



Port Development Across Indonesia

An indication of the ambition of the next five years
Port Finance Asia 2014

Presented By: David Wignall David Wignall Associates

September 2014



International Performance

Country	Rating	Change since 2005	Change since 1990
United Kingdom	5.1	-0.3	0.0
China	4.3	0.7	2.3
Singapore	6.8	0.0	0.5
Malaysia	5.7	-0.1	2.1
The Netherlands	6.7	-0.1	0.3
Indonesia	2.8	0.2	0.0
India	3.3	0.0	0.3
Philippines	3.2	0.4	0.3
Japan	5.2	-0.8	-1.2

Law 17/2008

- 1. A land lord and operator model: concessions
- NPMP covers the location, development, construction and operation of ports
- 3. NPMP reflects
 - a. national, provincial and local spatial plans
 - b. regional socio-economy development (and potential)
 - c. natural resources
 - d. strategic economic initiatives (growth triangles)
- 4. NPMP is to contain:
 - a. national port policy
 - b. location plan and chain of command
- 5. Plan to be for a period of 20 (twenty) years
- 6. NPMP to be reviewed every 5 years
- 7. NPMP can be reviewed after special events



Forecast Headlines

In 2030 the National Port System to handle

- 500 mtpa of Coal
- 420 mtpa or 42 m TEU
- 150 mtpa of Crude Palm Oil
- 107 mtpa of import petroleum products
- Other commodities

Key changes

- Large scale petroleum product imports
- CPO volume will increase 800%
- Container volume will increase 500%
- Coal will increase by 300% to 2030

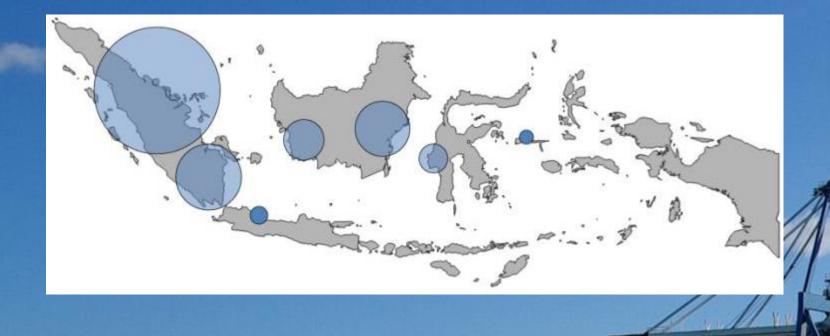




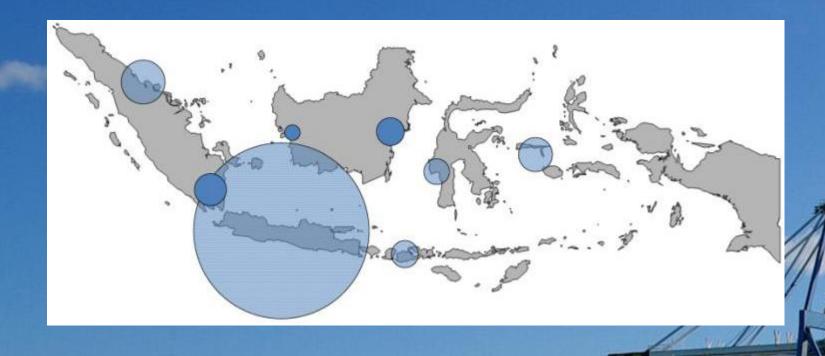
Ports in 2030...

	Conts.	Pet.	Coal	СРО	Rice	Cocoa	Fish
North Sumatra/Aceh	56.6	14.4	0.0	92.0	0.8	0.0	0.0
West Kalimantan	7.2	1.8	100.0	9.5	0.1	0.0	0.0
South Sumatra	30.3	7.7	100.0	24.9	0.4	0.0	0.0
Java	227.7	58.0	0.00	0.4	3.3	0.0	0.0
Bali and eastward	21.8	5.6	0.00	0.0	0.3	0.0	0.0
Kalimantan	22.7	5.8	300.0	17.4	0.3	0.0	0.0
Western Sulawesi	19.5	5.0	0.0	4.8	0.3	3.0	1.5
The East	34.0	8.7	0.0	1.1	0.5	0.0	2.0
Total	420.0	107.0	500.0	150.0	6.0	3.0	3.5
Total 2009	80.0	15.0	200.0	20.0	1.00	1.0	2.0

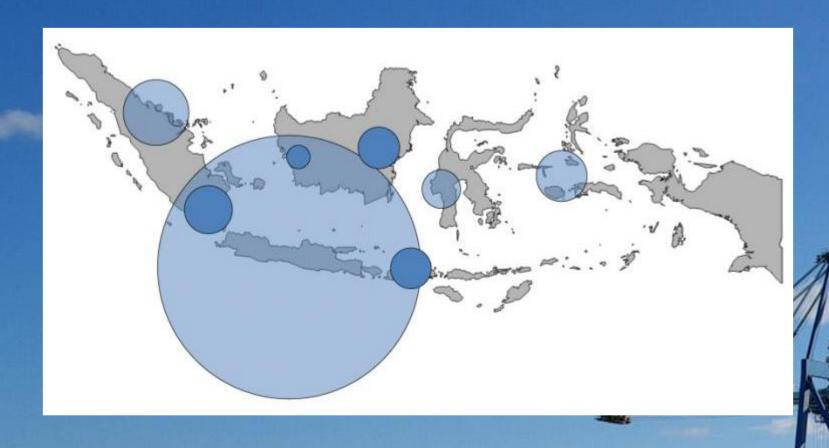
CPO Distribution



Petroleum Products

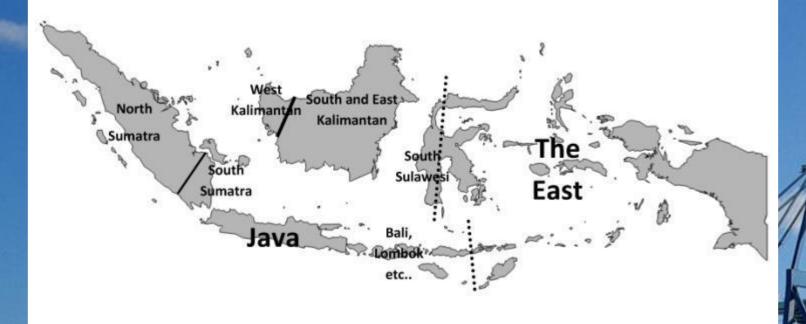


Container Distribution



Hinterlands

There are some clear hinterlands and region where concentrating cargo flows makes sense.





Major New Terminals

Major common user coal terminals

- Attracting added value
- Enabling exports
- Blending

Large expansion of container capacity

- Specialist facilities across country
- Large transshipment capability
- Direct calls to Intrasian/US/Europe

Petroleum Import Terminals

Mainly common user

CPO Terminals

Common user as well as dedicated



Container Terminals...

Cont	Containers		Productivity (TEU/yr)			Port Demand		
TEU	t	Berth (m)	Crane	Area (Ha)	Berth (m)	Crane	Area (Ha)	
5.66	56.6	2,000	150k	20k	2,831	38	283	
0.72	7.2	1,000	150k	20k	721	5	36	
3.03	30.3	1,000	150k	20k	3,031	20	152	
22.77	227.7	2,000	150k	20k	11,386	152	1,139	
2.18	21.8	1,000	150k	20k	2,184	15	109	
2.28	22.7	1,000	150k	20k	2,275	15	114	
1.95	19.5	1,000	150k	20k	1,951	13	98	
3.40	34.1	1,000	150k	20k	3,405	23	170	
Including Transhipment								
18.10	181.0	2,000	150k	20k	9,050	121	905	
8.20	82.0	2,000	150k	20k	4,100	55	410	
	TEU 5.66 0.72 3.03 22.77 2.18 2.28 1.95 3.40 18.10	TEU t 5.66 56.6 0.72 7.2 3.03 30.3 22.77 227.7 2.18 21.8 2.28 22.7 1.95 19.5 3.40 34.1 18.10 181.0	TEU t Berth (m) 5.66 56.6 2,000 0.72 7.2 1,000 3.03 30.3 1,000 22.77 227.7 2,000 2.18 21.8 1,000 2.28 22.7 1,000 1.95 19.5 1,000 3.40 34.1 1,000 Include 18.10 181.0 2,000	TEU t Berth (m) Crane 5.66 56.6 2,000 150k 0.72 7.2 1,000 150k 3.03 30.3 1,000 150k 22.77 227.7 2,000 150k 2.18 21.8 1,000 150k 2.28 22.7 1,000 150k 1.95 19.5 1,000 150k 3.40 34.1 1,000 150k Including Transhi 18.10 181.0 2,000 150k	TEU t Berth (m) Crane (Ha) Area (Ha) 5.66 56.6 2,000 150k 20k 0.72 7.2 1,000 150k 20k 3.03 30.3 1,000 150k 20k 22.77 227.7 2,000 150k 20k 2.18 21.8 1,000 150k 20k 2.28 22.7 1,000 150k 20k 1.95 19.5 1,000 150k 20k 3.40 34.1 1,000 150k 20k Including Transhipment 18.10 181.0 2,000 150k 20k	TEU t Berth (m) Crane (Ha) Area (Ha) Berth (m) 5.66 56.6 2,000 150k 20k 2,831 0.72 7.2 1,000 150k 20k 721 3.03 30.3 1,000 150k 20k 3,031 22.77 227.7 2,000 150k 20k 11,386 2.18 21.8 1,000 150k 20k 2,184 2.28 22.7 1,000 150k 20k 2,275 1.95 19.5 1,000 150k 20k 1,951 3.40 34.1 1,000 150k 20k 3,405 Including Transhipment 18.10 181.0 2,000 150k 20k 9,050	TEU t Berth (m) Crane (Ha) Area (Ha) (Ha) Berth (m) Crane 5.66 56.6 2,000 150k 20k 2,831 38 0.72 7.2 1,000 150k 20k 721 5 3.03 30.3 1,000 150k 20k 3,031 20 22.77 227.7 2,000 150k 20k 11,386 152 2.18 21.8 1,000 150k 20k 2,184 15 2.28 22.7 1,000 150k 20k 2,275 15 1.95 19.5 1,000 150k 20k 1,951 13 3.40 34.1 1,000 150k 20k 3,405 23 Including Transhipment 18.10 181.0 2,000 150k 20k 9,050 121	



Java

- 9 km of container quay, 120 STS cranes and 900 Ha of storage area
- 4 km of container quay in East Java with over 55 STS cranes and 410 Ha of Storage
- 80 or more petroleum products berths with over 700 Ha of storage terminal
- Investment over US\$ 20 billion



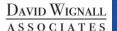
Southern Sumatra

- 3 km of container quay, 20 STS cranes and 152 ha of storage area
- A large petroleum products terminal
- A 100 mtpa coal terminal and CPO terminals
- Investment over US\$ 2 billion

Bali

- 2 major cruise terminals
- Improved roro links to Java
- Petroleum product distribution terminals
- Investment over US\$ 0.5 billion





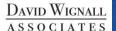
Northern Sumatra

- 4km of container quay, 40 STS cranes and 300 Ha of storage area
- 3 to 6 major petroleum storage terminals
- 10 to 20 CPO terminals
- Investment over US\$ 5 billion

West Kalimantan

- Container Terminals
- CPO Terminals
- Coal Terminals?
- Investment over US\$ 0.5 billion





West Sulawesi

- 2 km of container quay, 15 STS cranes and 100 Ha of storage area
- A major petroleum products terminal
- A common use CPO and agri-bulk terminals
- Investment over US\$ 1.5 billion

South and East Kalimantan

- 2.5 km of container quay, 15 STS crane and 120 Ha of storage area
- 3/4 coal terminals of 100 mtpa capacity
- Petroleum products and CPO terminals
- Investment over US\$ 10 billion



The Maritime East

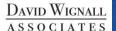
- 4 km of container quay, 25 STS cranes and 200 Ha of storage area
- Substantial consolidation and logistics support facilities
- A major petroleum products terminal
- Investment over US\$ 2 billion





Key Concerns

- Land
- Supporting Infrastructure
- Local Government
- Investment Requirements
- PPP
- Pelindo
- Managing Competition
- Port Workers Union
- Human Resources



Land Policy

Land is needed and its use needs enabling

- Land is constrained other developments
- Land acquisition may delay port development
- Land demand an order of magnitude greater
- Land is required to expand existing ports and to develop of new ports
- Protecting or enabling land use for port development is critical if the National Port Master Plan is to be successful.
- Methods of empowering landowners to seek JV partners for development and the approval of developments to improve land value prior to sale are needed

Land needs enabling

- Infrastructure
- Congestion around many ports
- Connections to road/rail key factor in location
- No supporting infrastructure no private investment



Investment Required

Investment over US\$ 40b required

- Investment priorities needs to be set
- There is little public money to invest
- How to direct public funds to priority projects needs thought
- Assessments of economic/commercial benefit

Policy for Government investment?

- Mobilise the state owned companies
- Leverage private investment





DGST and PPP

Limited funds available for investment compared to need

- PPP key method of attracting funds:
- Significant work has already been done by JICA and ADB on PPP arrangements
- GAP analysis required to ensure PPP fulfils all requirements
- PPP at Local level needed in light of the empowerment of Local Government in the Port & Shipping Act
- Template PPP options and when regulations on when they should be used required
- Capacity building required



Pelindo

Critical player

- Controls port land, is in JV with most users, operates all common user terminals
- Investment track record
 - Institutionally risk averse, retains cash
 - B/S provides some ability to invest but compared to need commercial capacity insignificant
 - · Emerging from this track record

Non-profitable ports impact:

- Cash generation
- Investment capacity

Investors views have changed: New Priok

Long term strategy under development a merger of the Pelindo's probable



Having a vision



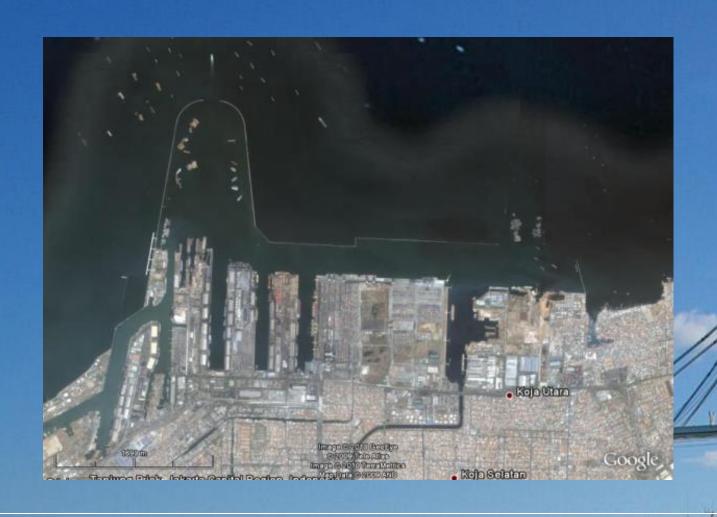


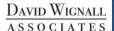
Brisbane a 100 year plan



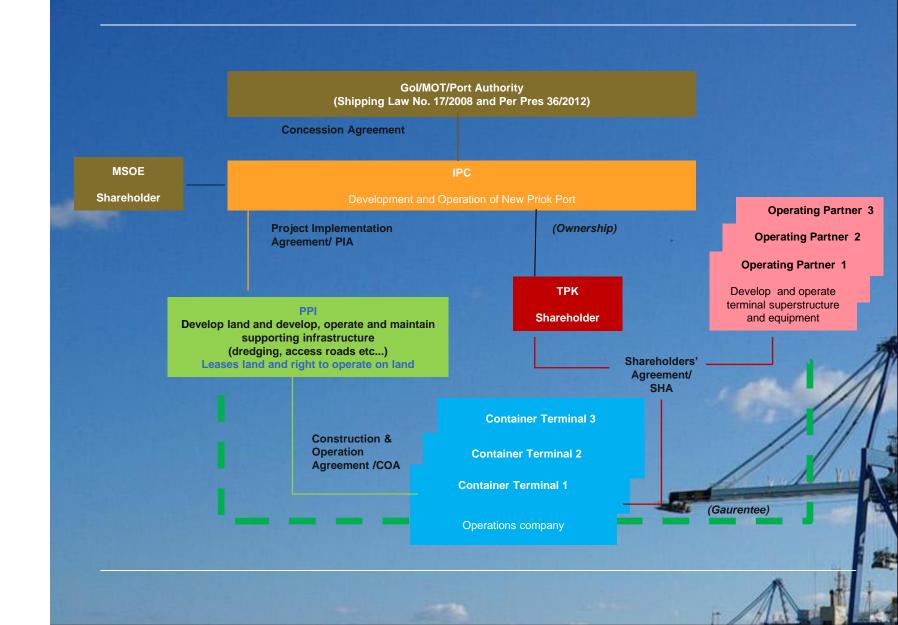


Space, deep water...





New Priok Commercial Structure



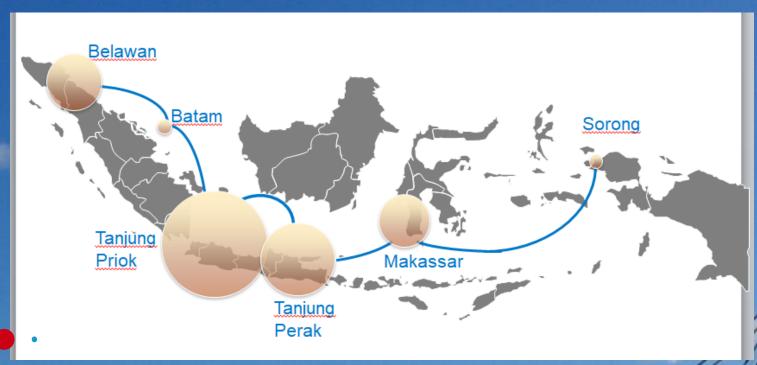


New Priok

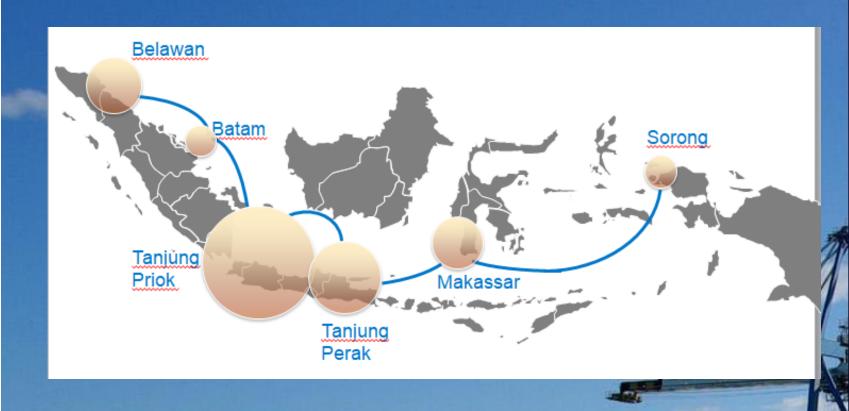




Domestic Container Volumes 2010



Domestic Container Volumes 2015





Domestic Container Volumes 2020





Why has Indonesia missed the revolution?

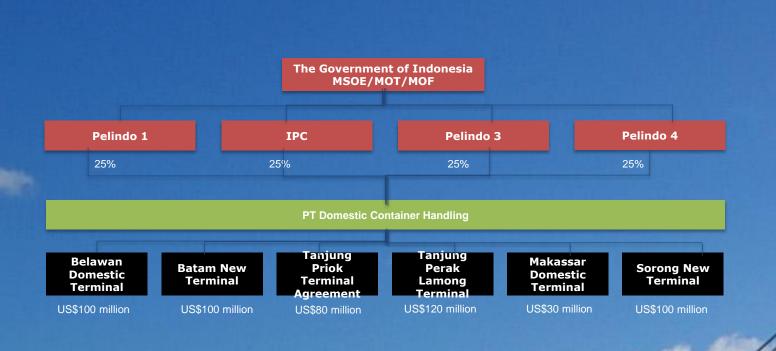
A perfect storm...

Ports

- Inability to keep up with investment required: water depth
 - · Lack of dedicated facilities and quality equipment
 - Lack of depth at terminals and in channels
- Heavily used container terminals and support services
 - · Container ships have to wait
 - Not possible to predict how long the ship waits
- Poor productivity in the port and terminals
- Container shipping, private sector
 - Has to compete with subsidized competitors
 - Suffers from high commercial costs of delays in the ports
 - Balance sheets of many companies damage in 1997/98
 - Pre-2008 Container market strong everywhere
 - 2008 Cabotage makes investment difficult now



Assembling the terminals required



- The Pelindo Companies have agreed in principle
 - US\$ 530 m of investment required
 - US\$ 159 m of cash equity from four SOEs required

Thank You

David Wignall Associates

www.DavidWignallAssociates.com

David@DavidWignallAssociates.com

Tel: +65 9621 8738

