

# **HYUNDAI HEAVY INDUSTRIES**

**BOA Merrill Lynch Korea Conference 2013 September 13, 2013** 





#### **Important Notice**

This presentation of Hyundai Heavy Industries (HHI) contains forward-looking statements relating to HHI's operations that are based on management's current expectations, estimates and projections. Words such as "anticipates", "expects", "intends", "plans", "projects", "schedules", "estimates" and similar expressions are intended to identify such forward-looking statements. These statements are not guarantees of future performance and are subject to certain risks, uncertainties, and other factors including new order flows, FX rates, steel plate prices and so on, some of which are beyond company's control and are difficult to predict. Therefore, actual outcomes and actual results may differ materially from what is expressed or forecasted in such forward-looking statements. The reader should not place undue reliance on these forward-looking statements. HHI undertakes no obligation to update any forward-looking statements to reflect subsequent events.

## **Contents**

- H H I at a Glance
- Business Performance
- Subsidiaries

# **HHI at a Glance**

# **History**

◆ Dec. 1973

Established Hyundai Shipbuilding & Heavy Industries

◆ Aug. 1999

Listed on Korea Stock Exchange

1970~2001



- **1983** 
  - Ranked No.1 in global shipbuilding market
- ◆ Jun. 1994
  Delivered Korea's first LNGc to HMM
- ◆ Feb. 2001

Completed world's largest Elf Girassol FPSO (343,000 Ton)

• Feb. 2002

Launched Hyundai Heavy Industries Group

2002~2007



**+ 2007** 

Built the world's most powerful ship engine (108,920 bhp marine engine, 8,600TEU containership)

**+ 2007** 

Built the world's largest LNGc (216,000 m2 for OSG)

Oct. 2008

Acquired Hi investment & Securities and Hi Asset Management

- Dec. 2009
   Acquired Hyundai Corporation
- ◆ Aug. 2010 Acquired Hyundai Oilbank

2008~2013



**+ 2010** 

Achieved 100 million bhp production in 2 stroke marine engines

**+ 2011** 

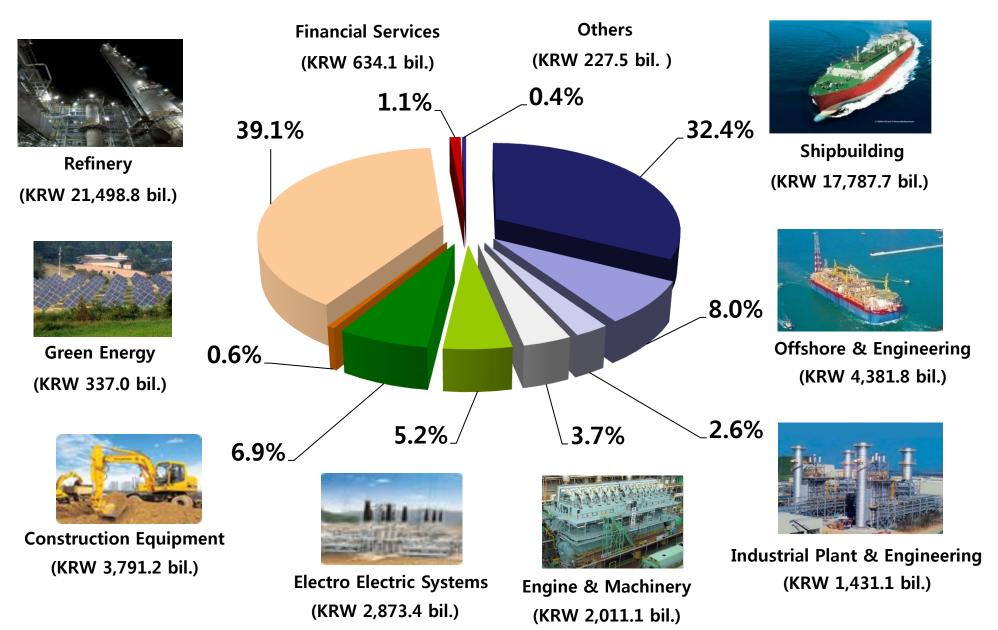
Lifted world's largest offshore platform (North Rankin2 project, 23,600tonnes)

**2011** 

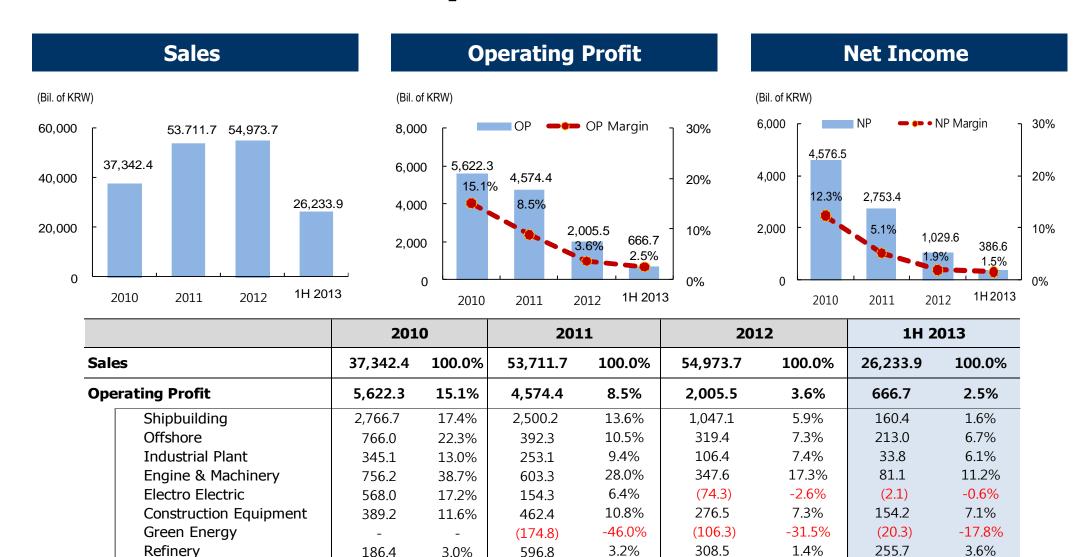
Records 100 million Gross Tonnage in Ships

## Sales Breakdown

(based on 2012 consolidated sales)



# **Financial Summary**



596.8

89.9

(303.1)

2,753.4

13.0%

5.1%

3.0%

19.2%

12.3%

186.4

80.2

(235.5)

4,576.5

(Consolidated basis, K-IFRS)

5.0%

1.5%

18.1

(227.2)

386.6

1.4%

15.0%

1.9%

95.1

(314.5)

1,029.6

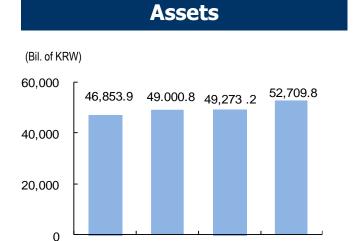
Finance services

Others

**Net Income** 

# **Financial Summary**

1H 2013

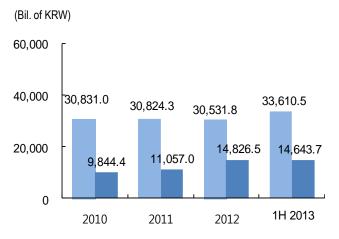


2011

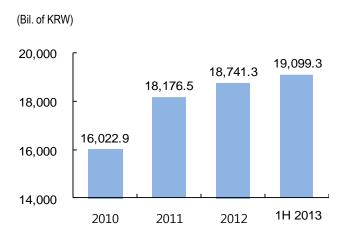
2012

2010

#### **Liabilities & Total Debt**



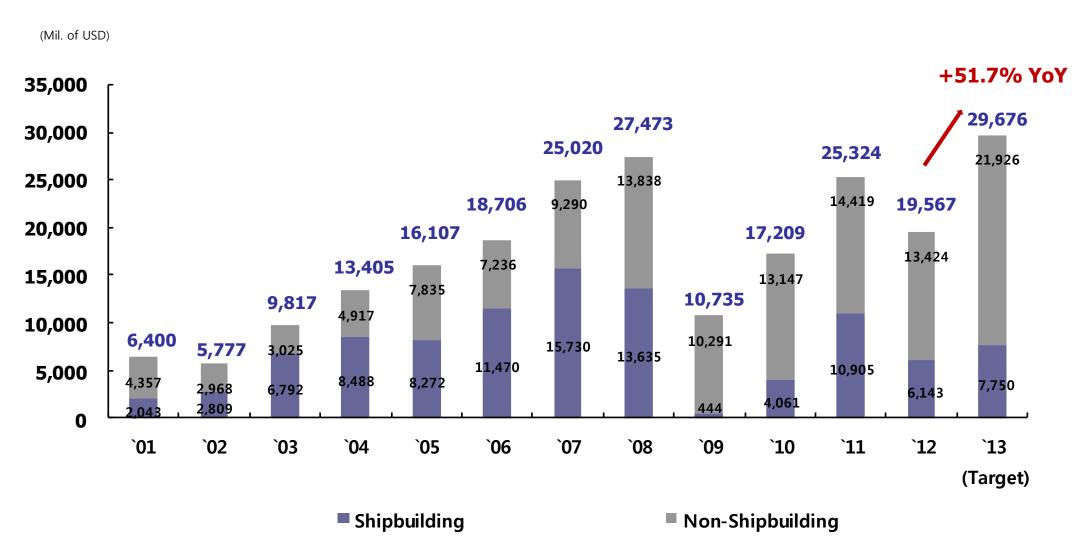
### **Shareholder's Equity**



	2010	2011	2012	1H 2013
Total Assets	46,853.9	49,000.8	49,273.1	52,709.8
Current Assets	22,929.1	23,076.4	25,278.6	28,520.1
Cash& Cash Equivalents	1,878.8	1,609.9	1,107.7	1,908.7
Non Current Assets	23,924.8	25,924.4	23,994.5	24,189.7
Total Liabilities	30,831.0	30,824.3	30,531.8	33,610.5
<b>Current Liabilities</b>	26,011.7	25,490.8	22,174.0	24,906.5
Non-Current Liabilities	4,819.3	5,333.5	8,357.8	8,704.0
Total Shareholder's Equity	16,022.9	18,176.5	18,741.3	19,099.3
Liabilties-to Equity Ratio	192.4%	169.6%	162.9%	176.0%
Debt-to-Equity Ratio	61.4%	60.8%	79.1%	76.7%
Total Debt	9,844.4	11,057.0	14,826.5	14,643.7

# **Business Performance**

### **New Orders Trend**



# **New Orders flow by Division**

Achieving 54.2% of annual target, a 47.0% increase YoY on the back of positive order flow of commercial vessels and offshore production facilities

• Shipbuilding : 20 Containerships, 14 LPGs, 8 Bulk Carriers, 5 Tankers, 4 Special Vessels, 2 LNGs, 1 Offshore Construction Vessel,

1 Accommodation Vessel, 1 Semi Submersible Rig

- Offshore : 1 FPSO (Rosebank, Chevron), 1 TLP & 1 FPU (Moho Nord, Total), 1 Spar Topside (Aasta Hansteen, Statoil)

- Industrial Plant : Shuqaiq Oil fired Conventional Power Plant, Saudi Arabia

Az-Zour North Combined-cycle power plant, Kuwait (Major project in bid)

- Engine & Machinery : Four-stroke marine engine orders increased YoY due to demand increase for special vessels such as drillship in 2012

- **Electro Electric Systems:** Orders declined YoY as a result of profit-focused order taking

- Construction Equipment: Demand declined YoY esp. in the Middle East, South America, China

- **Green Energy** : The ongoing oversupply problem and slowing demand continued to unfold

#### **Monthly New Orders in 2013**

(unit: mil. of USD)

	2	012			20	)13							
Division	Jul. (YTD)	Full year	Target	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Jul. (YTD)	Achieve ment (%)	YoY (%)
Shipbuilding	4,361	6,143	7,750	937	0	570	1,049	1,733	682	916	5,887	76.0	35.0
Offshore	1,246	2,072	6,000	1,183	64	2,064	1,907	95	98	41	5,452	90.9	337.6
<b>Industrial Plant</b>	540	4,077	6,000	37	0	84	2	27	7	19	176	2.9	(67.4)
Engine & Machinery	1,350	1,858	3,100	162	235	292	170	283	290	200	1,632	52.6	20.9
Electro Electric	1,479	2,318	3,160	143	139	208	172	155	215	81	1,113	35.2	(24.7)
Construction Equipment	1,817	2,773	3,272	217	230	286	273	252	242	168	1,668	51.0	(8.2)
<b>Green Energy</b>	143	326	394	32	26	17	25	8	26	18	152	38.6	6.3
Total	10,936	19,567	29,676	2,711	694	3,521	3,598	2,553	1,560	1,443	16,080	54.2	47.0

# **Shipbuilding**



# Market Overview Shipbuilding

- Despite tough shipping market, global new orders increased by 130% YoY as of July due to increased demands for ECO vessels
- In the 2<sup>nd</sup> half of the year, demands for LNGc and Drillship are expected to recover
  - LNG Carrier:

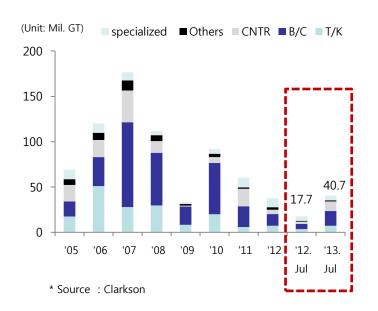
As the US readies SHALE GAS export, market expects around 18 LNG Carriers have to be delivered annually from 2016 to 2020. Considering global demand increase for natural gas, market expects annual LNG Carrier demand will be increased to 40~45 vessels for the period.

#### - Drillship

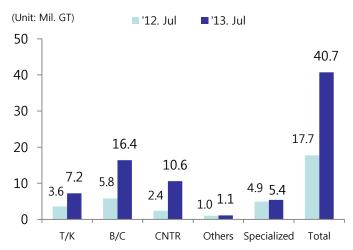
Demand has been sluggish in 2013 due to speculative orders 2011 and 2012, but drillship order is expected to recover from the 2<sup>nd</sup> half of this year as the unchartered rate for the orders has been decreased.

(Due to buyers' increased interest to Heavy Duty Design, we introduced new design of HD12000)

#### **Global demand**



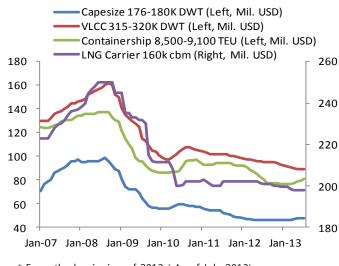
#### Global demand by vessel types



· Specialized Vessel: Drillship, LNGC and other offshore related vessels(AHTS, PSV)

\* Source : Clarkson

#### **Newbuilding price Trend**



- \* From the beginning of 2013 ( As of July 2013)
- Capesize B/C 176-180K DWT: +4.35%
- VLCC 315-320K DWT: -2.72%
- Containership 8,500-9,100 TEU: +5.88%

- LNG Carrier 160k cbm: -0.75%

HYUNDAI HEAVY INDUSTRIES

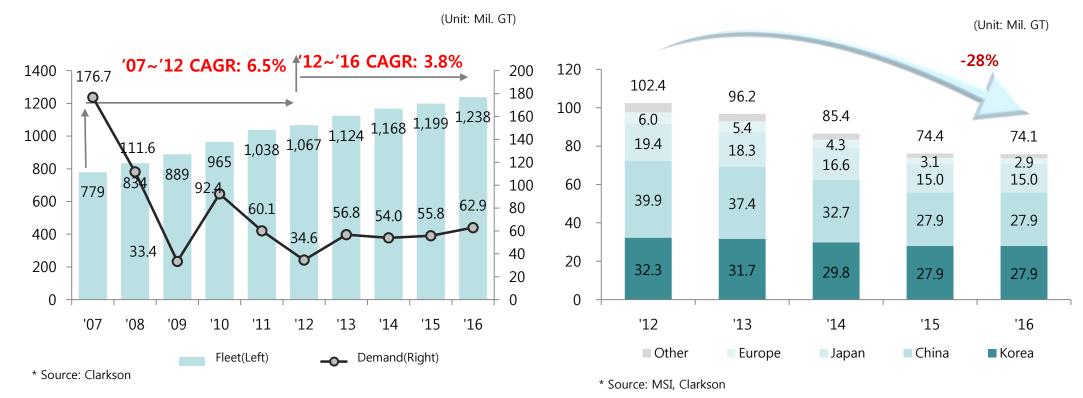
\* Source : Clarkson

# Market Outlook Shipbuilding

- Shipbuilding demand will show gradual recovery due to lower fleet increase after 2012.
  - (CAGR for the five years from `07~`12 stands at 6.5%, CAGR for the five years from `02~`16 stands at 3.8%
- As the market demand stays weak, restructuring among the less competitive shipyards will be inevitable. After the restructuring **global shipbuilding capacity is expected to decline 28% till 2016**.

#### **Global Fleet and demand Forecast**

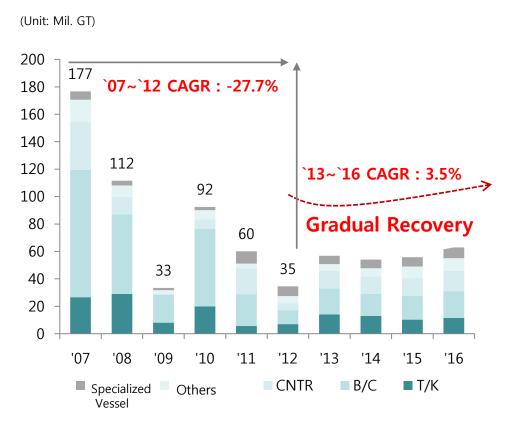
#### **Global Shipbuilding Capacity Forecast by Country**

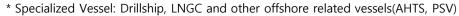


# Market Outlook Shipbuilding

- Due to slow economic recovery and slow resolution of over supply of vessels, market is expected to recover at a moderate pace.
- Due to shale gas trade and high oil price, sustained demand for LNGC is expected.
- Due to current increasing rate of charter drillship contract, demand for drillship is expected to improve in 2014.

#### **Demand Forecast by Shiptype**

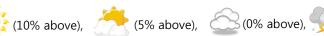


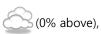


HYUNDAI HEAVY INDUSTRIES

\* Source : Clarkson









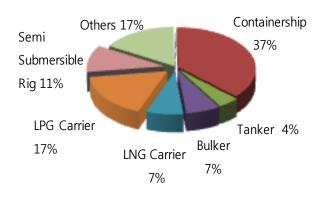
(Unit: Mil. GT)

		'12	'13	'14	'15	'16	'13~'16 CAGR	Signal		
	T/K	7	14.0	13.0	10.3	11.6	-6.1%	37		
	В/С	10.1	19	16	17.3	19.5	0.9%			
Commercial Vessels	CNTR	4.9	12.9	12.7	12.7	14.8	4.7%			
	Others	5.4	4.9	6.0	8.7	9.2	23.4%			
	Sub Total	27.4	50.8	47.7	49.0	55.1	2.7%	8		
	Drillshi p	1.8	1.2	1.6	0.9	0.8	-12.6%	<b>9</b>		
Specialized	LNGC	3.8	3.5	3.5	4.6	5.5	16.3%			
Vessels	Others	1.6	1.3	1.2	1.3	1.5	4.9%			
	Sub Total	7.2	6.0	6.3	6.8	7.8	9.1%			
Tota	Total		56.8	54.0	55.8	62.9	3.5%			

<sup>\*</sup> Others: RoRo, PCTC, Reefer, etc.

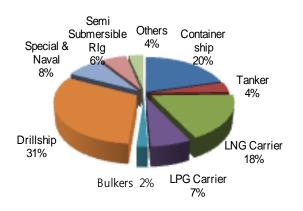
# Performance Shipbuilding

#### **New Orders by Shiptype (2013)**



• The above data is based on the amount

#### **Backlog by Shiptype (2013)**



- Backlogs as of July 2013 on a delivery basis : 132 vessels, USD 21.66 bil.
- The above data is based on the amount

#### **New Orders in 2013**

	2012	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Total	Target	Achievement	Details (mil. USD)
# of ship	38	9	0	6	12	9	10	10	56	-	-	-20 Containerships (2,204) -14 LPG Carriers (999) -8 Bulk Carriers (406) -5 Tankers (252)
Amount (mil. USD)	6,143	937	0	570	1,049	1,733	681	917	5,887	7,750	76.0%	-4 Special Vessel (518) -2 LNG Carriers (436) -2 Others (443) -1 Semi Submersible Rig (629)

<sup>\*</sup> New orders in Aug. 2013: 5 Containerships (682 mil. USD), 2 Tankers (183 mil. USD)

# **Delivery** Shipbuilding

#### **Annual Delivery (mil. GT)**

#### 10 Gunsan Offshore 9 8.1 Ulsan 8.0 8 7.5 7.2 6.6 0.8 7 6 5.4 **5.1** 0.3 5 4 6.4 6.2 6.2 3 6.0 5.1 4.8 2 4.0 1 0 2007 2008 2009 2010 2011 2012 2013(E)

#### **Annual Delivery** (number of vessels)

	2007	2008	2009	2010	2011	2012	2013 (E)
Ulsan	75	88	80	55	71	69	46
Offshore (on-ground building)	6	14	25	14	13	4	0
Gunsan	-	-	-	10	9	11	13
Total # of Ship	81	102	105	79	93	84	59

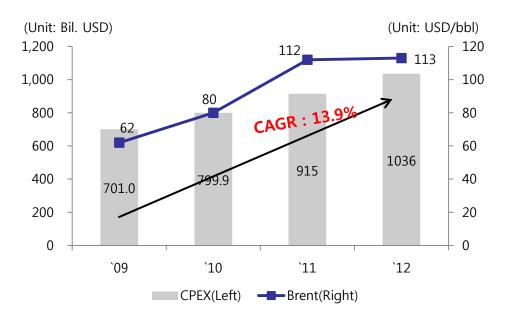
# Offshore & Engineering



# Market Overview Offshore & Engineering

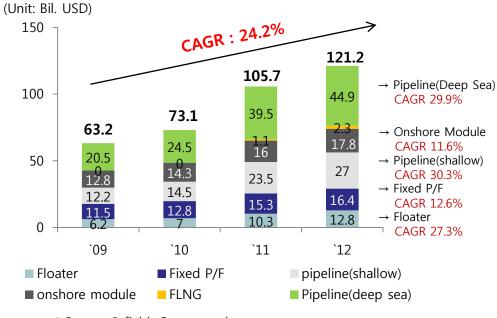
- Due to CAPEX increase of Oil Majors as high oil price maintained, size of offshore facilities market (FPSO, Platform, pipeline and etc.) has increased to U\$ 121 billion in 2012. (2009~2012 CAGR: 24%)
- Since 2010 when the oil price exceeded U\$80/barrel, the accrued CAPEX from Oil Majors reached U\$2.8 trillion.
- <u>Demand for deep see floaters is expected to increase on the back of deep sea field development</u> since medium-sized FPSO (Conversion & Lease) takes up 80% of current floater market.

#### Oil Price, Oil & Gas CAPEX



<sup>\*</sup> Source: Global Data (CAPEX Outlook, 2013), Bloomberg

#### **Global Offshore Market**



<sup>\*</sup> Source: Infield, Company data

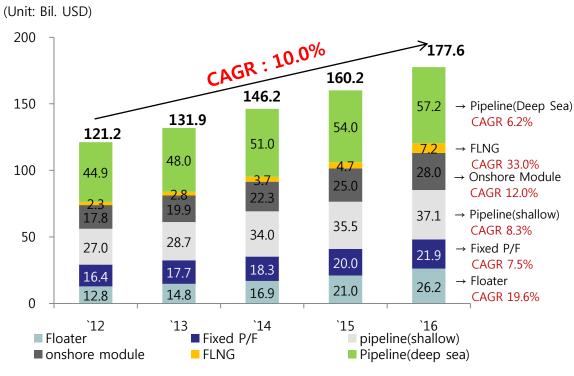
# Market Outlook Offshore & Engineering

- Oil Price is expected to stay at higher lever than the hurdle price (U\$60~70/bbl) for oil majors' investment
- Oil demand will increase from underdeveloped oil producing countries and <u>offshore market size will increase 10% annually from 2013</u>
   reaching U\$178billion in 2016
  - Sustained economic growth expected : Malaysia (5.3%), Nigeria (7.0%), Indonesia (6.4%), Thailand (5.0%)

#### **Oil Price Forecast**

#### — WTI **─** Brent (Unit: USD/bbl) 120 113 113 110 110 110 111 100 106 98 90 95 80 70 **Hurdle for Oil Majors' Investment (U\$60~70)** 60 50 '13 '14 '15 '16

#### **Global Offshore Market**



<sup>\*</sup> Source : Bloomberg ('13. March)

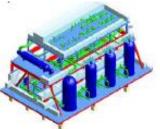
<sup>\*</sup> Source: Infield, Company data

# Performance Offshore & Engineering

#### Major Projects in 2009/2010

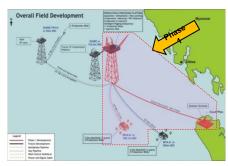


- Gorgon LNG (Oct. 2009)
- LNG processing modules fabrication
   (\$2.1 bil. from Chevron)



#### Myanmar SHWE Field development project (Feb. 2010)

Installation of gas production & processing platform,
 pipeline & onshore terminal
 (\$1.4 bil. from
 Daewoo International Corp.)





- Goliat FPSO (Feb. 2010)
- Cylindrical Floating
   Production Storage Offloading unit
   (\$1.1 bil. from ENI Norge AS)

	New Orders by Type							
(\$ mil.)	2008	2009	2010	2011	2012	July 2013		
Fixed	1,113	2,196	1,501	2,121	1,621	194		
Floating	1,704	46	1,303	1,819	412	5,178		
Subsea Pipeline	145	100	252	539	31	58		
Others	16	9	13	1	8	22		
Total	2,978	2,351	3,069	4,480	2,072	5,452		

#### **Performance Record**

(1976 ~ July 2013)

	Туре	Total number of projects	Major Projects
	Platforms	84	· Bongkot 4A Platform (PTTEP, 2012)
Fixed	Onshore Facilities	10	· Sakhalin-1 OPF Onshore Modules Fabrication(ExxonMobil, 2006)
	Jack-up rig	3	· Harsh Environment Jack-up PDQ (BP, 1994)
	Semi-submersible Drilling Rig	10	· Deepwater Horizon Semi- Submersible Drilling Unit (R & B Falcon, 2000)
Hoating	FPS0	10	· Usan FPSO (TOTAL, 2012)
	TLP	2	· West Seno Field Development (Chevron, 2003)
	<b>FPU</b>	4	· Moho Bilondo FPU (TOTAL, 2008)
Sub	sea Pipelines	5,192 km	· Paradip SPM Pipeline (IOCL, 2012)

# Performance Offshore & Engineering

### **Major Projects Awarded in 2011**

Qatar, Barzan Offshore Project



UK, Q204 FPSO



UK, Clair Ridge Platform



- Date: Jan. 2011

- Price: USD 860 million

- Owner : RasGas Company

- Completion: Nov. 2013

 Details: Fabrication and Installation of Wellhead Platforms, Living Quarters, Onshore & Offshore pipeline (EPC) - Date : Feb. 2011

- Price: USD 1.2 billion

- Owner : BP

- Completion: May 2016

Details: Construction of FPSO (EPC),
 Processing 0.32 million bpd, storing
 0.8 million bbls

- Date: Mar. 2011

- Price: USD 620 million

- Owner: BP

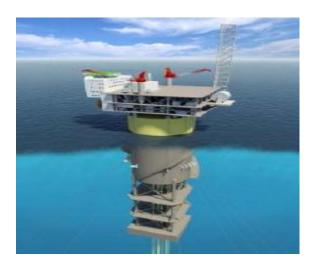
- Completion: Nov. 2014

 Details: Fabrication and Installation of Drilling and Quarters Platforms (EPC)

# Performance Offshore & Engineering

### **Major Projects Awarded in 2013**

#### Norway, Aasta Hansteen **Spar Topside**



- Price: USD 1.1 billion

- Owner: Statoil

- Completion : Feb. 2016

- Details: Fabrication and Installation of

Spar Topsides (EPC)

#### Congo, Moho Nord TLP & FPU



← TLP (Tension Leg Platform)

**FPU** (Floating Production Unit)



- Date: Apr. 2013

- Price: USD 1.9 billion

UK, Rosebank FPSO

- Owner : Chevron

- Completion: Nov. 2016

- Details : Construction of FPSO (EPC)

Processing 100,000 BOPD (Oil),

190 MMSCFD (Gas),

storing 1.05 million bbls

- Date: Mar. 2013

- Price: USD 1.9 billion

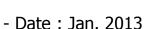
- Owner: Total

- Completion : May 2015 (TLP)

Jun. 2016 (FPU)

- Details: Fabrication and Installation of

Tension Leg Platform and



Floating Production Unit (EPC)



# **Industrial Plant & Engineering**



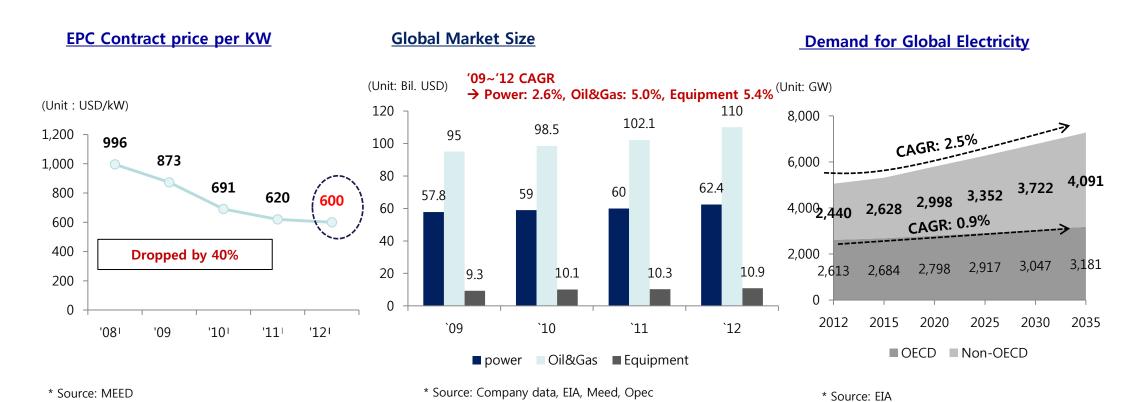






# Market Overview & Outlook Industrial Plant & Engineering

- Market expansion & growth for power plant is expected due to economical and industrial development in the middle east and ASEAN(Indonesia, Vietnam, Philippines, and etc.)
- Market growth for Oil & Gas related plant is expected due to high oil price, upgrade demand to meet environmental regulations, and Kuwait's plan to invest in refinery
- Since Korean E&C companies started to focus more on global power plant market due to poor demand in domestic construction market, **competition in power plant market has became tougher despite sustained increase in demand**. (Competition will get eased as the Korean E&C companies start to recognize huge losses)



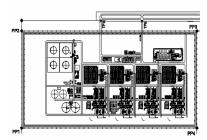
# Performance Industrial Plant & Engineering

#### **Performance Record**

		(1976 ~ July 2013)
Р	roject Type	Major Projects
		· Integrated Gas Development (IGD) Project (ADGAS, UAE, 2013(E))
	Oil & Gas	Escravos Gas Plant Phase III (Chevron Nigeria Ltd., Nigeria, 2010)
		Bonny Terminal Integrated Project (Shell Petroleum Development, Nigeria, 2008)
	Tank Farm	· KOC Crude Oil Export Facilities Project (Kuwait Oil Company, 2008)
Oil &		JPR Zarpa Tank Farm Project (Jordan Petroleum Company, 2000)
Gas		· Jazan Refinery and Terminal Project, Package. 2 (Saudi Aramco, 2016(E))
	Refinery &	HCP No.2 BTX Project Daesan (HC Petrochem, Korea, 2013(E))
	Petrochemical	• Mumbai Diesel Hydro-Desulfurization Project (Hindustan Petroleum Company, India, 2000)
		HPC 2nd Petrochemical Complex Project (Hyundai Oilbank, 1997)
	Gas To Liquid	Pearl GTL Feed Gas Preparation Project (Qatar Shell, 2011)
		<ul> <li>Riyadh PP 11 Independent Power Project         (Dhuruma Electricity Company, Saudi Arabia, 2013(E))     </li> <li>Sabiya Combined Cycle Gas Turbine Project</li> </ul>
	Combined Cycle/	(Ministry of Electricity and Water, Kuwait, 2013(E))
	Combined Cycle/ Simple Cycle	• Al Dur Independent Water and Power Project (Al Dur Power & Water Co., Bahrain, 2012)
	Power Plant	· Marafiq Independent Water and Power Project
		(Jubail Water and Power Company, Saudi Arabia, 2010)
Power		Shaybah Power Generation Project (Saudi Aramco, Saudi Arabia, 2008)
		Tihama Cogeneration Expansion Project Stage II
	Cogeneration	(Tihama Power Company, Saudi Arabia, 2015(E)) - Saudi Aramco 3rd party Cogeneration Program
		(Tihama Power Company, Saudi Arabia, 2006)
		- Jeddah South Thermal Power Plant
		(Saudi Electricity Company, Saudi Arabia, 2017(E))
	Thermal	Namjeju #3&4 Thermal Power Plant (KEPCO, Korea, 2007)
		· Makkah-Taif Thermal Power Plant
		(Saline Water Conversion Corporation, Saudi Arabia, 1989)
		Taweelah A1 (ADWEA, UAE, 2002)
Desa	alination Plant	Taweelah B (ADWEA, UAE, 1995) Umm Al Nar West (ADWEA, UAE, 1982)
		Al Khobar Phase 2 (SWCC, Saudi Arabia,1981)

	New Orders by Type								
(mil. USD)	2008	2009	2010	2011	2012	July 2013			
Power Plants	1,727	1,412	1,601	9	3,510	49			
<b>Chemical Plants</b>	117	1,177	145	493	253	2			
Plant equipment	232	237	264	512	314	125			
Total	2,076	2,826	2,010	1,014	4,077	176			

#### Major Projects in 2010/2011



- Riyadh PP11 (Jun. 2010)
- 1.6 bil. USD / Dhuruma Electricity Company, Saudi Arabia (SEC)
- 1,756MW Combined cycle power plant
- HCP BTX (May 2011)
- 361 mil. USD / HC Petrochem, Korea
- #2 BTX project to increase <u>Benzene</u>, <u>Toluene</u>, <u>Xylene</u> (BTX) capacity for HC Petrochem(JV of Hyundai Oilbank 50% + Cosmo Oil Japan 50%)



# Performance Industrial Plant & Engineering

### **Major Projects Awarded in 2012/2013**

#### Saudi Arabia, Jeddah South Power Plant



- Date : Oct. 2012

- Price: USD 3.2 billion

- Owner : Saudi Electricity Company

- Completion : Jun. 2016

- Details: 2,400MW Oil fired Conventional Power Plant

#### Saudi Arabia, Shuqaiq Power Plant



- Date: Aug. 2013

- Price: USD 3.3 billion

- Owner: Saudi Electricity Company

- Completion: Aug. 2017

- Details: 2,640MW Oil fired Conventional Power Plant

# **Engine & Machinery**











# Market Overview & Outlook Engine & Machinery

- While the market for two-stroke marine engine decreased by 19% as global commercial vessels market faced an order drought, the market for four-stroke marine engine increased by 15% as orders for special vessels such as drillships increased in 2012.
- In the first half of 2013, the demand for two-stroke marine engine showed a slight recovery driven by a slow recovery of commercial vessels market and increasing demand for eco-friendly marine engines as a result of stringent environmental regulations.

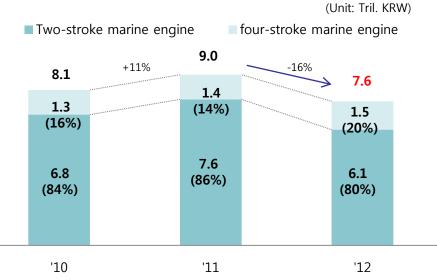
  (HHI's Eco-friendly engines: G-Type Engine production, ME-GI Engine commercialization, HiMSEN Dual-Fuel Engine development)

#### Marine engine price index trend

	`04	`05	`06	`07	`08	`09	`10	`11	`12	`13
Index	100	108	133	133	143	142	127	120	113	113

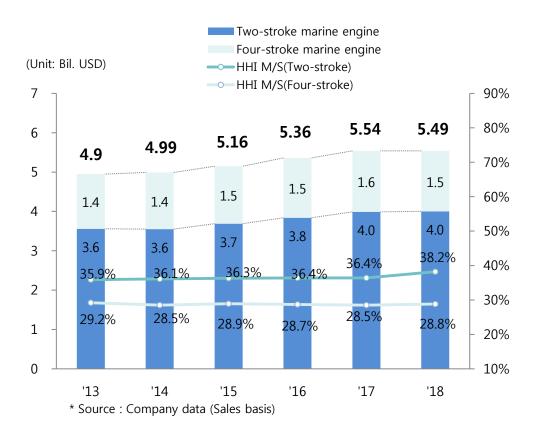
<sup>\*</sup> Source : Company data

#### Global Marine engine market size



#### \* Source : Company data (bhp production basis)

#### Global Marine engine market size and HHI M/S forecast



# Performance Engine & Machinery

#### **Eco-friendly Engine products**

#### **■** G-Type Engine Production

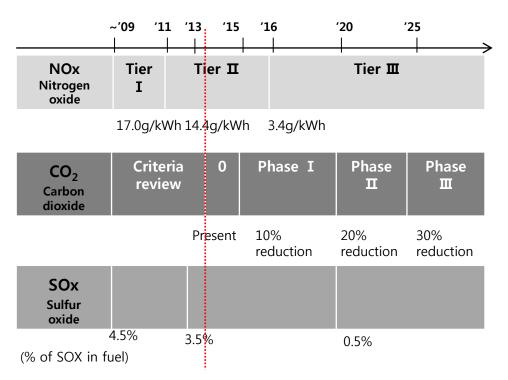
- Developed two-stroke marine engine which is capable of reducing fuel consumption and emissions by 7%. (March, 2013)
- The G-Type Engine will save \$3.2 Mil. per year for 7,500TEU Containership

#### ■ Industry's first dual-fuel marine engine package development

 Developed the engine package which operates on both natural gas and diesel fuel simultaneously. (November, 2012)

#### **■** EGR (Exhaust gas recirculation) system development

- Developed the industry's first two-stroke marine engine to feature an exhaust gas recirculation. (October, 2012)
- The system reduces NOx emissions by over 80% compared to Tier I



# Market Share in 2012 (%) Large-size Medium-size Diesel Marine Marine Propeller power Engine Engine plant

**50** 

23

90

23

95

7

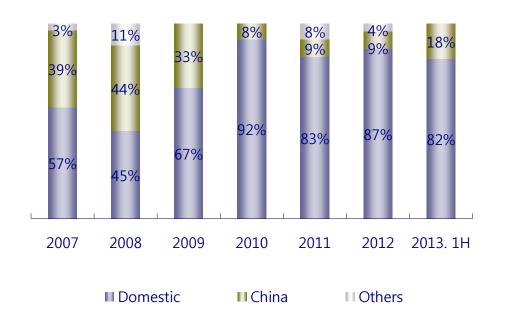
**Domestic** 

Global

52

35

#### Marine Engine New Orders Breakdown by Region



# **Electro Electric Systems**







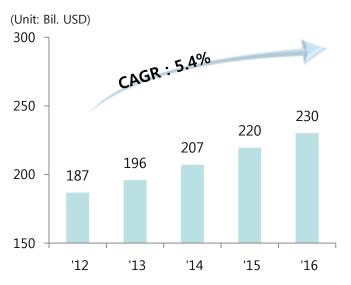


# Market Overview & Outlook Electric Systems

#### **Electro Electric Systems**

- The global electric equipment market shrank in 2009 due to financial crisis but the market size grew to 186.9 bil. USD in 2012 after hitting a record low in 2010.
- In developed countries (America, Europe), the ongoing financial crisis led to lower demand for power equipment, whereas <u>demand in emerging countries</u> (Asia, Middle East) began to show a gradual improvement.
- The global electric equipment market is expected to have stable growth potential until 2016 with CAGR 5.4% (2008~2012 CAGR 2.2%) driven by demand for replacement in developed countries, infrastructure investment expansion in Asia and Middle East, expansion of Smart-Grid market and many more.
- The slumping global economy in the recent years resulted in oversupply of electric equipment market in the first half of 2013 which will continue to intensify competition between electric equipment manufactures. To overcome the business recession, major manufacturers pursue making rapid inroads in the markets with high expected growth such as China and India.

#### **Global Electric equipment market forecast**



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\* Source: Goulden Reports, 2011

#### Market price index trend of transformers



<sup>\*</sup> Source : Company data

#### **Capacity expansion of major manufacturers**

Dan dan san		Capacity expansion
Producer	Region	Details
ABB	N. America	Acquisition of transformer company ('08)
	China	Construction of transformer manufacturing facility ('08)
SIEMENS	Russia	Construction of transformer manufacturing facility ('09)
	India	Construction of transformer and high voltage circuit breaker manufacturing facility ('10)
ALSTOM	China	Construction of transformer manufacturing facility ('09)
ALSTOW	India	Construction of transformer and high voltage circuit breaker manufacturing facility ('10)
ABB	N. America	Acquisition of transformer company ('08)
Mitsubishi	America	Construction of transformer manufacturing facility(`13)
ННІ	Russia	Construction of high voltage circuit breaker manufacturing facility (`13) 32

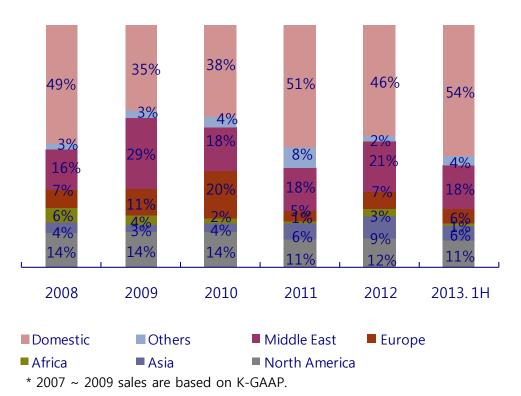
# Performance Electro Electric Systems

#### **Major performance**

#### • US transformer long-term supply contract (May 2010)

- USD 600 mil. Order for supplying transformers ranging from 230kV to 500kV to Southern California Edison(SCE) for 10 years from 2010 to 2019
- Largest transformer order to date

#### Sales Breakdown by Region



**AHYUNDAI HEAVY INDUSTRIES** 

#### **Major Projects**

Project Type	Major Projects
Generator Installation	· West Generating Project (U.S.A)
Power Transmission & Mutation Installation	· British Columbia Hydro & Power Authority (Canada)
Iron Manufacture Installation	· NUEVA VENTANAS 240MW Coal Fired Power Project (Chile)
Water Treatment & Cement & Petrochemical Installation	· KODECO IKC Project (Indonesia)
Automotive Goods	· Seoul Metro (South Korea)
Marine Goods	· Royal Nedlloyd Group (Netherlands)
Ocean Installation	· Al-Jubail Saline Water Conversion (Saudi Arabia)
Marine Steam Turbine	· Hyundai Merchant Marine LNG Carrier – 22,000MW Marine Steam Turbine (South Korea)
Know-how Export	· Gas Insulated Switchgear : TATUNG Company (Taiwan)
Fresh Water Installation	· Shuweihat S2 IWPP Project (U.A.E.)

# **Construction Equipment**













### Market Review & Outlook Construction Equipment

#### **Construction Equipment**

- In 2012, the global construction equipment market shrank by 9% (9.2 bil. USD) YoY to 83.4 bil. USD, where products that are relatively more sensitive to economic conditions shrank more than others. (Wheel loader market: -21%, Excavator market: -9%)
- Global construction equipment market is expected to shrink in 2013, esp. in China(-5%) and Europe(-15%).
- The Chinese excavator market saw a positive YoY growth from 2013 April, but the ongoing global economic challenges and tight credit policies will dampen excavator demand and the market is expected to shrink slightly for the year as a whole.
- After 2014, the global construction equipment market will see growth at CAGR of 9% until 2016, driven by steadily expanding infrastructure investment in the emerging market.

#### Trend of global construction machinery market (2009~2016)

#### (Unit: Bil. USD) ■ China ■ Europe ■ North ■ Southeast ■ Central and Others 100 Asia South America America 80 33 22 21 32 60 15 13 16 19 40 12 14 14 12 20 23 20 20 17 11 0 '09 '10 '11 '12 '13

### • Others: Middle East, India, Russia, Africa, Oceania, \* Source : : ISC, Off Highway Research, WITS Turkey, Japan and South Korea

#### **Monthly Excavator sales in China**

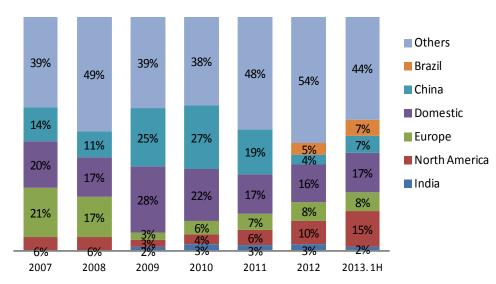


# Performance Construction Equipment

#### **Excavators Sales in China**



#### **Construction Equipment Sales by Region**



X 2007 ~ 2009 sales are based on K-GAAP.

<b>Excavator Sales in China</b>
---------------------------------

	July 2012	July 2013	YoY
Market	77,329	70,382	-9.0%
нні	6,561	5,405	-17.6%
M/S	8.5%	7.7%	-0.8%p

(Source: China construction machinery association)

#### **HHI's Excavator Market Share by Region**

	2010	2011	2012
Domestic	33.2%	32.4%	27.5%
Global	8.6%	8.0%	8.7%
China	11.3%	10.2%	8.1%
India	11.3%	13.9%	17.3%

(Source: Company data)

<sup>※</sup> Others includes Russia (10%), Middle East (9%), Africa (8%), Southeast Asia (7%), Turkey, Australia and etc.
HYUNDAI HEAVY INDUSTRIES

# **Green Energy**





# Market Review & Outlook Green Energy

#### (Solar power)

- Although ongoing chronic oversupply and fall in product prices is worsening profitability, solar panel installations in 2013 1Q increased by 21% YoY (7.6GW). The demand in China is forecasted to be 6.4GW, Japan 6.3GW, U.S.A 5.0GW, Germany 4.2GW, Italy 1.9GW.
- Chinese manufacturers continued to dump their inventories, leading to a cutthroat competition, but order opportunities in Japanese market and Europe's anti-dumping tariffs on Chinese solar panels helped to increase inquiries to Korean manufacturers.

#### (Wind power)

- In the global wind power market, the market share of Chinese manufacturers saw a continued growth brought on by extensive experiences in the domestic market, whereas the market share of the European manufacturers was scaled back.
- As the market experiences an oversupply problem, manufacturers are focusing to expand their lineup with large-sized wind turbines to diversify model lineup and pave the way for future growth.

#### **Global Market demand for Solar power**

(GW)	′08	′09	'10	'11	′12	′13(E)	′14(E)	′15(E)	′16(E)
Demand(A)	6.0	8.4	19.2	27.7	33.0	35.1	45.4	53.8	56.7
Supply capacity(B)	12.0	21.0	34.2	55.1	57.0	50.5	55.3	59.8	73.6
Excess capacity(C=B-A)	6.0	12.6	15.0	27.4	24.0	15.4	9.9	6.0	16.9
% of excess capacity(C/A)	100.0%	150.0%	78.1%	98.9%	72.7%	43.9%	21.8%	11.2%	29.8%

<sup>\*</sup> Source: Photon Consulting January, 2013

#### **Global Market demand for Wind power**

(GW)	'08	′09	′10	′11	′12	′13(E)	′14(E)	′15(E)	′16(E)
Demand(A)	26.7	38.6	36.6	41.9	48.6	40.8	48.8	48.9	52.3
Supply capacity(B)	38.1	57.3	64.4	78.6	81.0	72.4	71.9	70.5	67.1
Excess capacity(C=B-A)	11.4	18.7	27.8	36.7	32.4	31.6	23.1	21.6	14.8
% of excess capacity(C/A)	42.7%	48.4%	76.0%	87.6%	66.7%	77.5%	47.3%	44.2%	28.3%

<sup>\*</sup> Source: Bloomberg New Energy Finance, February, 2013

# **Solar Power**

- > Vertically Integrated Solar company with 600MW capacity of polysilicon-based solar modules
- > Thin-film solar cell production facility with 100 MW capacity in 2013

	Solar Cell	Solar Module	Thin-film Solar module	Solar System (Inverter)
Picture				100kW
Facilities	Solar Cell Plant (Eumseong, Korea)	Solar Module Plant (Eumseong, Korea)	<b>Hyundai Avancis</b> (Ochang, Korea)	Electro Electric Systems Division (Ulsan, Korea)
Annual Capacity (2012)	600MW	600MW	100MW	500MW
Details	- Mono-crystalline, Poly- crystalline solar cells produced	- 54 cell(6X9), 60 cell(6X10), 72 cell(6X12) modules produced	<ul><li>JVC with Saint-Gobain (50:50)</li><li>CIGS (Cu, In, Ga, Se) thin- film solar module produced</li></ul>	- Grid-Tied Solar Inverter with/without transformer

#### > Capacity and Sales

		2005	2007	2008	2009	2010	2011	2012
Capacity	Cell (MW)	30	30	60	370	370	580	600
	Modules (MW)	20	30	70	170	510	560	600
	KRW bil.) Il HHI Sales		50 0.4%	107 0.6%	150 1.3%	591 2.6%	399 1.6%	344 1.4%

<sup>\*</sup> The above capacity expansion and sales plan is subject to change according to the market situation.

#### **AHYUNDAI HEAVY INDUSTRIES**

#### > Solar Product Certification

- UL Listed
- IEC 61215 edition 2, IEC 61730 (TUV)
- J-PEC
- JET Cert
- CE Declaration
- MCS (UK)
- CSTB (France)
- Ammonia resistance test

## **Wind Power**

#### **▶** Wind Turbine Production facilities

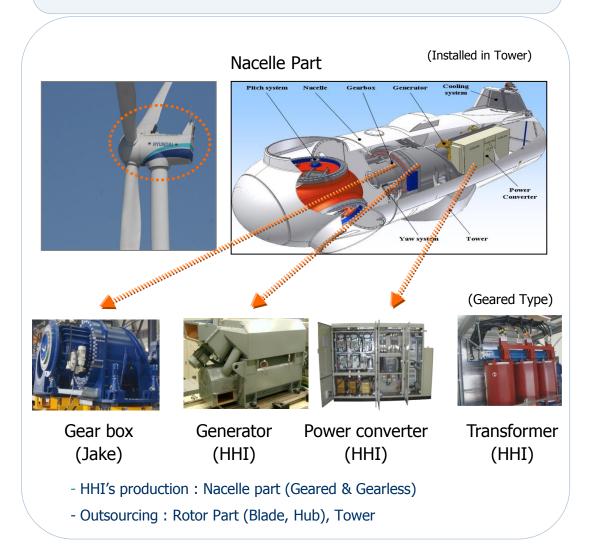
Company Name	Details
Wind Turbine plant (HHI)	<ul><li>Located in Gunsan, Korea</li><li>Annual Capacity: 600MW</li><li>Capex: KRW 110 bil.</li></ul>
Weihai Hyundai Wind Power Technology	<ul><li>Located in Weihai, China</li><li>Annual Capacity: 600MW (2MW X 300 units)</li><li>JVC with Datang Shandong Power Generation (80% by HHI)</li></ul>
Jahnel-Kestermann (Jake)	- Located in Bochum, Germany - Annual Capacity: approx. 500 units of gearbox

#### > HHI's Products & Certification

Model	Rated Power (MW)	Gear Type	Installation Type	On Market
HQ1650	1.65	Geared	Onshore	Jun. 2009
HQ2000	2.0	Geared	Onshore	Jun. 2010
HQ5500	5.5	Geared	Offshore	-

<sup>\*</sup> On Market: based on proto-type installation date

### **Wind Turbine System Structure**



# **Subsidiaries**

# **Hyundai Oilbank**

#### At a Glance

Production Capacity 390,000B/D

#1:110,000 B/D, #2:280,000 B/D

Completion of # 2 HOU Plant

34.4%

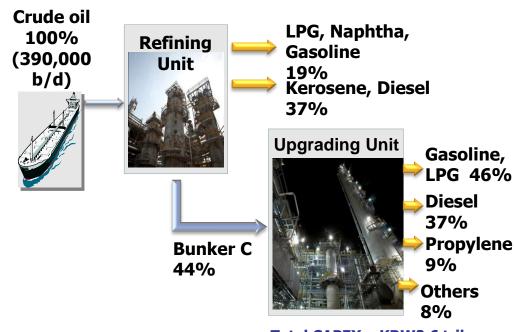
With the completion of # 2 HOU plant in Jan., 2011, Hyundai Oilbank achieved a ratio of 34.4%, the highest upgrading ratio in the industry

Domestic Light Oil Market Share 22.1%

HHI's Management Control
 Acquired by HHI in Aug., 2010

91.1%

### **Facilities & Products**

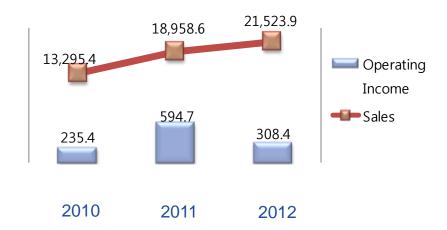


Total CAPEX: KRW2.6 tril. (JUI. 2006~ Feb. 2011)

# **Hyundai Oilbank**

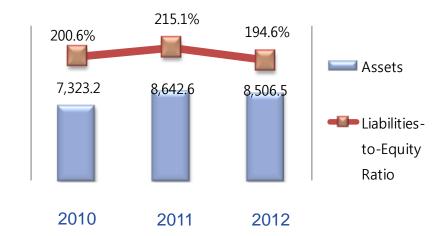
#### **Income Statement**

			(Uni	it: KRW billion)
	2010	2011	2012	2013. 1H
Sales	13,295.4	18,958.6	21,523.9	9,716.9
Operating Income	235.4	594.7	308.4	255.6
%	1.8	3.1	1.4	2.6
Net Income	409.2	360.7	156.5	66.3
%	3.1	1.9	0.7	0.7



#### **Financial Position**

	(Unit: KRW						
	2010	2011	2012	2013. 1H			
Total Assets	7,323.2	8,642.6	8,506.5	8,989.8			
Total Liabilities	4,887.3	5,899.5	5,618.8	6,035.0			
Total Shareholder's Equity	2,435.8	2,743.2	2,887.6	2,954.8			
Liabilities-to- Equity Ratio(%)	200.6	215.1	194.6	204.2			



<sup>\*</sup> The financial information of 2009 is based on K-GAAP.

# **Hyundai Samho**

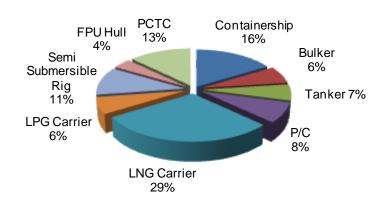
#### At a Glance

- Production Capacity
- 4.3 mil. GT
- Delivered 42 vessels in 2012
- # of dry docks: 2
- 2013 Sales Target
- 3,717 bil. KRW

2013 Order Target

4,500 mil. USD

#### **Backlog by Shiptype (2013)**



- Backlogs as of July 2013 on a delivery basis : 65 vessels, USD 6.89 bil.
- The above data is based on the amount

#### **New Orders in 2013**

	2012	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Total	Target	Achievement	Details (mil. USD)
# of ship	16	0	0	10	10	6	0	13	39	36	108.3%	-11 P/Cs (547) -10 PCTCs (687) -6 LPG Carriers (450) -4 Bulk Carriers (254)
Amount (mil. USD)	2,508	0	0	716	689	396	0	1,031	2,832	4,500	62.9%	-4 Containerships (322) -2 Tankers (114) -1 FPU Hull (270) -1 High Lift Vessel (188)

<sup>\*</sup> New orders in Aug. 2013: 5 Containerships (707 mil. USD), 2 LNG Carriers (420 mil. USD)

# **Hyundai Samho**

#### **Income Statement**

(Unit: KRW billion)

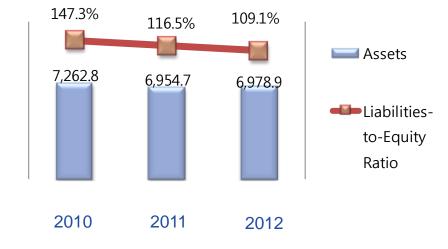
	(0.111111111111111111111111111111111111				
	2010	2011	2012	2013. 1H	
Sales	4,316.6	4,828.7	4,231.8	1,798.9	
Operating Income	830.3	804.3	254.0	16.9	
%	19.2	16.7	6.0	0.9	
Net Income	631.6	551.0	-13.4	20.5	
%	14.6	11.4	-0.3	1.1	



#### **Financial Position**

(Unit: KRW billion)

		(6			
	2010	2011	2012	2013. 1H	
Total Assets	7,262.8	6,954.7	6,978.9	6,696.2	
Total Liabilities	4,325.8	3,741.7	3,641.1	3,390.1	
Total Shareholder's Equity	2,937.0	3,213.0	3,337.7	3,306.1	
Liabilities-to- Equity Ratio(%)	147.3	116.5	109.1	102.5	



<sup>\*</sup> The financial information of 2009 is based on K-GAAP.



# Q&A

# Thank You

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#### \*For More Information

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