

WELCOME TO WÄRTSILÄ CHINA

JAAKKO ESKOLA,
GROUP VICE PRESIDENT , SHIP POWER

JAMES HAN
PRESIDENT OF WÄRTSILÄ CHINA LTD.

- Wärtsilä in brief
- Chinese Economy Update
- Wärtsilä in China
- Marine Market in China - Overview
- Chinese Power Industry in General
- Wärtsilä Services Business in China

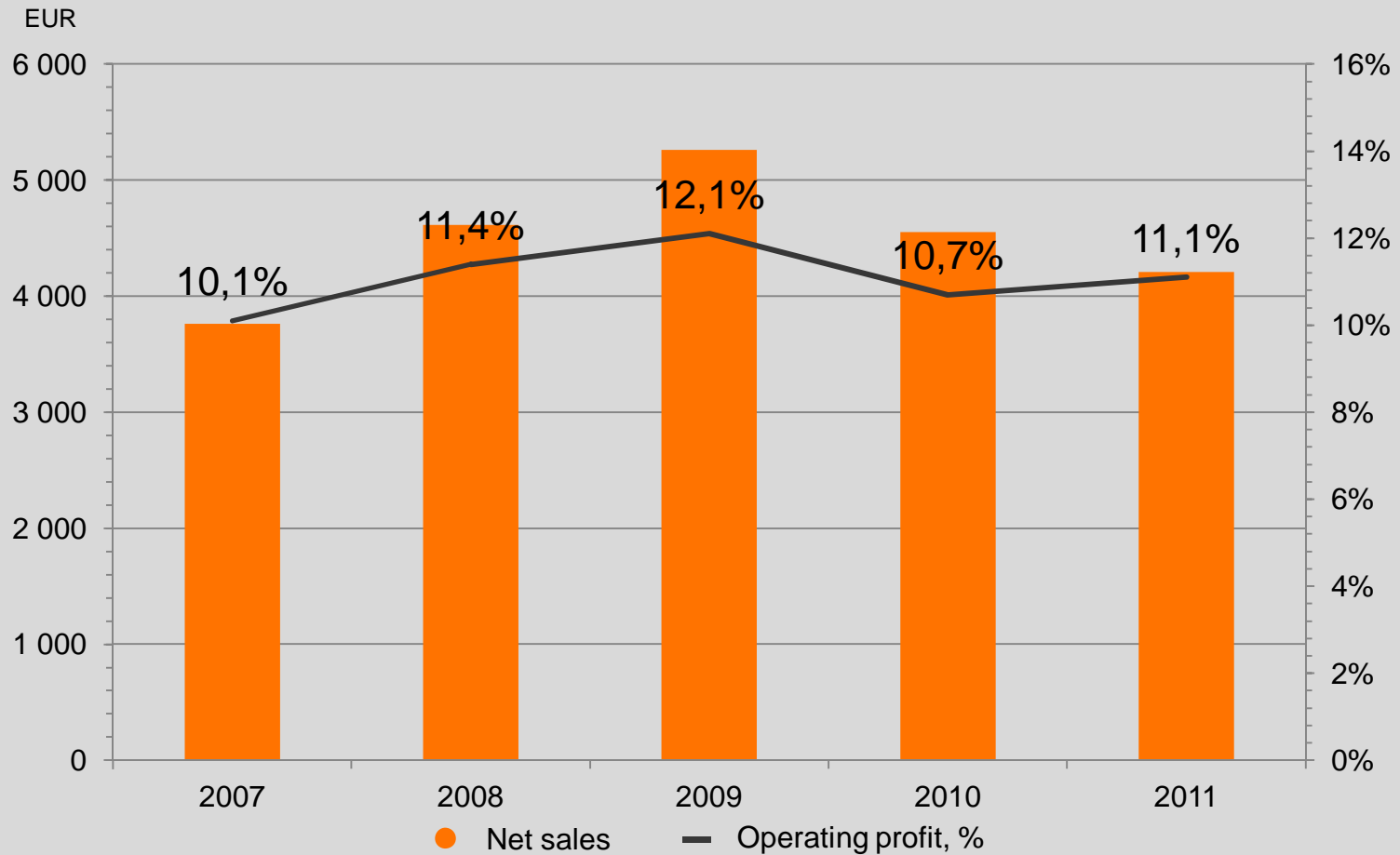
This is Wärtsilä

**SHIP
POWER**

**POWER
PLANTS**

SERVICES

Net Sales and Profitability

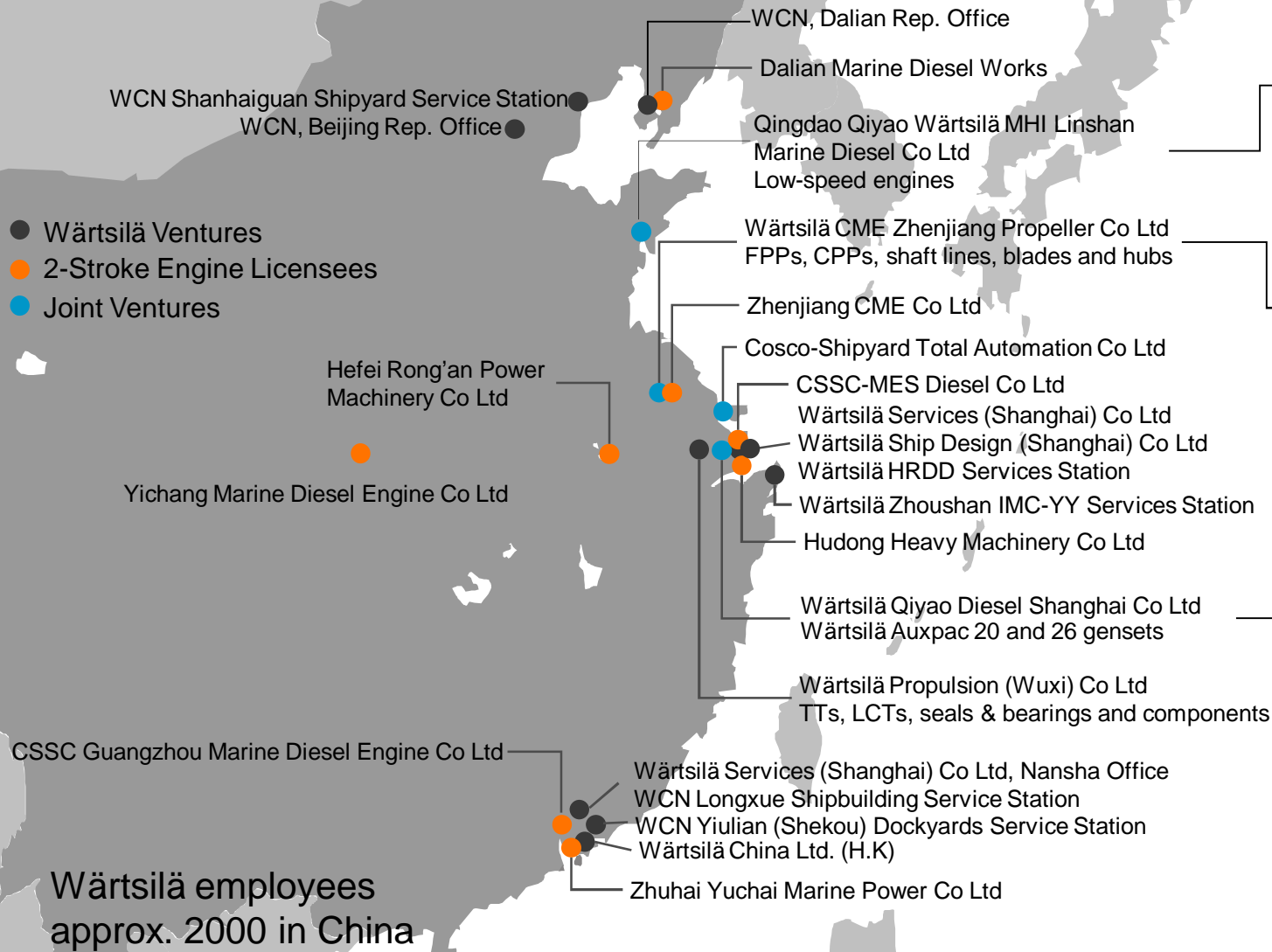


Chinese Economy Update

- GDP has slowed to 8.9% during Q411 from 9.1% in Q311.
- CPI in Jan rose to 4.5%, higher than expected 4.2% due to Chinese New Year factor. This may deter policymaker from further loosening the monetary policy.
- Trade figures are weak in Jan. Imports sank 15.3% yoy in Jan, the worst since Nov. 2009, while exports fell 0.5% yoy. Imports slump during Jan is raising some concerns for domestic demand.
- Slight increase in business activities at the beginning of the year, as Jan PMI rose to 50.5 from 50.2 in Dec 2011.
- “There is downside pressure on our economy and elevated inflation at the same time” (quoted from Premier Wen, Jan.2, 2012). The country is facing problems of weakening external demand and rising costs for the companies.
- China will continue to fine tune the policy and further introduce measures to boost domestic consumption, and make sure the real economy gets sufficient investment for growth.

Wärtsilä in China

- Wärtsilä Ventures
- 2-Stroke Engine Licensees
- Joint Ventures



Wärtsilä in China

- Wärtsilä has been present in China for more than 20 years, through its fully owned subsidiary and long-term licensing agreements.
- Wärtsilä has established joint ventures for propeller and auxiliary generating set production with leading Chinese shipbuilding groups, and our thrusters are produced at our 100% owned company. We also have a joint venture with COSCO to offer automation services.
- Our low-speed or 2 stroke engines are produced in China by 8 licensees as well as a joint venture company.
- In the marine market, the leading Chinese ship owners and shipyards are Wärtsilä customers.
- Wärtsilä Services provides service and maintenance for its customers in China through eight locations. The largest one is located in Shanghai.
- In the energy markets, Wärtsilä has delivered altogether 3,500 MW of power plants to China.

Wärtsilä China Manufacturing Facilities



Delivery Centre – Thrusters, Seals, Bearings / Wuxi (China)



***Established Oct 2004 and
Inauguration phase 2 Nov
2007***

100% owned by Wärtsilä

Employees: 167 (Jan. 2012)

Wärtsilä CME (Zhenjiang) – FPP & CPP (China)

**Established June 2004 and inauguration
CPP factory June 2011**

Joint Venture
Wärtsilä 55%
CSSC¹ 45%

Employees: 462 (Jan 2012)



Note: ¹ CSSC = China State Shipbuilding Corporation

Delivery Centre - Auxpac 20 & 26 Shanghai (China)



Inauguration June 2006

Joint Venture
Wärtsilä 50%
CSIC¹ 50%

Employees: 145 (Jan. 2012)

Note: ¹ CSIC = China Shipbuilding Industry Corporation

Delivery Centre - 2-stroke engines / Qingdao (China)



Inauguration April 2009

Joint Venture

Wärtsilä 34%

CSIC¹ 50%

MHI² 16%

Employees: 556 (Jan. 2012)

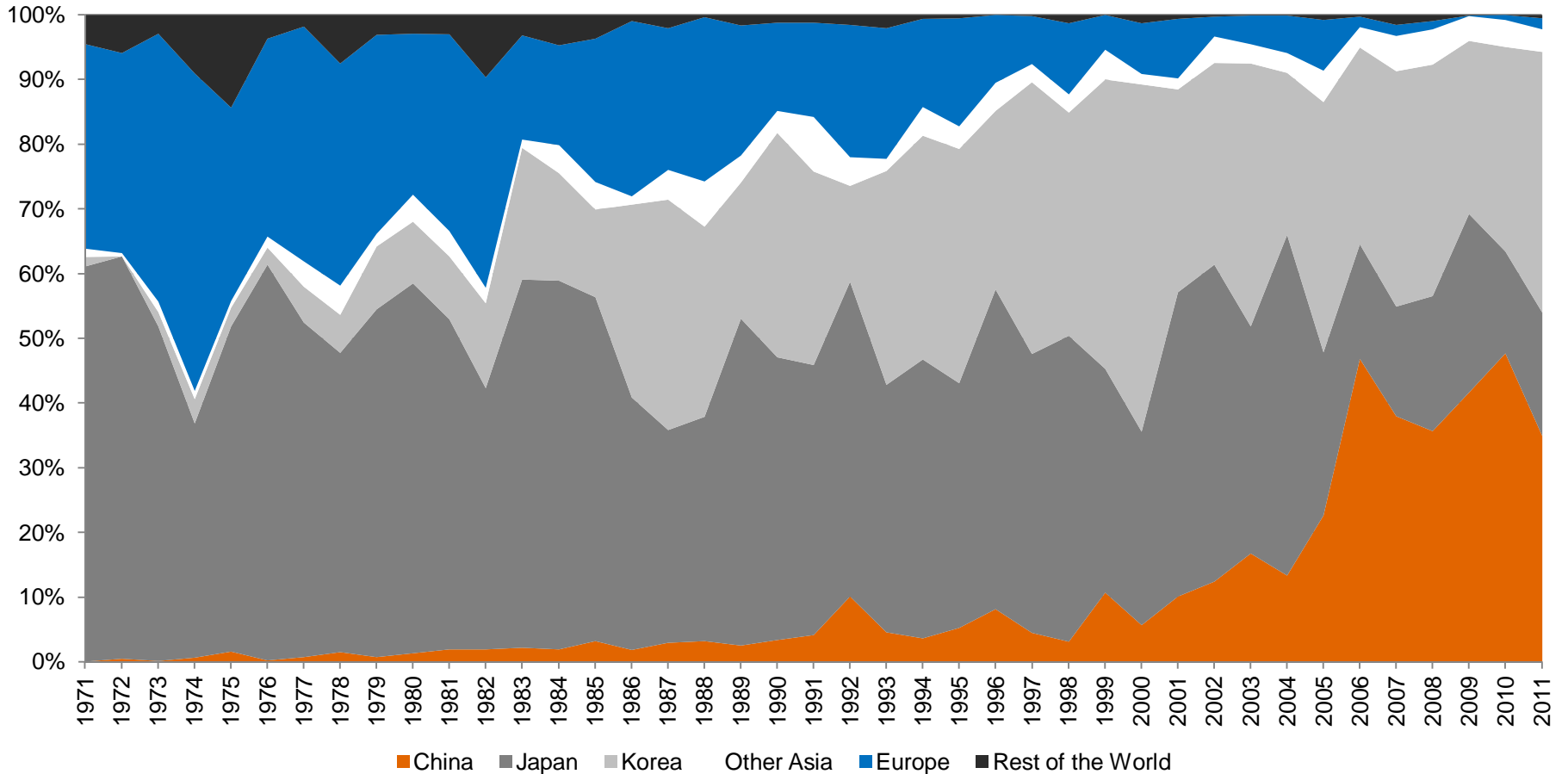
Note: ¹ CSIC = China Shipbuilding Industry Corporation, ² Mitsubishi Heavy Industries

Marine Market in China - Overview

- Over 1000 Shipyards in China
- In 2011, total production volume was increased by 16.9% to 76.65 million DWT (comparing to 52.91 million DWT from Korea). However, new order intake decreased by 51.9% to 36.22 million DWT.
- In 2011, major state owned companies, such as CSSC and CSIC had about 37% (44% in 2010) market share (based on production volume) while Jiangsu province alone contributed around 35.4% of private S/Ys.
- Comparing with Korea and Japan, China's local marine equipment content is only about 50% while the rest will be relying on either foreign technology and/or importation
- Aggressive expansion and upgrade in large containerships, special and offshore by some leading Chinese S/Ys will close the gap in 5-10 years
- The consolidation of shipbuilding industry will continue.

China in merchant vessels

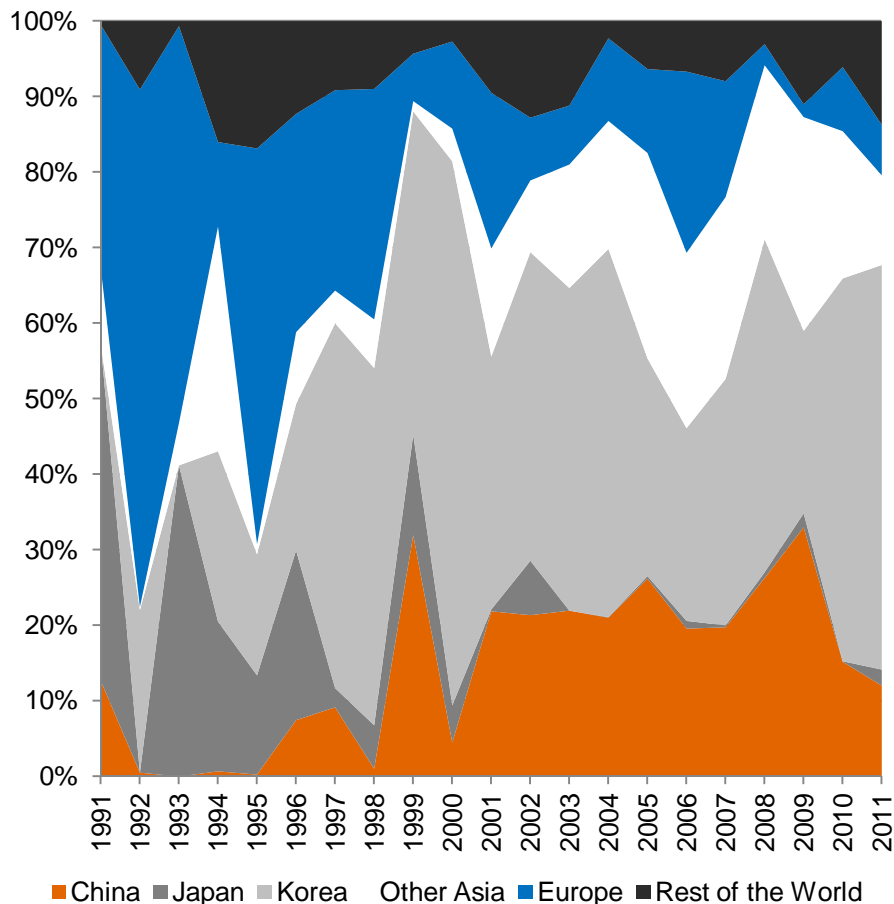
Merchant vessels: contracting volumes (DWT), share by region



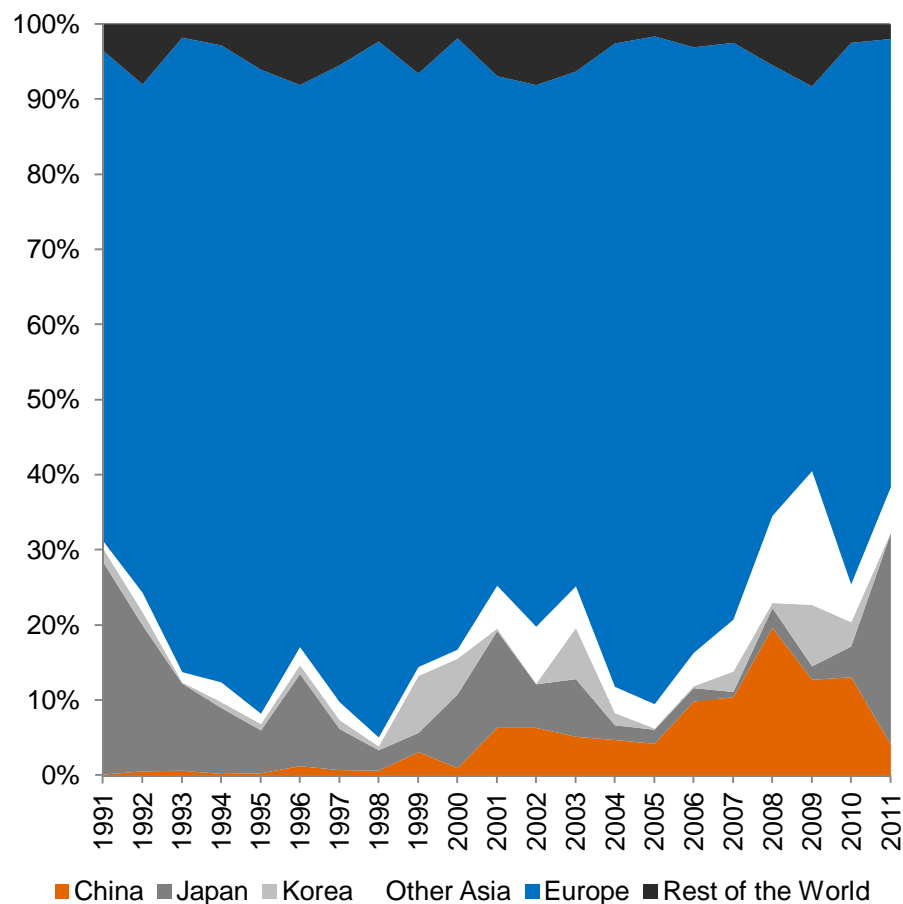
Source: Wärtsilä's Marine Market Database (MMDB)

...and in other vessel segments

Offshore vessels: contracting volumes (GT), share by region



Special* vessels: contracting volume (GT), share by region



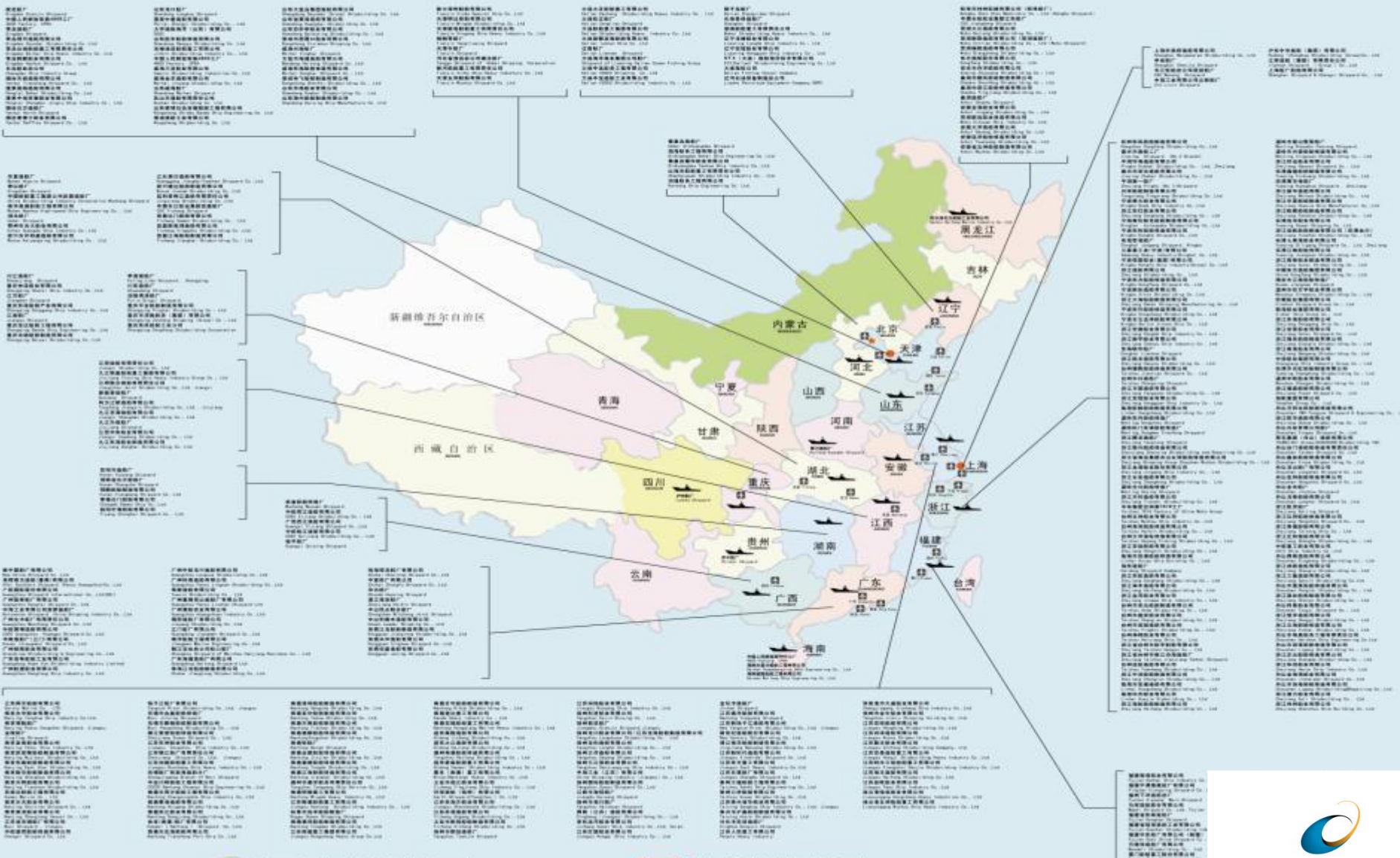
* Special includes: cruise, ferries (ropax and pax only), dredgers, and tugs
 Source: Wärtsilä's Marine Market Database (MMDB)

Main Chinese Shipyards

造船厂分布图

LOCATION OF MAJOR CHINESE SHIPYARDS

2009. 7



Main Shipowners in China



- COSCO: China Ocean Shipping Corp.
- CNOOC: China National Offshore Oil Corp.
- MOC: The Ministry of Communication China
- CSG: China Shipping Group
- Sinotrans: China National Foreign Trade Tran. Corp.
- STS: Shanghai Time Shipping

Chinese Power Industry in General



- China power generation is dominated by coal generation (78%). Hydro (16%), nuclear (2%). The gas generation is still at low level.
- The Government controls also the grid company which has been split into 2 Companies: China State Grid and China South Grid
- There is a monopoly in power generation and transmission
- Electricity price is linked to the coal price
- Gas generation is less than 3% of the total, due to the scarcity of gas. Although situation is gradually improving.
- In 2020 gas generation will grow to 7%
- Wind power has been developed at brisk pace with total installed capacity of 45 GW in 2010
- However 40% of the wind power is not connected to the grid due to the shortage of transmission capacity
- China has embraced the smart grid concept (mainly HVDC)

Wärtsilä Power Plants history in China

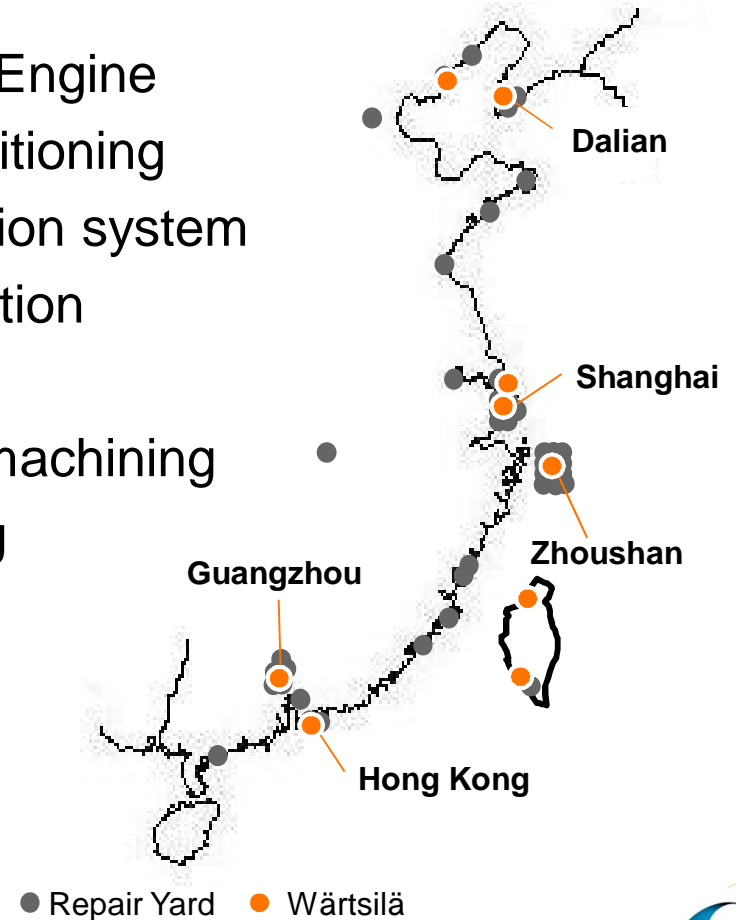
- 1990's to early 2000** when availability of electricity from grid could not meet increasing demand, Wärtsilä focused on captive power plants for industrial parks.
- 2000 – 2005** China ramped up the construction of large coal fired power plants. Wärtsilä targets the market for black start units for large power stations.
- 2006 – 2009** China mining and construction companies started to expand overseas. Wärtsilä supplies power plants to Chinese EPC contractors for overseas projects in remote areas.
- 2010 – Present** China is putting focus on renewable energy, smart grid concept and power system energy efficiency, providing opportunities for Wärtsilä's solutions





Spare Parts, Field Service and Special Projects

- Marine Engine
- Reconditioning
- Propulsion system
- Automation
- Boiler
- In-situ machining
- Training



Defend our strong position in China and aggressively pursue further growth

- Clear leadership for certain vessel types
- Differentiated approach to customers
- Maximized synergies with Ship Design
- Continue expanding our local manufacturing footprint as well as engineering design capability
- Further strengthening of local organization

Uncertainty ahead?

The fundamentals show risks and opportunities

- Risks of downturn in global economy are tangible, also for Chinese economy
- High oil prices represent a risk towards global economic growth, however they also stimulate investments in exploration and production for oil and gas
- Expansion of emerging economies (including China) continues to support growth of demand for transportation of raw materials and energy

Highlights about the present

- Earnings are at very low levels
- Overcapacity continues to cast shadows in main merchant segments

The future brings interesting challenges!

- Ship owners base is shifting and increasingly Chinese
- Increasing interest in the market for gas applications, Chinese yards' interest in gas fuelled vessels increasing
- Increasing focus on energy efficiency and environmental performance
- Increased need for a total performance approach → ship design capabilities are crucial!



