

Korean Shipbuilding Industry & Policy

June 6th 2018



Ministry of Trade, Industry and Energy



Outline

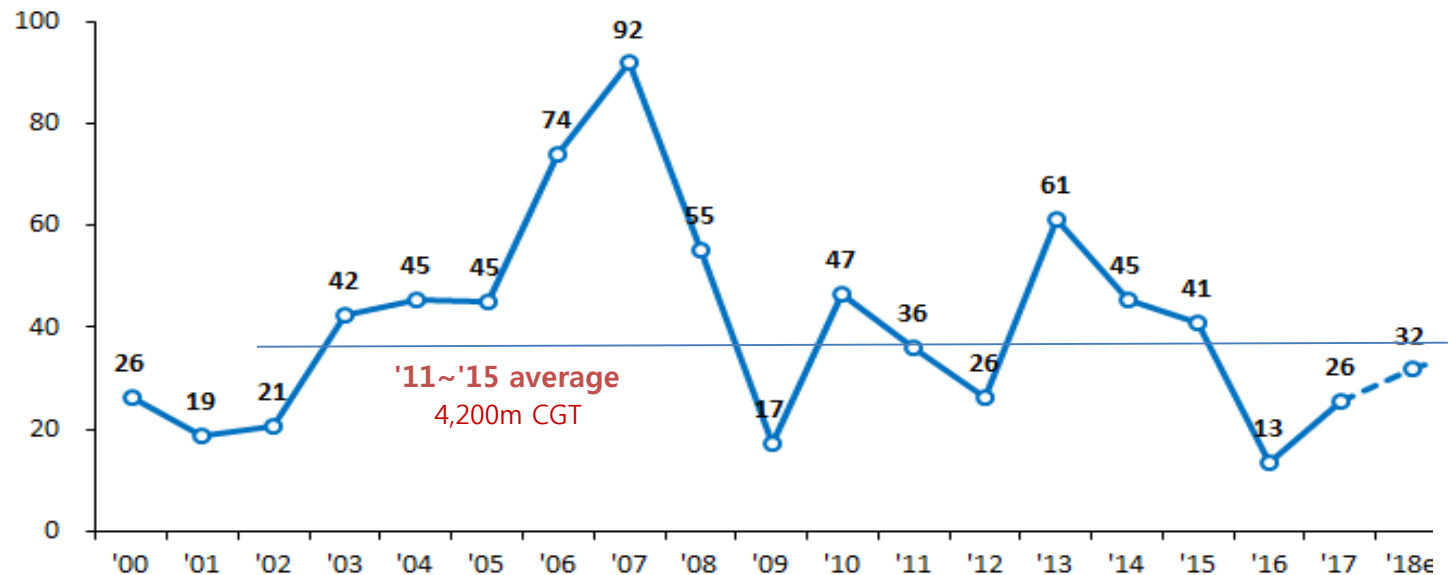
1. Shipbuilding Market
2. Korean Shipbuilding Industry
3. Forecast of Shipbuilding Market
4. Korean Gov't Policy
5. Cooperation with Greece



1. Shipbuilding Market (1)

- 2016 was a year with a historically low level of new-building demand
- Supply side adjustments in reaction to continued market pressures

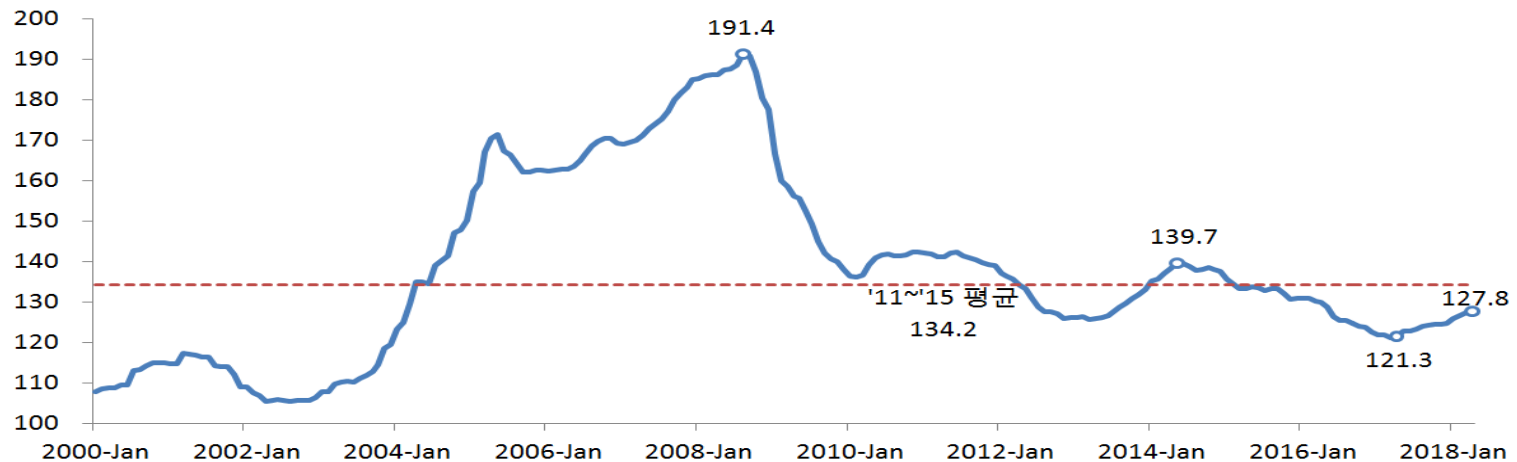
< World Historical Contracting (Clarkson, '18. 3) >



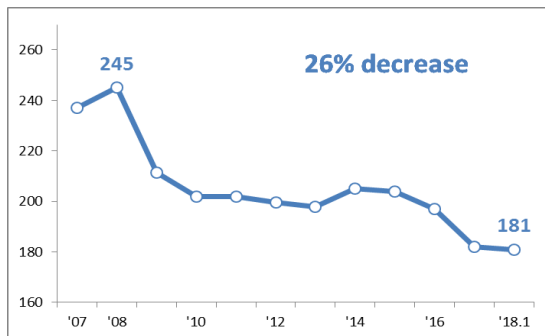
1. Shipbuilding Market (2)

- Over supply and low demand resulted in weak price of a vessel

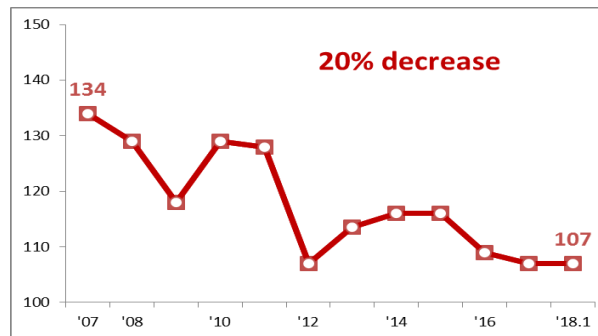
< Clarkson's newbuilding Price Index >



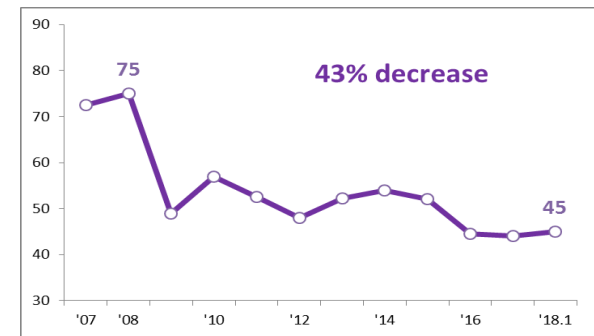
< Newbuilding Price Index by Type >



< LNG Carrier >



< Large Containership >



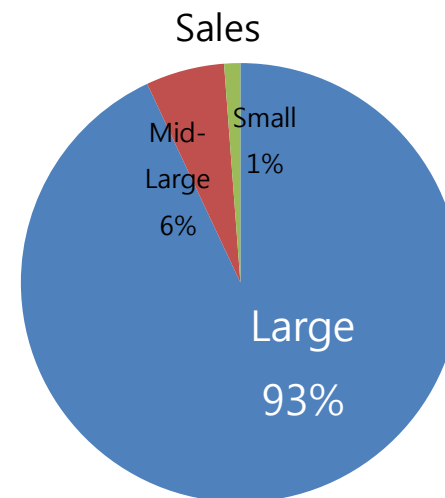
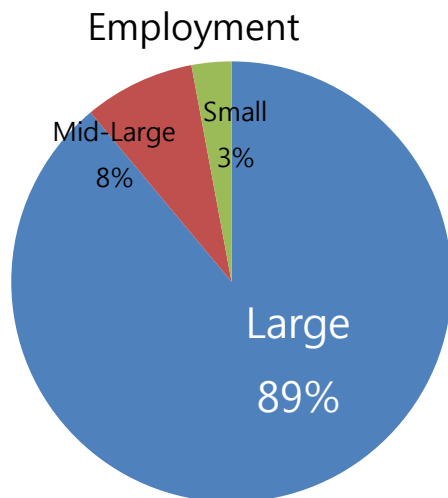
< MR Tanker >

2. Korean Shipbuilding Industry (1)

- 84 shipbuilding companies in Korea

Size	Number	Companies
Large	5	HHI, DSME, SHI, H-Mipo, H-Samho
Med-Large	5	STX, Daehan, Hanjin, Sungdong, Daesun
Small	More 74	Samkang, Kangnam, Mastek etc.

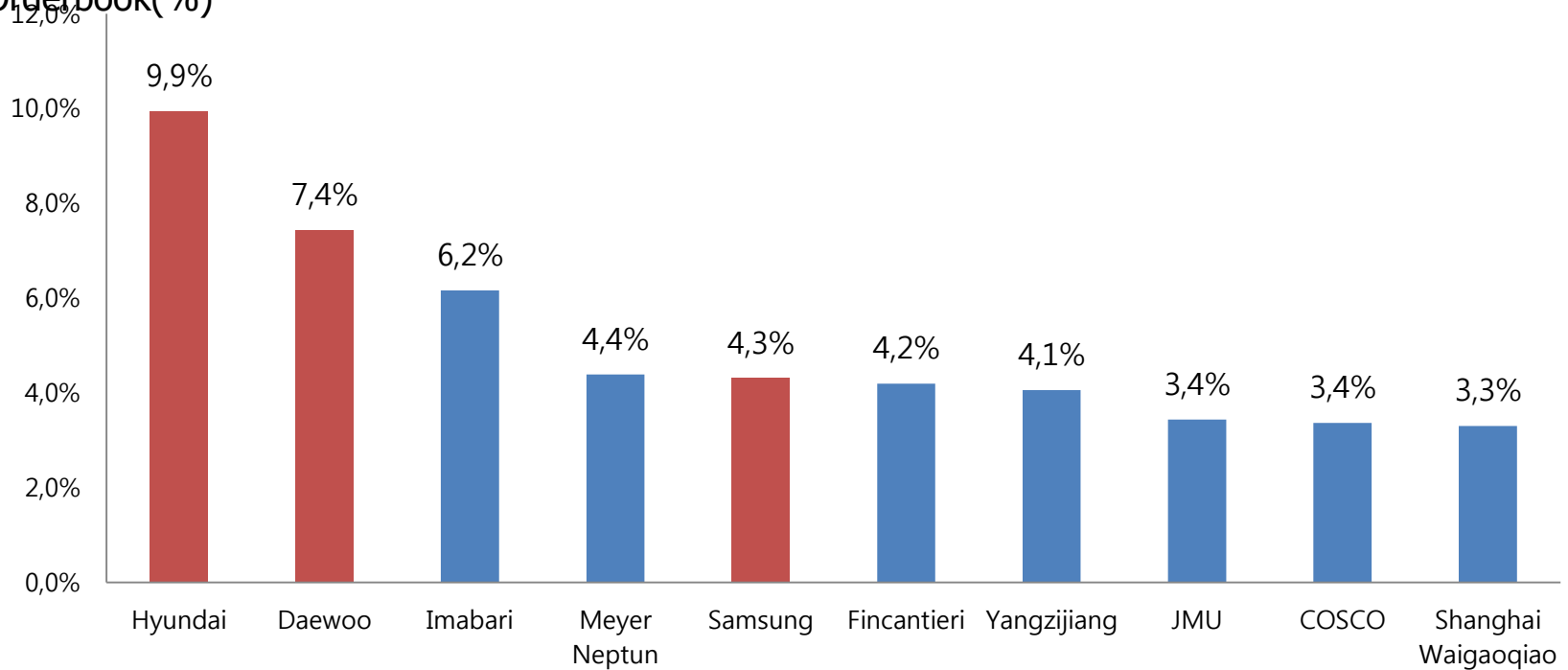
- Large companies are key players in employment and sales



2. Korean Shipbuilding Industry (2)

- Korean shipbuilders top in the global shipbuilding industry
- Korean shipbuilding has been accounts for about 30% of the global market for last 20 years

Share of Global Orderbook(%)



< Clarksons' Research, '18.4 >

2. Korean Shipbuilding Industry (3)

- Painful efforts to survive the cycle and depression



Challenges

- 86% decrease of new-order
(‘07) 92M CGT → (‘16) 13MCGT
- Significant drop of Price
- Increased competition



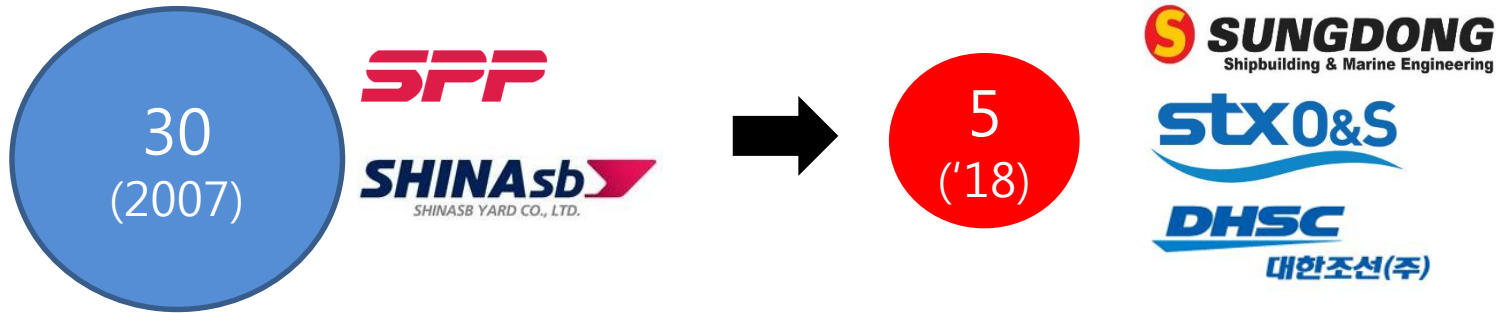
Restructuring

- Capacity Reduction
 - Among 32 docks, 10 temporarily closed
 - Lay off
- Securing liquidity and cash flow
- Keeping core assets

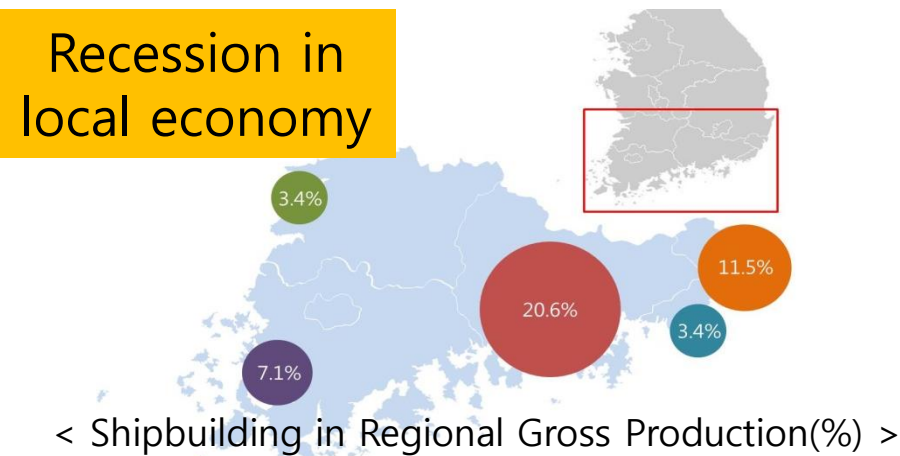
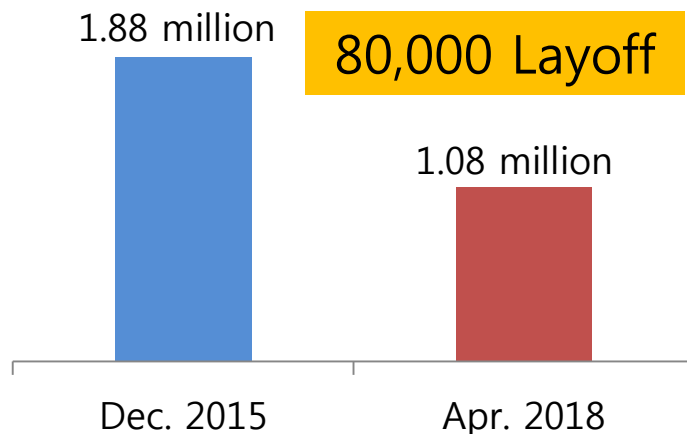
- Huge losses of Big 3 came from not shipbuilding but offshore plant

2. Korean Shipbuilding Industry (4)

- 25 mid size shipbuilders were bankrupt

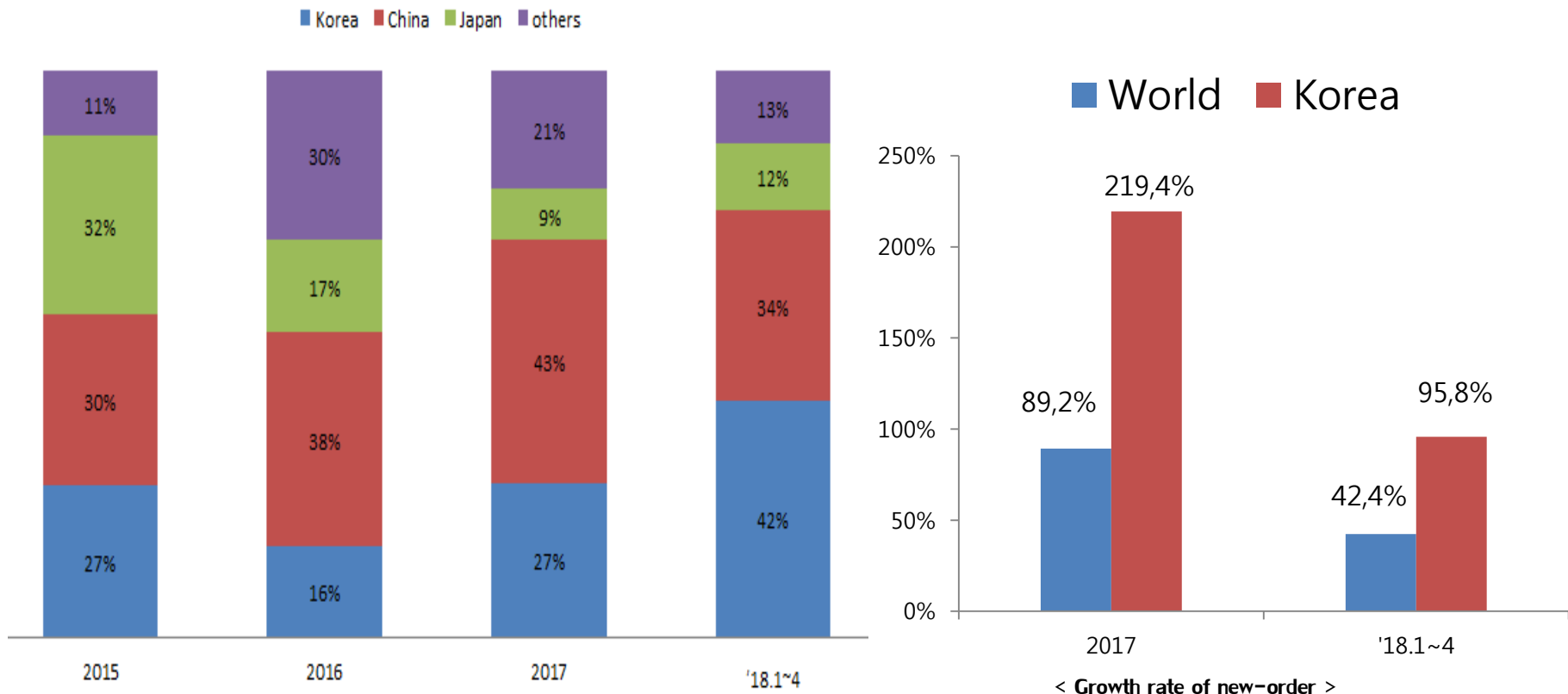


- Korean gov't has taken various measures to minimize negative impacts from recession and restructuring of shipbuilding industry



2. Korean Shipbuilding Industry (5)

- Korea's market share is increasing and making recovery.
- The growth rate of Korea's contracting is more bigger than that of world new contracting.



3. Forecast Shipbuilding Market (1)

- Policy should consider key trends of the future market

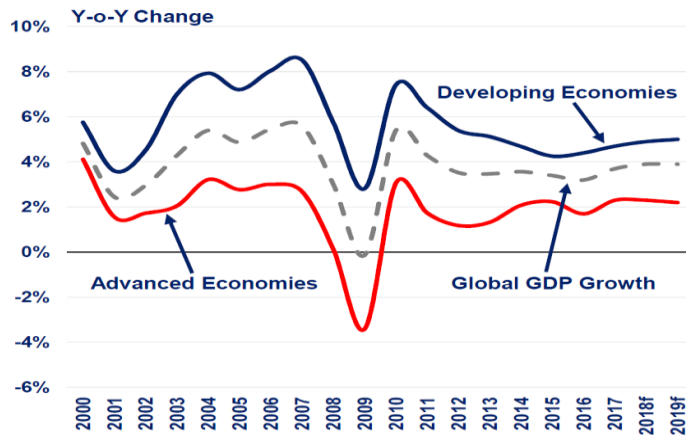
- ① Supply and Demand
- ② Regulation
- ③ Technology development
- ④ Competition among global shipbuilders

- How to enhance the competitiveness

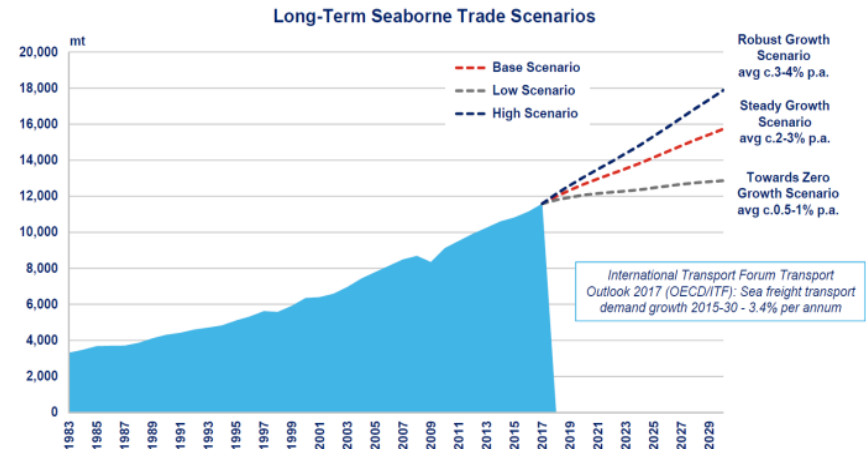
3. Forecast Shipbuilding Market (2)

- Factors for shipping and shipbuilding are positive.

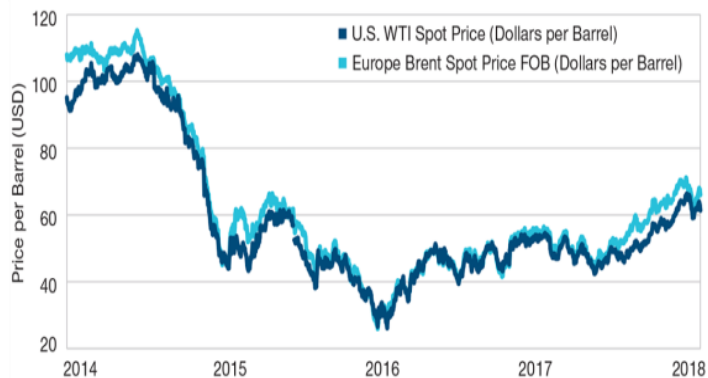
World Economy growth



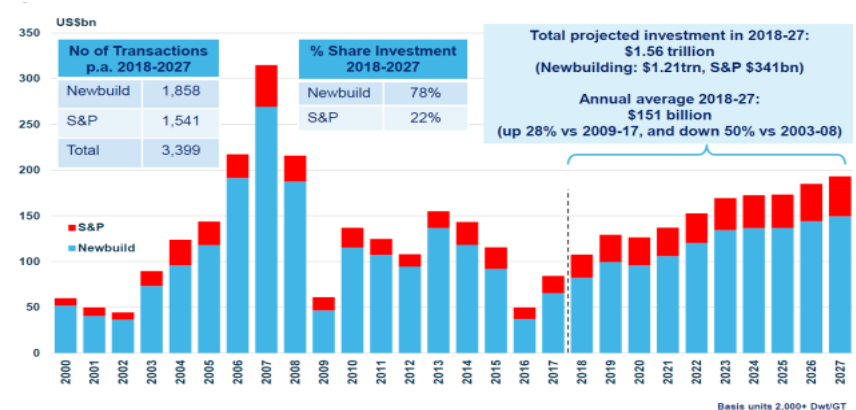
Seaborne Trade



Oil Price

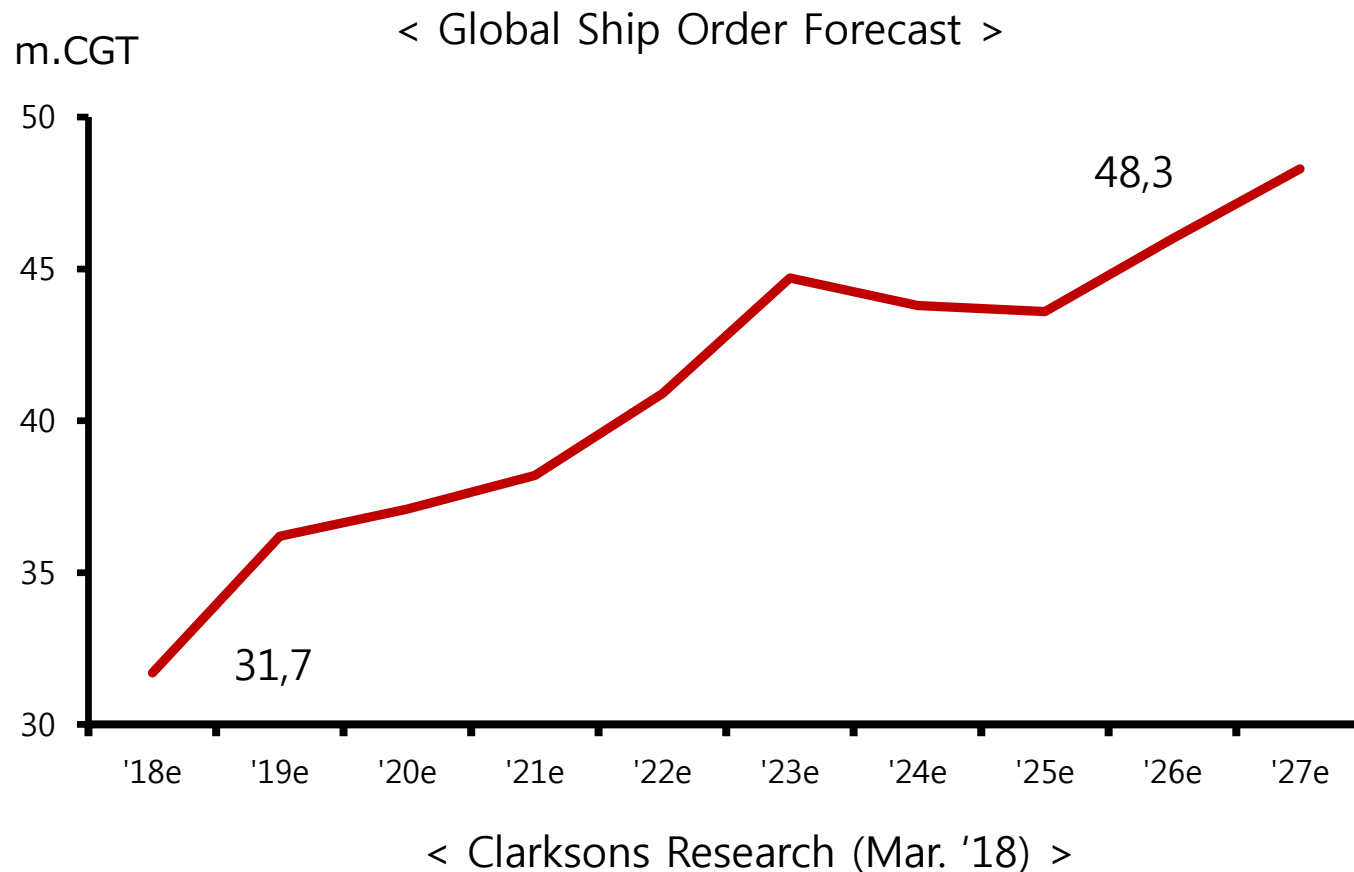


Protected Investment



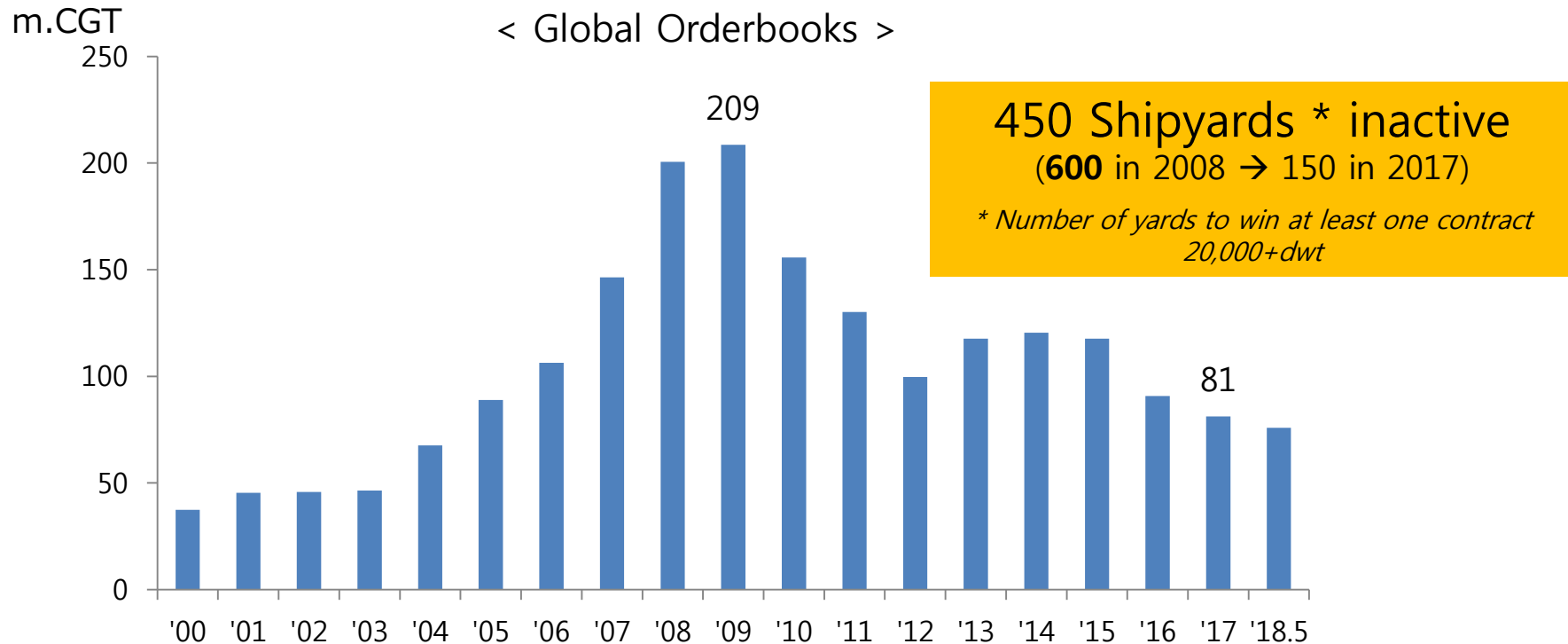
3. Forecast Shipbuilding Market (3) - Demand

- It's clear that global shipping is on course for recovery
- But it's not big boom



3. Forecast Shipbuilding Market (4) - Supply

- Supply : capacity of shipbuilding was decreased significantly
 - Down sizing and slow production



- China's capacity has been decreasing (M&A, Bankrupt)

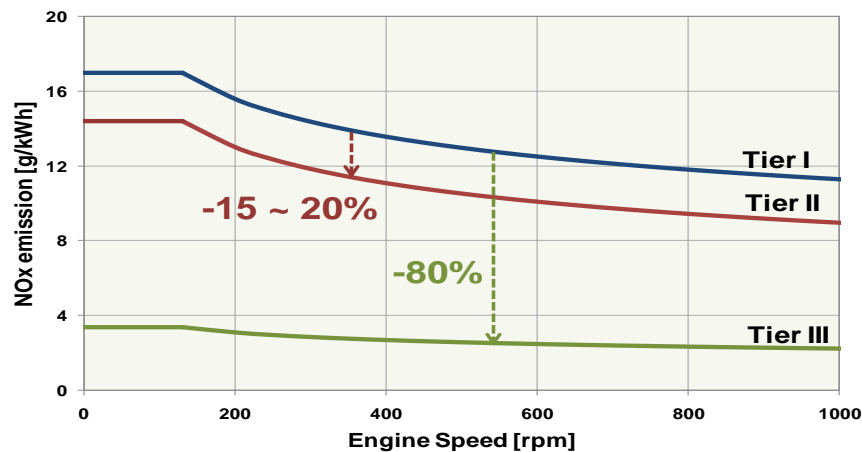


3. Forecast Shipbuilding Market (5) - Regulations

- Environment Regulations accelerate new vessel orders and retrofits.



< NOx : Tier III >



< SOx : 3.5% → 0.5 >



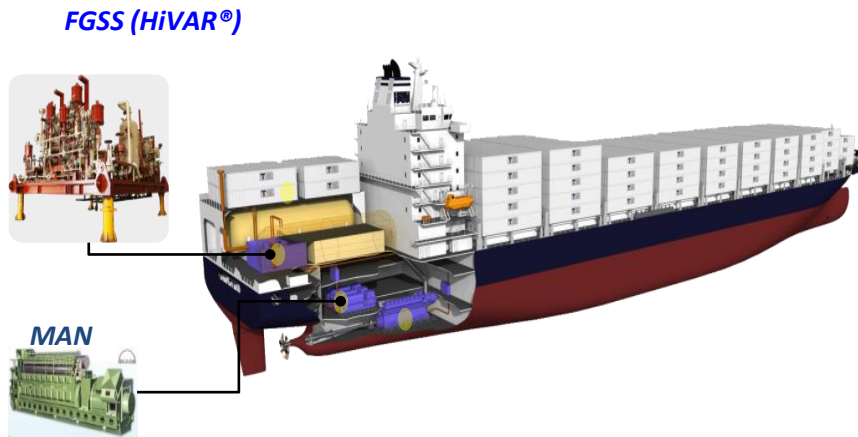
< CO2 Reduction >

Reduce the total GHG emissions by 50% by 2050

3. Forecast Shipbuilding Market (6) - Technology

- Technology developments can support productivity of shipyard and give solutions to regulations.

< LNG fueled Ship >



< Autonomous Ship >



* *YARA Birkeland's Autonomous ship*



< IOT, Big data >

* *HHI INTEGRICT smart ship solution*

4. Gov't Policy for shipbuilding (1)- Commitment

South Korea's president has announced his commitment to revitalizing the nation's shipbuilding sector.

"Korea can become a global shipbuilding leader once again"

"The vision of becoming a global shipbuilder is a national task that we cannot give up,"



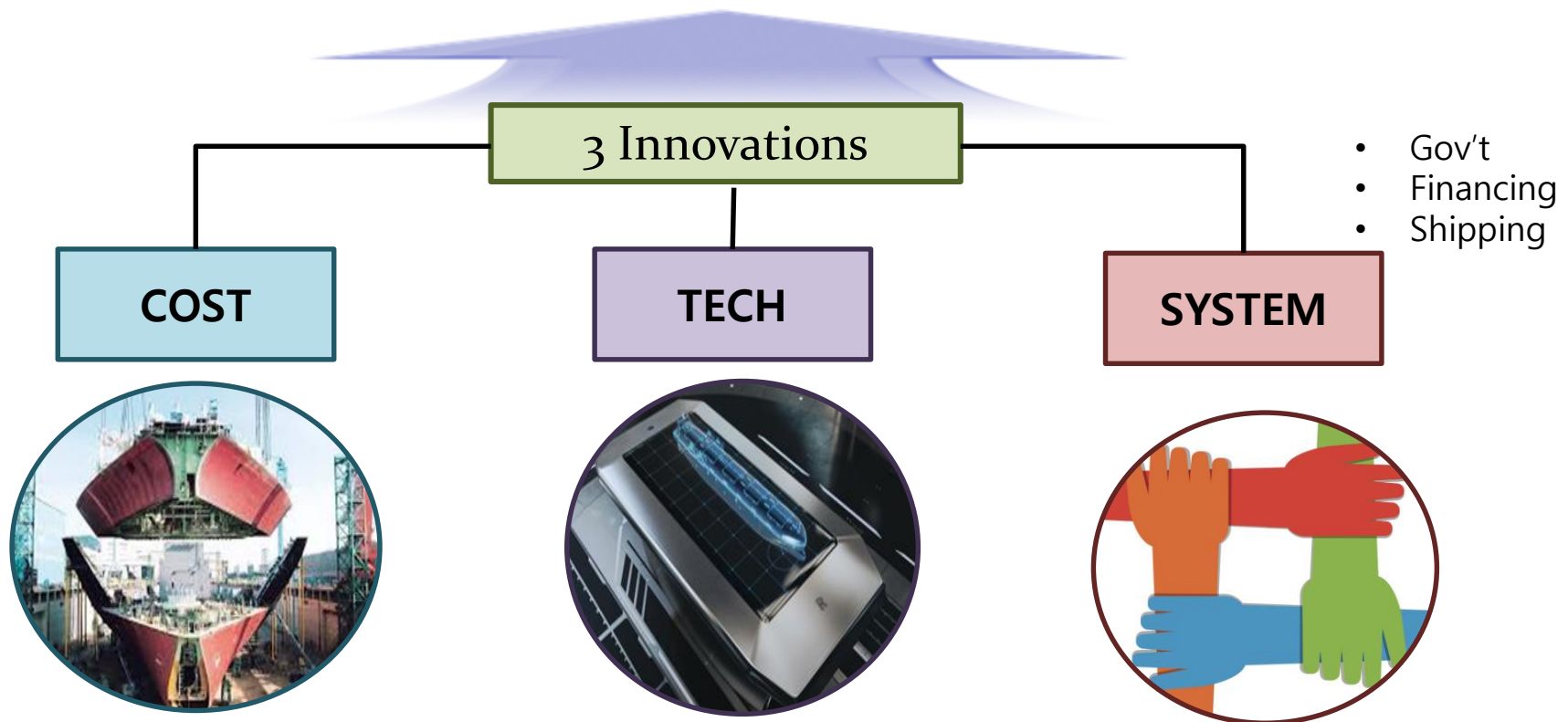
**Visiting to DSME
at Jan 3rd, 2018**

4. Gov't Policy for Shipbuilding (2) - Direction

**Rebuild robust
shipbuilding Industry**

**Focus on growth
quality and Tech.**

**Change targets
- good quality Job**



4. Gov't Policy for Shipbuilding (3) – Demand

- First priority to overcome the crisis by facilitating domestic demand
- Public new orders of 67.7 billion dollars will be placed during 2017-2020

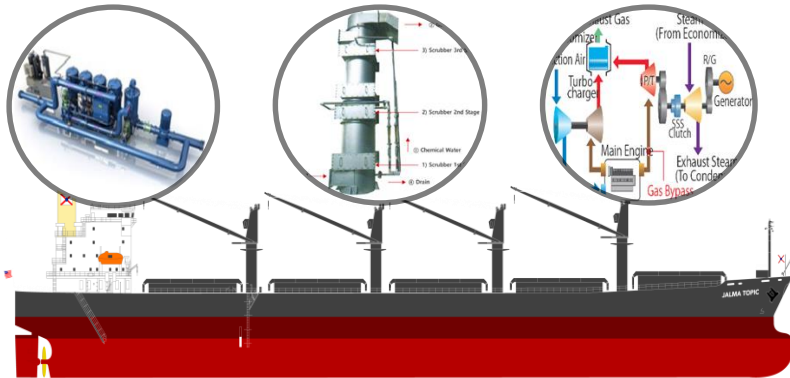


- Expanding financing to shipping
 - ✓ Establishment of the Korea Ocean Business Corporation (July 2018)
 - ✓ Expanding financing programs for new orders

4. Gov't Policy for Shipbuilding (4) - Technology

- Investment for recovery of market and the future

R&D for marine equipment of green ship



R&D for autonomous ship



Preparing changing of vessel fuels

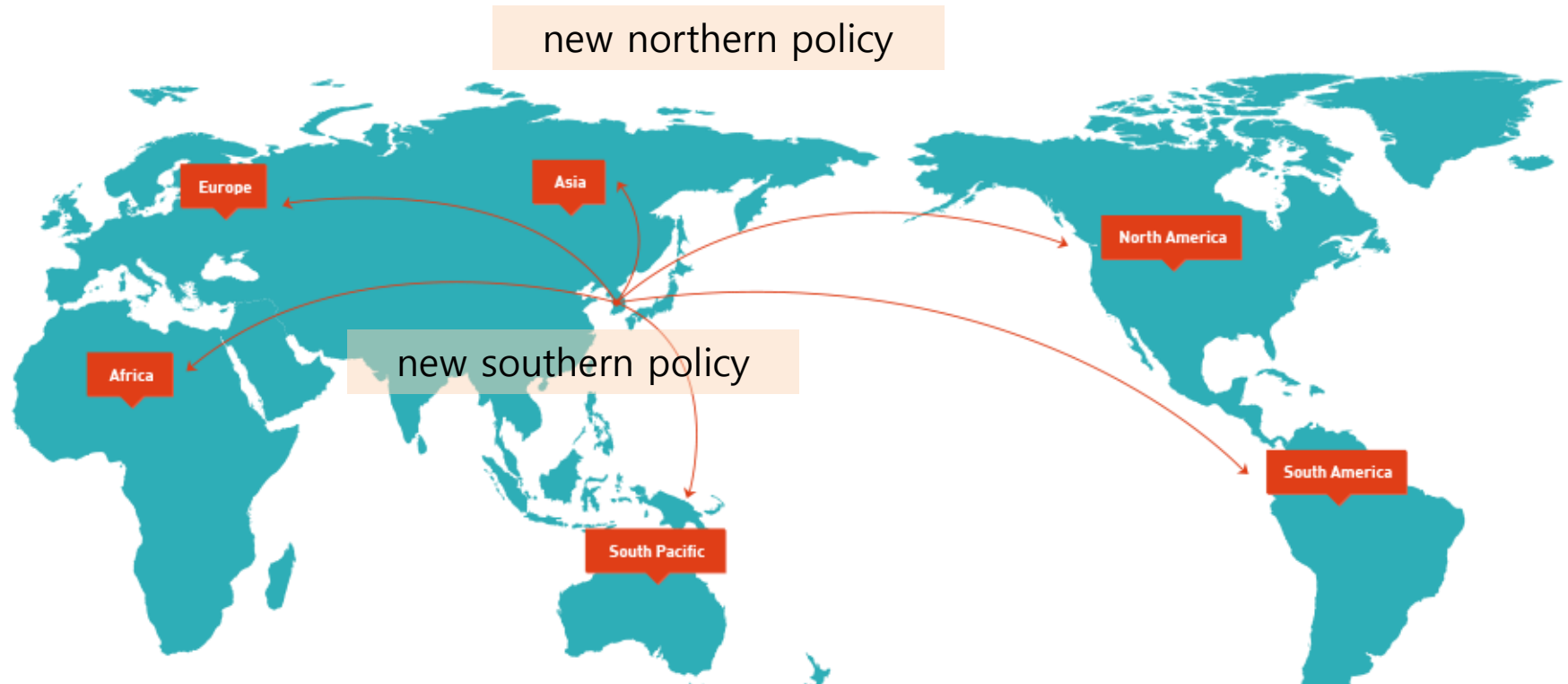
- ✓ LNG
- ✓ Electric
- ✓ Hydrogen

Keeping skilled workers



4. Gov't Policy for Shipbuilding (5) - Partnership

- Strengthen partnerships with client countries
- About 75% of orders came from overseas ship owners



5. Cooperation with Greece (1) Long time friend

- A Greek is start for Korean shipbuilding industry



Greek Shipping Tycoon George S. Livanos was the first customer of the Hyundai Heavy Industries

Over 80% of bilateral trade came from maritime industry

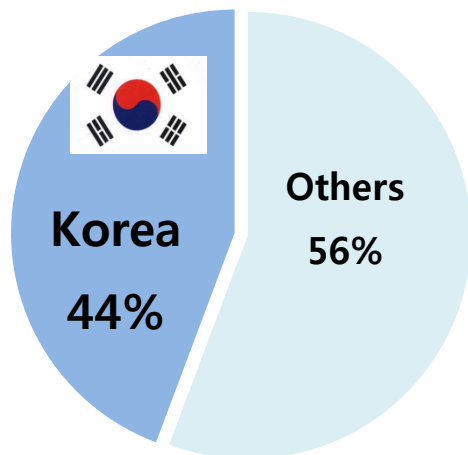
- Great ship owner has a keen eye on the best shipbuilder



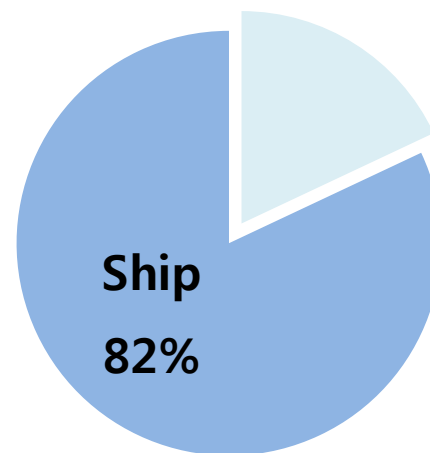
Korea is a power house in shipbuilding with best technology and quality

6. Cooperation with Greek (2) - Trade

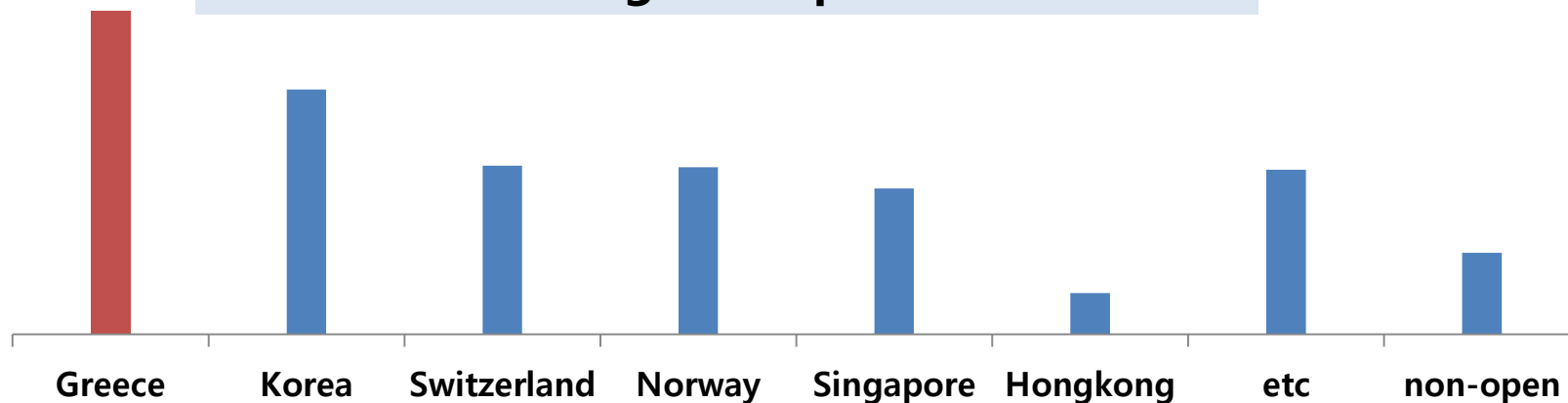
Greek's ship order



Korean Export to Greece



National Ranking of ship order to Korea



5. Cooperation with Greece (3) High level Meeting

- Long accumulation of mutual trust has proved its real worth
- Explore ways to strengthen cooperation



Prime Ministers' Meeting (Oct. 2017)

Lee Nak-yeon & Alexis Tsipras



Ministers' Meeting (June 2014)

Yoon Sang-jick &
Miltiadis Varvitsiotis

ευχαριστώ
Thank you
감사합니다

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