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EVOLUTION ON DIGITALIZATION AND TRANSFORMATION IN TECHNOLOGY FOR A COMPETITIVE EDGE

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ports & logistics

Port of Tanjung Pelepas (PTP) Part of Industry Revolution

From a small fishing village to one of the of the World's Biggest Container Terminal



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PTP OVERVIEW

3

Core
Businesses

120

Million TEU
Handled

18

World
Ranking

300

Port
Calls

3,500

Acres For
Container
Terminal
& Free Zone

2

Strong
Shareholder

60

Government
Concession

2000

Commenced
Operation

30

Shipping Lines &
Box Operators

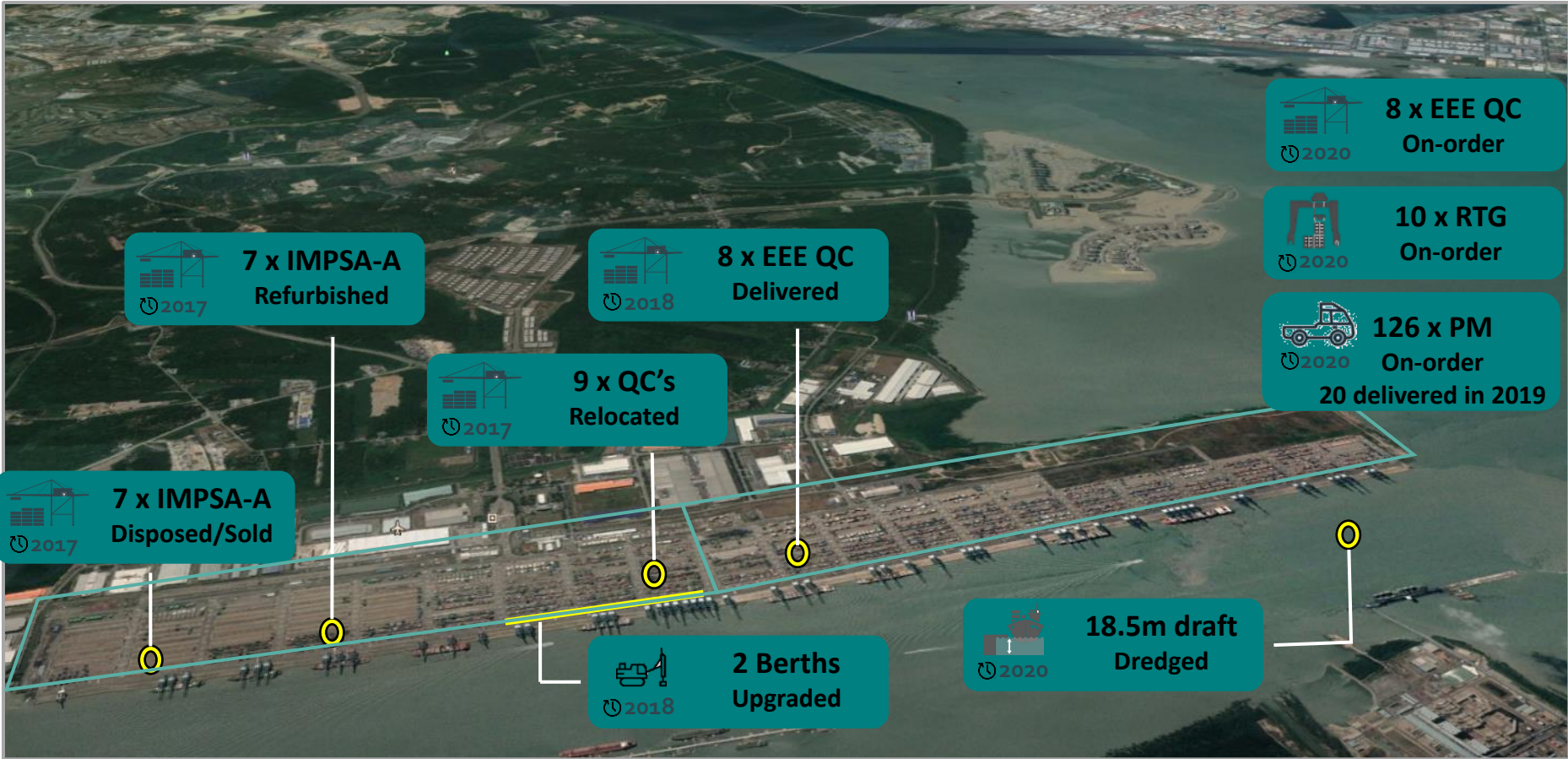
1998

Free Zone
Authority

East West Shipping
Route

Ports of Call	Weekly
Jakarta	11
Semarang	5
Surabaya	5
Indonesian Outports	5
Belawan	3
Panjang	3

Existing footprint of 12.0 mil TEUs terminal infrastructure and moving forward... 13.0 mil TEUs



PHASE 1
2.160m of quay, 26 QC's,
max (design) depth 16.5m

\$ USD435 mil
invested

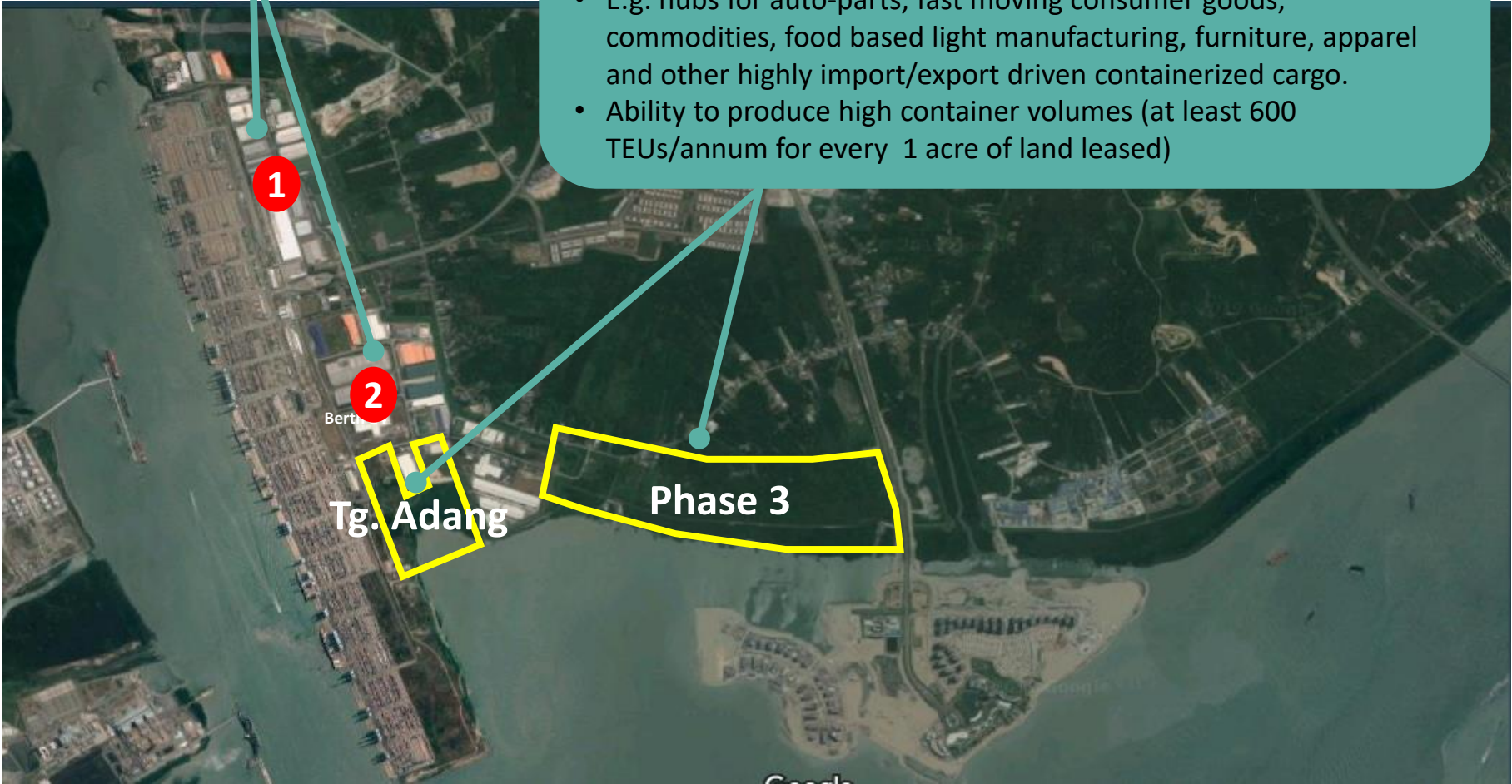
PHASE 2
2.880m of quay, 32 QC's,
max (design) depth 19.5m

Tanjung Pelepas Free Zone Future Expansion Plan

FREE ZONE PHASE 1 & 2
Fully developed and leased

FREE ZONE EXPANSION – TANJUNG ADANG & PHASE 3

- 168 acres (Phase 3) & 100 acres (Tanjung Adang)
- Suitable for regional consolidation and distribution hubs
- E.g. hubs for auto-parts, fast moving consumer goods, commodities, food based light manufacturing, furniture, apparel and other highly import/export driven containerized cargo.
- Ability to produce high container volumes (at least 600 TEUs/annum for every 1 acre of land leased)



Port of Tanjung Pelepas (PTP) Gearing Towards Digitalization and Automation

PTP Digitalization & Automation Initiatives

Productivity Application



Terminal Network



PTP Initiatives



Terminal Operating System



Autonomous Driving Prime Mover



Upgrading of LTE 4G Terminal Network



Terminal wide wireless broadband mobile network upgrade that support and connects operational devices .

- fast, stability, reliable and secured connectivity
- deliver operational improvement on existing applications and make feasible new applications that highly dependable with high speed network and responsive data transfer
- embracing the future of Internet of Things (IOT) for Smart Port transformation.

Terminal Operating System – for greater port efficiency



NAVIS N4

- Supports multi-terminal visibility and control
- Real time monitoring and management of operational activities
- Supports future growth that benefits workforce and customer value
- Future Port Automation Module

REAL TIME PERFORMANCE MONITORING

- Visibility of real operation performance
- Key operational decision making tool
- Increase efficiency in Planning and Execution
- Cloud base view on the go on any device

BERTH OPTIMIZATION ENGINE (BOE)

- Optimizing Planning and N4 integration
- Real time distinctive customer experience
- Maximizing operational capacity
- Minimizing labour cost
- Analytical insight and reporting

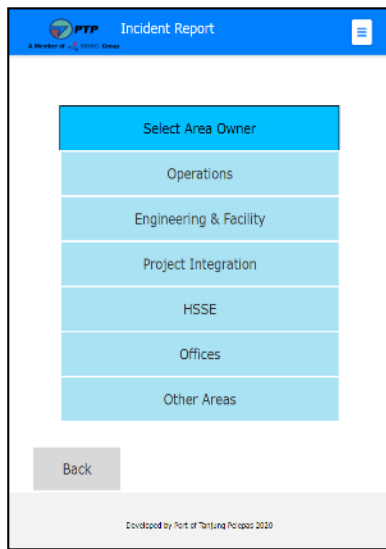
ASSET DIGITIZATION

- Visibility of real time
- Valuable data for predictive analysis
- Pro-active approach to problem solving
- Maximizing terminal performance



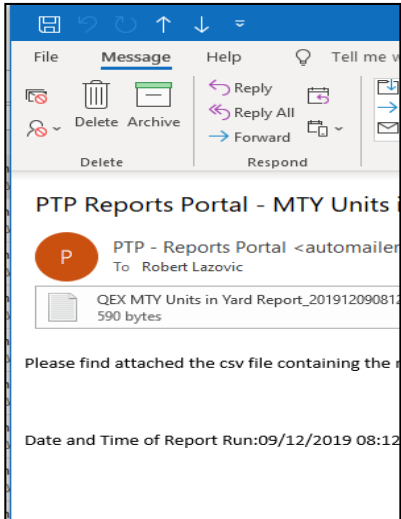
BLUE COLAR INCENTIVE APPLICATION

- A mechanism to encourage monetary performance delivery
- Operator’s Real Time progress performance
- User friendly mobile interface



PTP CONNECT

- Incident Reporting
- Ideas and Feedback
- Bus Transport Management (akin to ‘GRAB’)



AUTO REPORTING

- Real time data from operational system
- Timely Delivery
- Mass Distribution



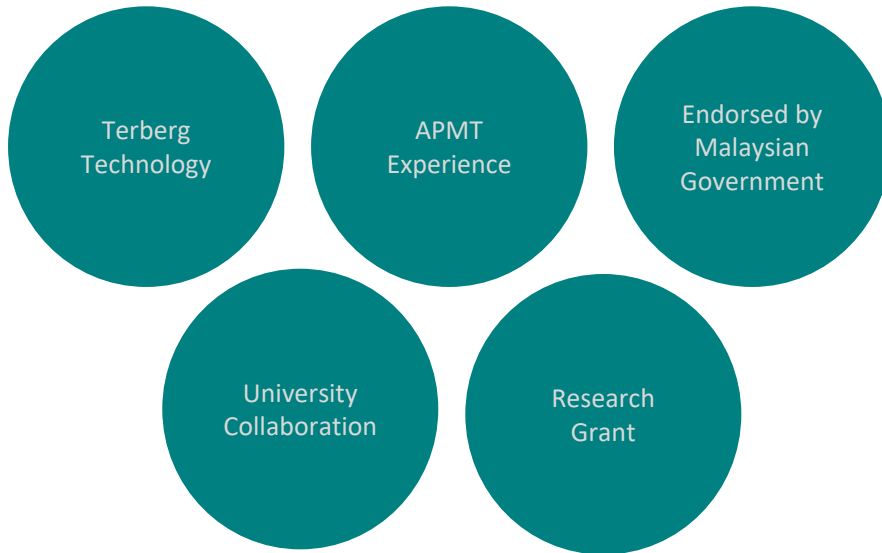
DIGITALIZATION OF WORKFLOWS – HEALTH, SAFETY AND ENVIRONMENT

- Incident Life Cycle Management System
- Permit to Work Management System
- Chemical Registration System



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navis02



- First prototype autonomous truck driving in a S.E.A container terminal by 2023
 - ✓ Reduced dependency on foreign labour
 - ✓ Stable and consistent productivity
 - ✓ Maintain high level of safety
 - ✓ Enhancing local expertise and creation of more skilled job



Formalised the Memorandum of Understanding (MoU) on 18 June 2019.

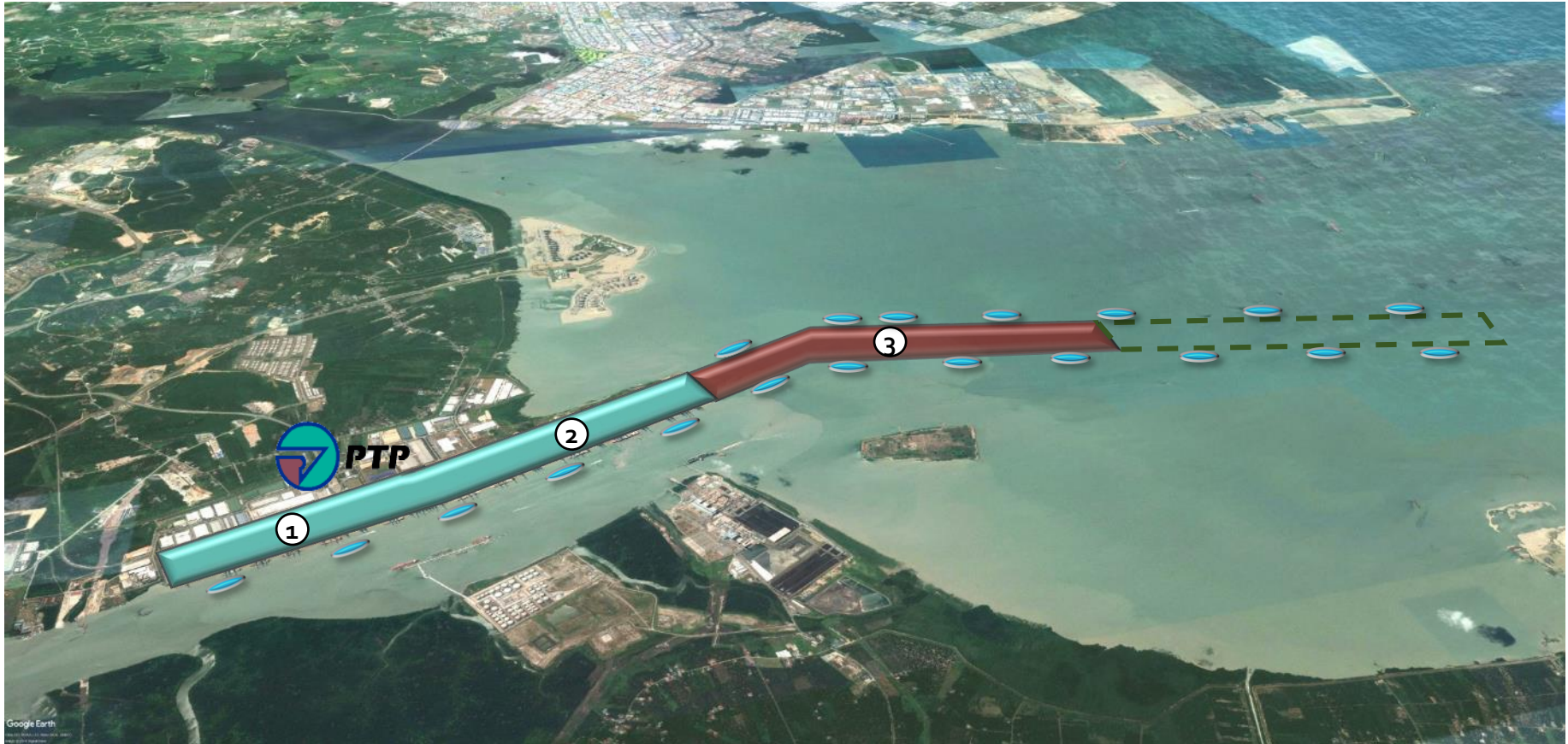


Port of Tanjung Pelepas (PTP) Next Development Plan

2019 – 2039: PTP's 20 Year Terminal Development Plan



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DEVELOPMENT PHASES	LENGTH (KM)	CAPACITY (TEUs Mil)
Phase ① & ②	5.0	12.0 ✓
Phase ③	4.5	12.0
TOTAL	9.5	24.0

Doubling
 capacity in **20** years
 to **24** mil TEU
 capacity

Thank you



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