# Maritime Cluster and Shipbuilding Development


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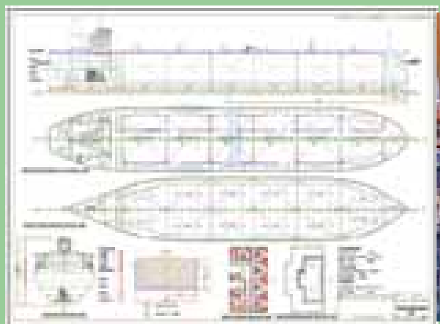


# I. SHIPBUILDING AT A GLANCE

## Global

- Most of ships today are built in South Korea, China or Japan, but it may still come as a surprise that these three countries alone account for more than three-quarters of ship on order. When the other Asian shipbuilding countries are added in to the equation the figure increases to 82%.
- Speculation has been rife in recent years about when China will overtake South Korea as the leading shipbuilding nation. By one measure at least – numbers of ship on order – it has already happened, but deadweight and price are the determining factors, South Korea shows no sign of relinquishing its commanding lead.
- The implementation of CSR (Common Structural Rules) for tankers and bulk carriers has increase the needed for new building and conversion of the ship.
- IMO meeting adopts accelerated single-hull tanker phase-out, new regulation on carriage of heavy fuel oil (into double-hull)

## Domestic

- Indonesian shipbuilding industry has proven that it has global competitiveness. This is visible by the export report from US$ 47,4 million in the year 2004, becoming US$ 294,1 million in the year 2006 or increased 6,2 times more (620%) only within two years.
- Number of shipbuilder in Indonesia which is counted ± 250 companies with capacities attached around 400.000 DWT/year for new building and around 6.000.000 DWT/year for ship repair.
- The biggest shipbuilding production facility measure up to 150.000 DWT (Graving dock) is also utilized to docking repair.

## I. SHIPBUILDING AT A GLANCE …

- By the implementation of Presidential Instruction No. 5 / 2005, the domestic demand for ships is increased as follows :

| No | Type | Recent condition (No. of ships) | Total ship needed (Unit) |
|---|---|---|---|
| 1. | General Cargo | 1.388 | 800 |
| 2. | Container | 107 | 80 |
| 3. | Bulk | 46 | 30 |
| 4. | Barge | 1.408 | 500 |
| 5. | Tug Boat | 1.357 | 500 |
| 6. | Tanker | 233 | 132 |
| 7. | Passenger | 229 | 50 |
| 8. | Ro-Ro | 60 | 50 |
| | **T O T A L** | **4.828** | **2.142** |

(Source: Ministry of Transportation)

# II. NATIONAL PRODUCTION CAPACITY

| No | Class of facility (DWT) | Ship repair | | | New building | | |
|---|---|---|---|---|---|---|---|
| | | Number (unit) | Annual capacity / year | | Number (unit) | Annual capacity / year | |
| | | | (GT) | (DWT) | | (GT) | (DWT) |
| 1 | < 500 | 121 | 480.000 | 720.000 | 99 | 21.000 | 31.500 |
| 2 | 501 – 1.000 | 45 | 495.000 | 742.500 | 27 | 17.000 | 25.500 |
| 3 | 1.001 – 3.000 | 25 | 455.000 | 682.500 | 8 | 10.000 | 15.000 |
| 4 | 3.001 – 5.000 | 6 | 400.000 | 600.000 | 10 | 37.000 | 55.500 |
| 5 | 5.001 – 10.000 | 7 | 900.000 | 1.350.000 | 11 | 50.000 | 75.000 |
| 6 | > 10.000 | 6 | 1.270.000 | 1.905.000 | 5 | 130.000 | 197.500 |
| | **JUMLAH** | **210** | **4.000.000** | **6.000.000** | **160** | **265.000** | **400.000** |

# III. MAJOR SHIPYARD INDUSTRY IN INDONESIA

Palembang
- PT. Intan Sengkunyit
- PT. Dok&Perkapalan Kodja Bahari
- PT. Mariana Bahagia
- PT. SAC Nusantara
- PT. Dok Karang Sumatera
- PT. Karya Makmur
- PT. Nirwana Indah
- PT. Hidup Sejahtera
- PT. Galpin

Bangka Belitung
- PT. Dok & Perkapalan Air Kantung
- PT. Timah
- PT. Dwi Jasa Mitra
- PT. Sarana Marindo

Samarinda
- PT. Kaltim Shipyard
- PT. Rejeki Abadi Sakti
- PT. Manumbar Kaltim
- PT. Bengkel Merdeka

Balikpapan
1. PT. Amerta Marina Perkasa
2. PT. Balikpapan Utama
3. PT. Dua Dua
4. PT. Megah Mulia
5. PT. H&H Utama International
6. PT. Sarana Daya Utama
7. PT. Panrita Shipbuilding
8. PT. Teknik Samudera Ulung
9. PT. Gema Cipta Bahtera

Pontianak
- PT. Inocin
- PT. Kapuas Cahaya Bahari
- PT. Wahana Kapuas

Menado
- PT. Industri Kapal Indonesia

Batam
- PT. Nan Indah Mutiara Shipyard
- PT. Pan United Shipyard
- PT. Karimun Sembawang S.
- PT. Batamas Jala Nusantara
- PT. Bahtera Mutiara Harapan
- PT. Bandar Victory Shipyard
- PT. Inocin
- PT. Inter Nusa Jaya
- PT. Kacaba Marga Marina
- PT. Palma Progress Shipyard
- PT. Sumatra Timur Indonesia
- PT. Hyundai Citra Shipyard
- PT. Dwi Rejeki Jaya Indonesia
- PT. Batam Expresindo Shipyard
- PT. ASLShipyard Indonesia


Maluku
- PT. Dok & Perkapalan Waiame
- PT. Perum Perikani
- Seramu Jaya Prima

Papua/Sorong
- PT. Pertamina
- PT. Navigasi
- PT. Usaha mina

Makasar
- PT. Industri Kapal Indonesia
- Perikanan Samudera Besar

Pakanbaru (Dumai)
- PT. Pertamina
- PT. Usda Soraya Jaya Rengat

Jambi
- PT. Naga Cipta Sentrl
- PT. Pura Gurita Karya
- PT. Cahaya Murni Mega

Jakarta
- PT. Dok & Perkapalan Kodja Bahari
- PT. Inggom Shipyard
- PT. Daya Radar Utama
- PT. Marspec
- PT. Wayata Kencana Dockyard
- PT. Indomarine
- PT. Karya Teknik Utama
- PT. Sarana Laut Pawitra

Semarang/Tegal
- PT. Jasa Marina Indah
- PT. Dok & Perkapalan Kodja Bahari
- PT. Galkap Tirtamas
- PT. Tegal Shipyard Utama
- PT. Tirta Raya Mina
- PT. Menara Tegal

Surabaya
- PT. PAL Indonesia
- PT. Dok & Perkapalan Surabaya
- PT. Dumas
- PT. Najatim Dockyard
- PT. Adiluhung Segara Utama
- PT. Dewa Ruci Agung
- PT. Bayu Samudera Sakti
- PT. Ben Sentosa

# IV. TARGET

**Mid Term (2007 – 2009)**

- Increasing of new building capacity and capability up to 50.000 DWT.
- Increasing of ship repair to reduce delivery time as well as docking days.

**Long Term (2010 – 2025)**

- Establish new shipyard facility having capacity for new building (building berth/graving dock) and ship repair up to 300.000 DWT to fulfills domestic demand as well as overseas.
- Increasing national shipbuilding industry capability to build the various types and size i.e Korvet, Frigate, Cruise Ship, LPG CARRIER and other special ship.
- Increasing capacity and capability of domestic component industry in order to support domestic shipyard demand.
- Strengthening National Ship Design and Engineering Center (NaSDEC) in order to support design and engineering as well as research and development.

## V. MARITIME INDUSTRIAL CLUSTER OBSTACLES

- Relationship between core, supporting and related industry still limited to business relationship.
- Limited networking between core industry (Shipyard) with supporting industry (material & component suppliers) and related industry (user/marine, insurance, finance etc.).
- High dependency on imported component.

# Main, supporting and related industry of Maritime Industrial Cluster

**Central Government**
Min of Industry, Min of Transportation
Min of Finance, Min of Energy, etc

Competitiveness Forum,
Working Group,
Cluster Facilitation

**District Government**

-Steel & Non Ferro Steel
-Wood
-Fiber Glass
-Plastic
-Machine

-Main & Auxiliary Engine
-Deck Machinery
-Electrical Machinery & Part
-Telecommunication /Navigation
-Finished Product

**National Ship Design and Engineering Center (NaSDEC)**

**Ship Yard**
-Design & Engineering
-Procurement Material
-Construction of Ship

Classification Society (BKI) and other Foreign classification society

-Passenger Ship
-Ferry
-Tanker
-General Cargo
-Bulk Carrier
-Tug Boat
-Fish Boat
-War Ship
-Container Ship
-Etc.

FOREIGN MARKET

DOMESTIC MARKET

**R&D Institution**
BBLM, B4T, ITS, UI, Unhas, Indonesian Hydrodynamics Laboratory, etc

**Service**
Banking, Insurance, Non Banking Financial Institution, etc.

**Association**
IPERINDO, INSA etc.

# VI. STRATEGY AND POLICY

- Makes domestic market as base load for developing shipyard industry through shipbuilding industry revitalization and utilization empowerment program.
- Strengthening and developing maritime industrial cluster (Surabaya-KIKAS and Jakarta-KIKAJA).
- Strengthening Indonesia shipbuilding competitiveness through production facilities modernization and production management system to reduce delivery time.
- Strengthening ship design center (National Ship Design and Engineering Center/NaSDEC).
- Developing human resource in shipbuilding industry through establish technical training center (Welding center).
- Developing shipbuilding industrial special zone (Lamongan, Batam-Karimun, Kendal, Pontianak).
- Developing domestic supporting industry (material and component) by promoting potential domestic product to increase the use of local content.
- Boosting investment promotion program and friendly business climate to attract foreign investment.
- Developing shipyard financing program through local Bank and other Non Banking Financial Institution
- Developing ship standardization and component

# THANK YOU