA
QTY. AS PER B/L : 18,457MT BULK CORN
QTY. AS PER B/L : 7,000MT BULK SBM

HATCH 7 | HATCH 6 | HATCH 5 | HATCH 4 | HATCH 3 | HATCH 2 | HATCH 1

MV. FLORA

CORN 4,896.40MT | SBM 3,460.90MT | CORN 9,941.00MT | SBM 3,539.10MT | CORN 3,619.60MT

HATCH LIST

HATCH	DISCHG PORT	QUANTITY	TYPE OF CARGO
NO.1	PASIR GUDANG	3,619.60MT	CORN IN BULK
NO.3	PASIR GUDANG	3,539.10MT	SBM IN BULK
NO.4	PASIR GUDANG	9,941.00MT	CORN IN BULK
NO.5	PASIR GUDANG	3,460.90MT	SBM IN BULK
NO.6	PASIR GUDANG	4,896.40MT	CORN IN BULK
	TOTAL	25,457.00MT	

Changes made

- Discussions and engagements with the Shipping Agents, Shippers and Consignees managed to increase their awareness on how critical this document is for more efficient cargo operations

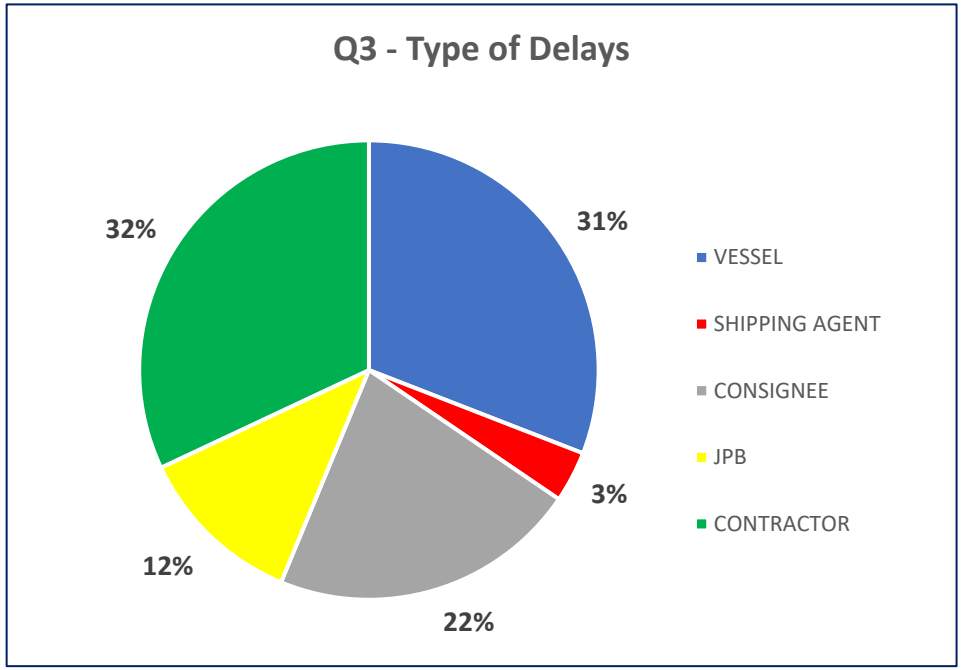
Today, submission of cargo stowage plan prior to vessel arrival is a mandatory requirement

PROCESSES : FOCUS ON MAJOR CUSTOMERS

- Operational issues at Bulk Terminal resulting in overall low productivity, longer vessel turn around time, longer vessel waiting time at the anchorage.
- Statistics show that 22% of the delays were contributed by Consignees.
- Previously there wasn't any focus on customers contributing big volume.

Changes made

- Studied customer profile and identified the bigger volume contributors (68% from total Dry Bulk volume).
- Started engaging these customers with big volume contribution to discuss issues and challenges and agree on way forward.
  - POW, Receiving Points, Truck deployment for direct operations, meal breaks, Friday Prayer breaks, etc.



Cargo Type	Target LOP	Actual LOP
Copper Concentrate	180	218
Wheat / Soya Bean / Maize	200	249
Fertilizer	200	226
PKE	300	350
Gypsum	200	272
PKS	200	393

PROCESSES : TRIMMING PROCESS

- Bulk cargo trimming is a process of levelling cargo in ship's holds performed by Trimming Contractors
- Johor Port engages 2 Trimming Contractors for such works
- Previous practice is to deploy 1 Contractor per vessel
  - Easier to monitor operations
  - Protecting Contractor's interest
- Relying on 1 Contractor per vessel sometimes results in inefficient trimming operations
  - Equipment breakdown
  - Shortage of manpower
  - Operation delays, lower LOP, longer vessels turnaround time, higher waiting time at the anchorage and customer complaints

Changes made

- Changing from the norm of 1 Contractor per vessel to 2 Contractors per vessel (different hatch)
- Engagement with Contractors to manage their initial resistance and convince them to accept the change in practice

Dry Bulk productivity improved by 11.2% from 183MT per hour in 2019 to 206 MT per hour in 2022

PROCESSES : POSITIVE RESULTS FROM THE INITIATIVES

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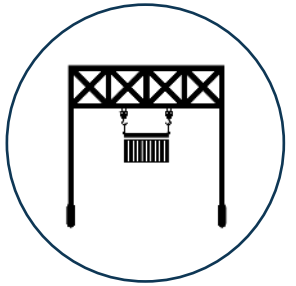


2019	GMPH / BMPH 18.3 32.4	Vessel Waiting Time 6 hrs	Berth Turnaround Time 14.5 hrs	Haulier Truck Turnaround Time <45 minutes, 92%	QUICK START 55 MIN	QUICK SAIL 48 MIN	RTG MPH 11.2
	↑ GMPH : 26.2% BMPH : 26.4%	↓ - 75%	↓ - 45%	↓ 6.1%	↓ - 66%	↓ - 65.5%	↑ 2.6%
2022	GMPH / BMPH 24.8 44.0	Vessel Waiting Time 1.5 hrs	Berth Turnaround Time 10 hrs	Haulier Truck Turnaround Time < 98 % BELOW 45 MIN	QUICK START 33 MIN	QUICK SAIL 29 MIN	RTG MPH 11.5

SYSTEMS

ICT SYSTEMS UPGRADE

Terminal Operating System
Tender evaluation is being undertaken and the new system is expected to Go Live by 2024.

ERP System
System development is being carried and the ERP system is expected to Go Live for JPB in year 2024.

4G Coverage
Comprehensive 4G LTE coverage within Port area to Go Live by 2023.

Digital Imaging & Archiving of Documents
Pilot Project for Finance records of JPB & JPL will complete by Q4 2022 and will be extended to Procurement & Marine in year 2023/2024.

DIGITALISATION OF MARINE OPERATIONS

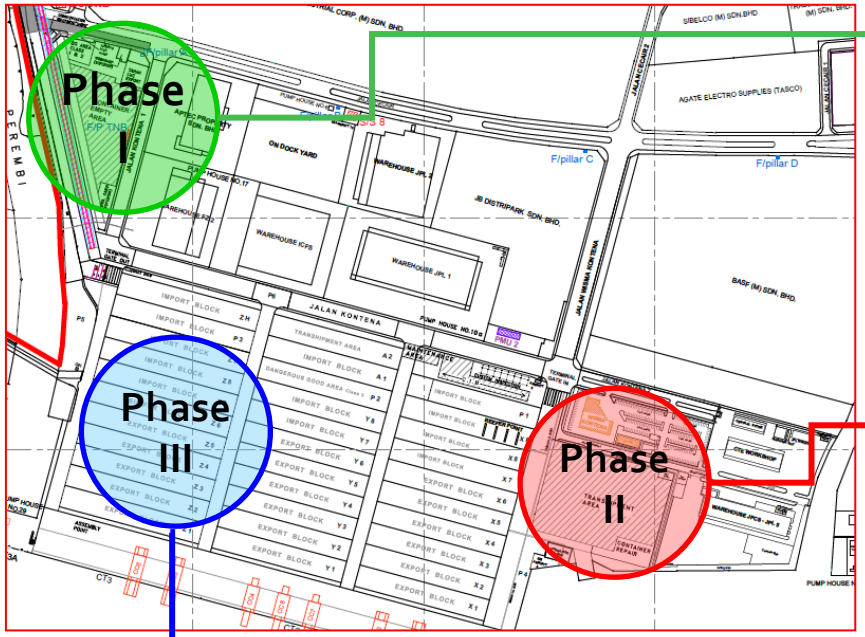
Marine Services SMART Integrated System
Profile of vessels gets bigger and of latest design & technology. Adoption of relevant technologies will facilitate efficient movement of vessels, delivery of Marine Services and smooth flow of information.

SMART will integrate the Operation Planning, Commercial, Billing, Performance Monitoring & etc.

The use of manual work process e.g. Pilot Voucher form will ceased and be replaced with AI scheduling (connected to Pilots, Tug master and Pilot Boat Skipper) for efficient planning in resources deployment.

The System is expected to be used by 2H 2023.

CONTAINER TERMINAL



Phase I

- Rehabilitation of Empty Yard surface measuring 4.05 acres


Before


Completed April 2020

Phase II

- New Container Yard measuring 10.66 acres


Before


Completed April 2021

Phase III

- Rehabilitation of existing Container Yard


Before


Completed January 2022

Increased Yard Capacity & Efficiency

CONTAINER TERMINAL

NEW YARD AREA

- New Yard area of 10.65 acres
  - 5.02 acres for MTY
  - 5.647 acres for Laden
  - 660 ground slots, 5 height stacking

REHABILITATE CY

- 17 blocks of old CY being rehabilitated (completion by Q1 2020)

INCREASED HANDLING CAPACITY

- Able to offer space to Shipping Lines for their Empty pools
- Able to handle Mini Transshipment activities
  - East Malaysia, Chittagong and Indonesia

PM PASSING LANE

- Converted utilities area to passing lane
  - Replace crusher run with concrete
- Easier maneuvering for TTs and external Hauliers
- Improved Truck turn around time in the CY

IMPROVE STACKING HEIGHT

- Import / Export Laden - 3.0 to 4.5 high
- Import / Export Empties - 4 to 5 high

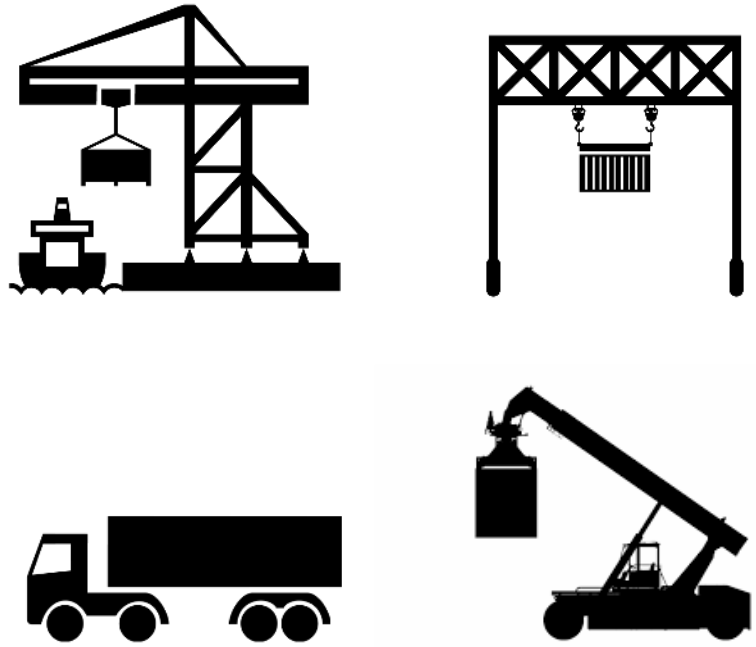
CONTAINER TERMINAL

2023

- 1 unit of Twin Lift Quay Crane
- 12 units of new Terminal Tractors (additional)
- 30 units VMT for ITT Fleet / CFS
- Upgrading of Gate-in / Gate-out, Rail Yard and On-Dock Depot
- Extension of Reefer Block at Container Yard
- Rehabilitation of Interlocking Pavement / Turning Plate replacement at Container & Container Freight Station

2024

- 1 unit of Twin Lift Quay Crane
- Replacement of 4 units Container Reach Stacker



CONVENTIONAL TERMINAL

INFRASTRUCTURE

- Rehabilitation of Yard and Wharves
- Repair Jetties / Wharves

Wharves and Jetties Rehabilitation

EQUIPMENT

- Replace 2 Level Luffing Cranes with Mobile Harbour Cranes
- Additional Mobile Harbour Cranes

WAREHOUSES

- Warehouse Expansion programs will be carried out in Phases from 2022 and will be fully completed by 2025.
- Additional 400k sq ft of warehouse space will be created on top of the existing 5.1 mil sq ft space.

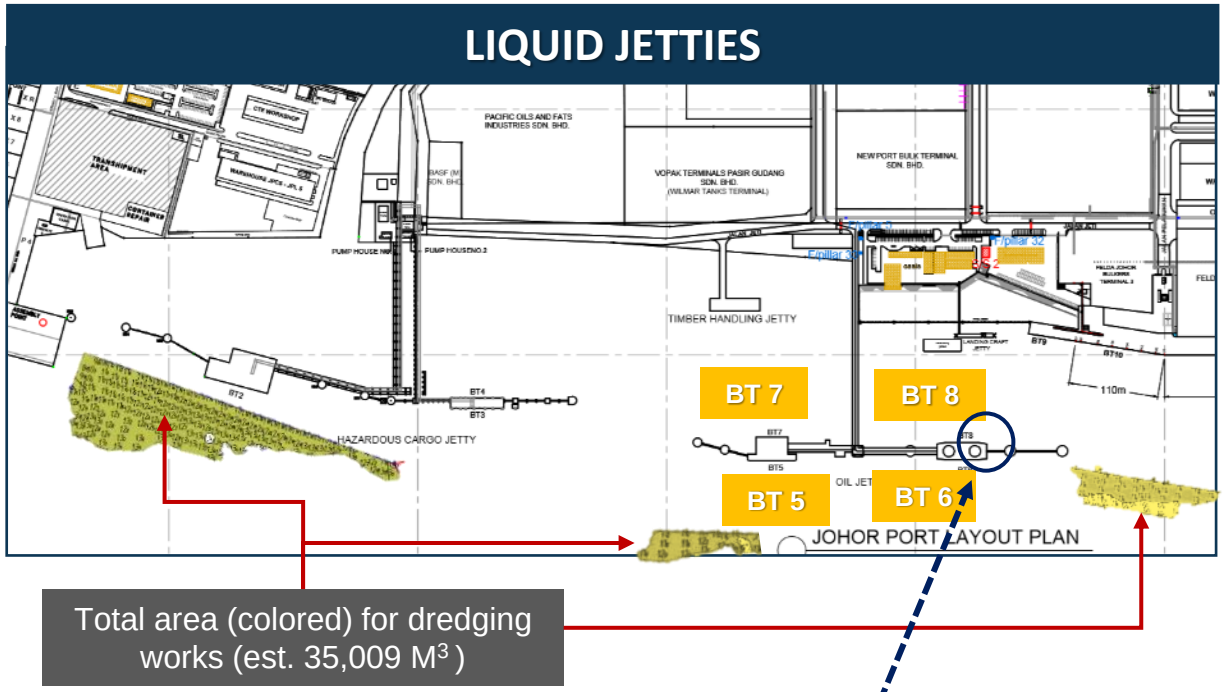
Merging of **Warehouse 7B2 & 8B** of approx. 52k sqft (2022-2023)

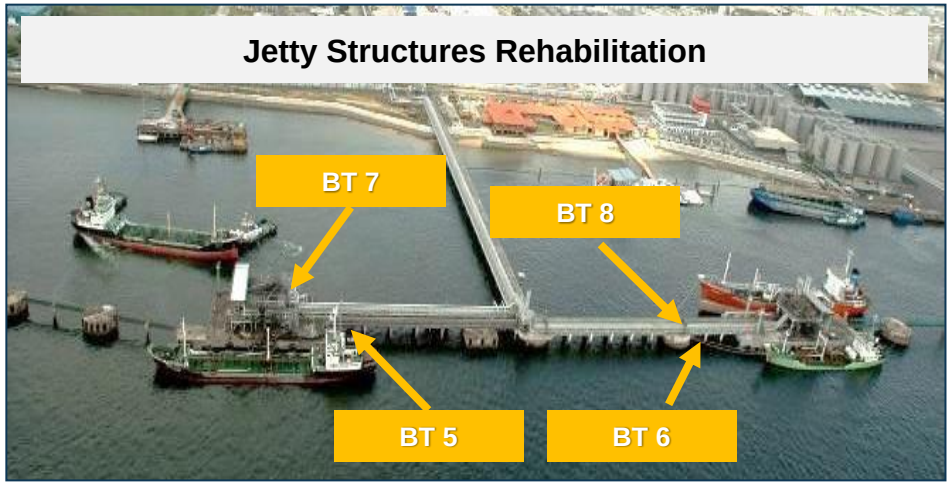
Merging of **Warehouse 8B & 9B** of approx 52k sqft (2022-2023)

LIQUID TERMINAL

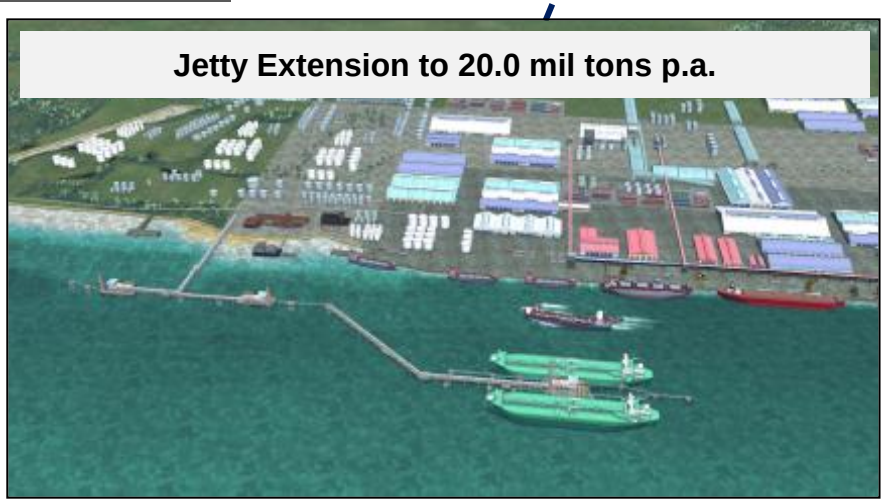
1. **Liquid Jetty Extension**:
   - Additional 2 berths for 4.0 mil tons p.a. capacity.
   - Immediate 3.0 mil tons p.a. of Palm Oil is forecasted upon availability of the Jetty.
   - Investment in new Edible and Non-Edible piping
   - Space optimization to free up land for new Tankage facilities.

2. **Rehabilitation of existing Liquid Jetties structures (BT5, 6, 7 & 8) & other rehabilitation / replacement works**





Rehabilitation of BT5, BT6, BT7 & BT8 (2023-2025)



2 berths (Edible & Non-edible) with annual handling capacity of 4 to 5 mil tons (2023-2024).

PEOPLE : CONTINUOUS DEVELOPMENT OF HUMAN CAPITAL

TALENT RECOGNITION INITIATIVES

TALENT DEVELOPMENT INITIATIVES

THANK YOU

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