Doosan Quarterly Business Review 2Q 2014

2014.07.28

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Key Highlights

1. Targeting an Operating Profit of KRW 500 billion by 2018 through strengthened business portfolio

2. Fuel cells identified as an industry with huge growth potential

3. 2Q results were decent, despite a slowdown in the smartphone market, with steady earnings in Industrial Vehicle division

4. Expect 3Q OP to recover due to the sale of KFC and the launch of new cellphones, giving a boost to the Electro-Materials division

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Entering the Fuel Cell Industry

- Fuel cells are a new type of renewable energy that generate power through electrochemical reactions

ClearEdge | POWER
Delivering Smart Energy Today™

A leader in stationary fuel cells

- Company name: ClearEdge Power
- Target market: large buildings, regulatory requirements
- Mainly manufactures PAFC fuel cells

FCP 퓨얼셀파워 FuelCellPower

Pioneering the residential fuel cell market

- Company name: Fuel Cell Power
- Target market: Residential
  - Current M/S of 80% in domestic market
- Manufactures residential (1kW) and commercial (5-10kW) fuel cells

DOOSAN

- Maximize synergies through acquisition of two companies with complementary strengths in products, geography, and value chain.
  - ClearEdge Power can expand into Korean market through Fuel Cell Power's sales network
  - FCP can scale-up production and add U.S. residential sales to reduce costs and improve quality through CEP
- Use Doosan's operational excellence and global network to expand into key growth markets

Ownership of All Core Fuel Cell Technologies

- Built a full lineup of fuel cell products via the acquisition of ClearEdge Power and Fuel Cell Power.
- Fuel cells have a high barrier to entry. Core technologies in buildings, regulatory requirements, and residential applications are owned by only 7 players in the global fuel cell market.

Main Business Areas for ClearEdge Power and Fuel Cell Power

Business Area	Int'l Leaders
 Buildings	**ClearEdge Power** Fuelcell Energy Bloom Energy
 Residential	**Fuel Cell Power** Toshiba Panasonic Altergy

Past failures of Korean companies to commercialize fuel cells

- "Company A": After 10 years of effort, invested in FuelCell Energy
- "Company B": Pursued development with overseas company, now in suspension
- "Company C": Suspended commercialization of its own small PEM fuel cell technology

MOU to Build Fuel Cell Plant in Pyeongtaek

Source: GK Holdings

Building the largest fuel cell plant in Pyeongtaek

—360MW, KRW 2 trillion

Overview

- Investment: KRW 2 trillion
  Stage 1 requires KRW 500 billion for 100MW plant. Later increasing plant size to 360MW
- Schedule: Stage 1 construction will start in 2015 and be completed in 2016. Stage 2 construction will occur from 2016 to 2018
- MOU Partners: Doosan Corporation, POSCO Energy (producing fuel cells and related parts), Gyeonggi Province, Pyeongtaek, KOGAS, GK Holdings

Doosan's Fuel Cell Projects Created by Korean Regulations

- Several fuel cell projects stemming from domestic energy regulations are currently in progress

Large-scale fuel cell power facility construction started in Goduk

20MW for 45,000 households,
KRW 105 billion

- Construction-Economy Press, February 2014

Plan to build the world's largest fuel cell power plant in Songdo

60MW power plant

- Aju-Enonomy Press, March 2014

After Goduk, the next fuel cell power plant construction is Sangam

20MW, KRW 107 billion, completion by June 2015

- Today-Energy Press, May 2014

Plan to build fuel cell power plant in Gwangju

40MW, completion by 2016

- Gas Press, September 2013

Construction started of fuel cell power plant in Haeundae

30.8MW, completion by October 2015

- International Press, April 2014

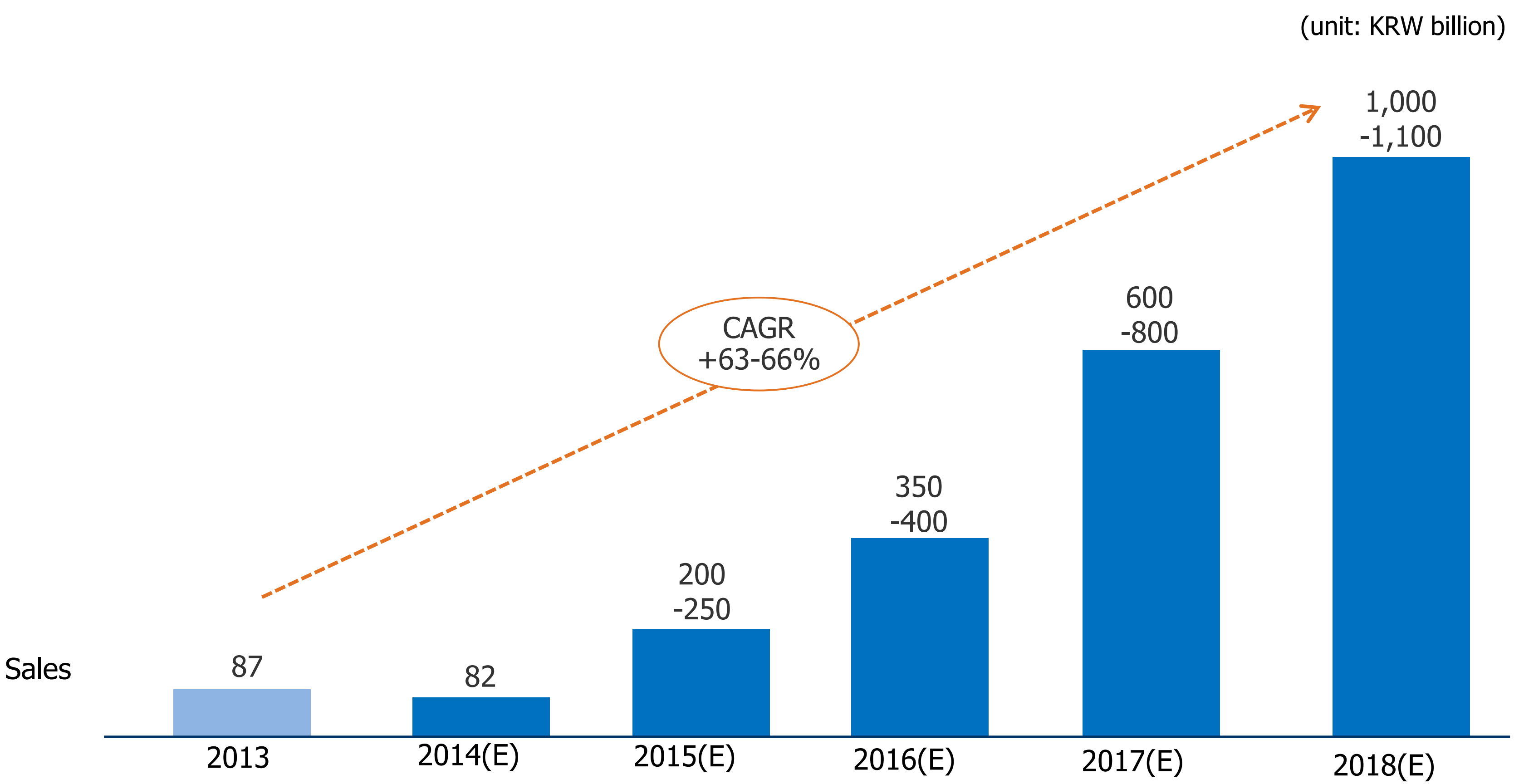
Korea South-East Power Co. builds additional 3MW fuel cell power plant in Bundang

3.08MW, operations began May 2013

- E2 Press, May 2013

Projected Revenues for Doosan Fuel Cell

- By 2018, building, residential and regulatory-required projects estimated to reach KRW 5.1 trillion
- Fuel cell sales expected to reach KRW 1 trillion — a reasonable projection given that only three players own the related technologies



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2Q/2014 Business Results (Consolidated)

- 2Q consolidated sales and OP slightly decreased YoY; however, growth was significant on QoQ basis
- In-house OP was decent, despite a slowdown in smartphone markets, mainly due to the strong performance of Industrial Vehicle division
- OP of subsidiaries increased due to improvement in earnings at Doosan Infracore

(unit: KRW billion, %)

	2013 2Q	2014 1Q	2014 2Q	YoY	QoQ
Sales	**5,845**	**4,764**	**5,299**	**-9.3%**	**+11.2%**
▪ In-house	324	429	420	+29.4%	-2.2%
▪ Subsidiaries	5,521	4,335	4,883	-11.6%	+12.6%
OP (%)	**383 (6.6%)**	**239 (5.0%)**	**329 (6.2%)**	**-14.3% (-0.4%P)**	**+37.3% (+1.2%P)**
▪ In-house	28	29	25	-9.4%	-13.1%
▪ Subsidiaries	356	210	303	-14.7%	+44.3%

2Q/2014 Business Results (Parent)

- 2Q OP decreased both YoY and QoQ to KRW 21 billion
- In house OP declined due to earnings slowdown in Electro-Materials; however, Industrial Vehicle continued to generate steady earnings through expanding M/S domestically and sales growth in export markets
- Dividend income and others decreased QoQ due to base impact of 1Q

(unit: KRW billion, %)

	2013 2Q	2014 1Q	2014 2Q	YoY	QoQ
Sales	**355**	**504**	**448**	**+26.1%**	**-11.2%**
OP (%)	**30** (8.5%)	**80** (15.9%)	**21** (4.6%)	**-31.7%** (-3.9%P)	**-74.5%** (-11.4%P)
▪ **In-house**	**28**	**29**	**25**	**-9.4%**	**-13.1%**
- Electro-Materials	14	11	7	-51.7%	-38.9%
- Industrial Vehicle	-	12	12	-	+5.2%
- Mottrol	6	-2	0	-	-
- I&C	7	8	6	-16.4%	-21.8%
▪ **Dividend income, etc.***	**2**	**51**	**-5**	-	-

* Dividend income, brand royalties and others

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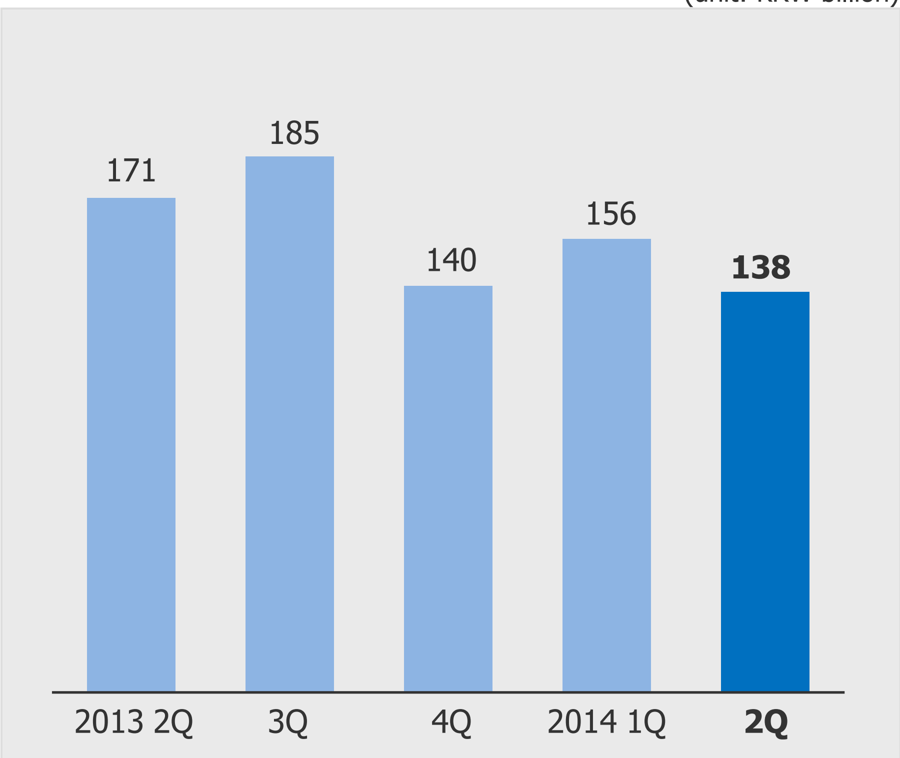
Electro-Materials — 2Q Results (Parent)

- 2Q sales and OP down because of slowdown in smartphone industry
- Have secured a growth driver in Package Copper Clad Laminate, a type of CCL with one of the highest margins in the division, which has risen to 20% of Electro-Material's total sales
- Expect OP to rebound in 2H thanks to new smartphone launches by major clients

Quarterly Sales

(unit: KRW billion)



2Q Results

1 Client Diversification

- Search for new clients overseas
  - Strengthen overseas sales networks and R&D channels
  - Secure new clients in Japan and China
- Diversify product lines through auto parts
  - Enter auto electric device and lighting business (KRW 45 billion sales of auto electric devices in 2014)

2 Improve Cost Structure

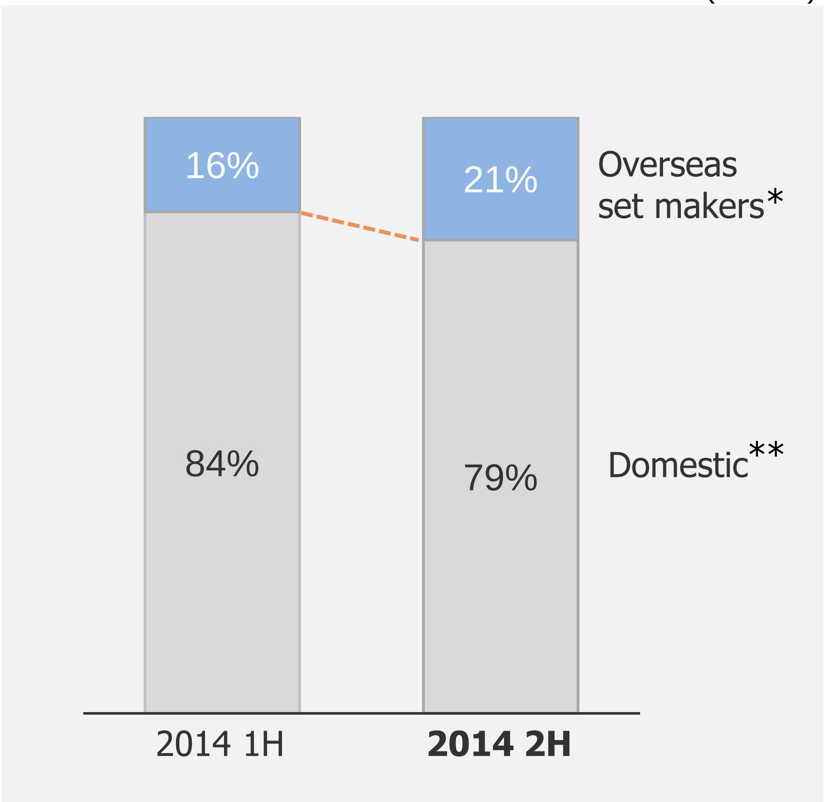
- Improve cost structure via short-/long-term cost road map
- Revamp production platform and reduce costs
  - Improve production quality
  - Save costs by diversifying resources

Electro-Materials — 2014 Outlook (Parent)

- Seek growth through diversifying clients and applications, and increase sales from launches of new smartphones in 2H

Domestic and Overseas Sales Breakdown

(Unit: %)



* "Company A" and Chinese set makers
** Companies "S" and "L"

Core Strategies

1 Launch cover-lay business

- Enter cover-lay film business to build full lineup of Flexible Printed Circuit Board materials
- Utilize FCCL client network to expand portfolio

2 Increase sales to overseas clients

- Expand marketing activities with Chinese set makers
- Work with local agencies and dealers in overseas markets
- Strengthen relationships with overseas clients

3 Add new growth drivers

- Acquire a copper foil manufacturer for high-end CCL and Lithium Ion Battery
- Improve profitability and secure new growth momentum through cost reduction

Overview of Circuit Foil

CIRCUIT FOIL

The leading copper foil manufacturer

Overview

- Company name: Circuit Foil
  - Established in 1959, based in Luxembourg
- Financial Status: Sales of US$106 million (2013)
- Former owner: ArcelorMittal

Business

- Major Business: Copper foil manufacturer for high-end CCL (global market share: 4%)
- Product: Copper foil for batteries, PKG CCL, NWB CCL, FCCL

Background & Synergy

M&A Background

To strengthen high-end CCL business and to enter new businesses

1. Stable supply of high-end copper foil & improve cost competitiveness

+

2. Enter elecfoil business for electric vehicles

Synergies

1. Improve profitability by internal sourcing of copper foil

2. Expand business to elecfoil for electric vehicles

3. Technological innovation through cross-R&D with material divisions from the core level (e.g.: heat radiation, shielding, graphene)

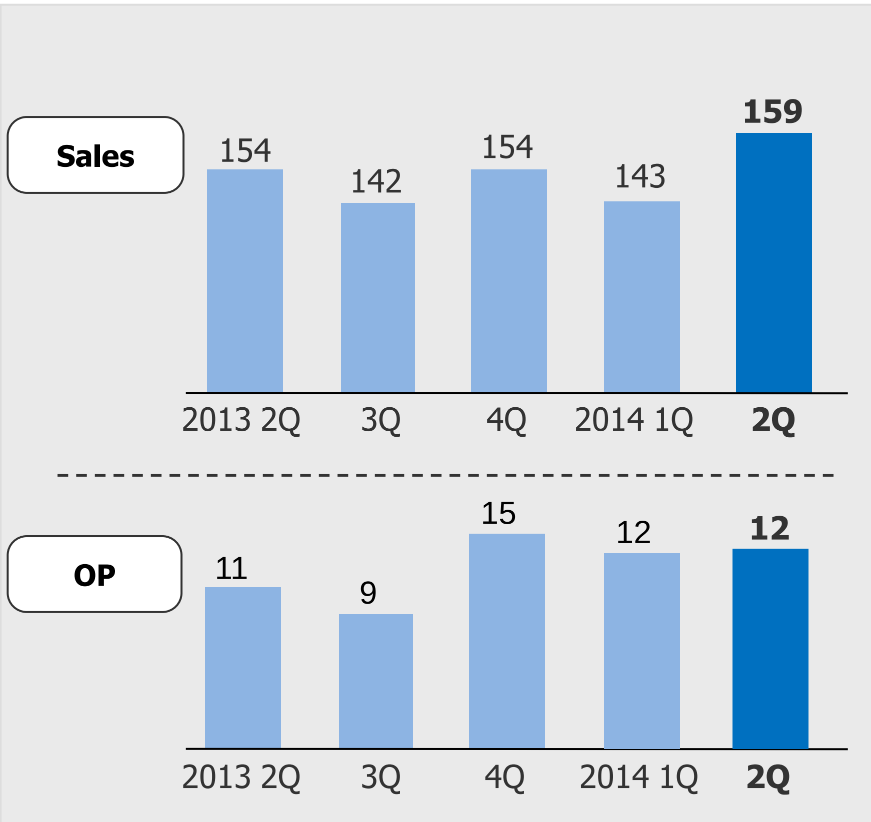
Improve profitability of in-house business and secure additional growth momentum

Industrial Vehicle – 2Q Results (Parent)

- 2Q sales and OP increased both YoY and QoQ, sales to KRW 159 billion and OP to KRW 12 billion
- Domestic sales grew 22% and sales to advanced markets rose 7% due to economy recovery

Quarterly Sales

(unit: KRW billion)



2Q Results

1 Strengthened domestic market leadership

- Maintained No. 1 spot in domestic market share thanks to the stable supply of G2 engines
- Dominant market position due to fleet deal orders from logistic companies and environmental forklift business initiated by the government
- Strengthened domestic dealers' capabilities

2 Enhanced foreign market positioning

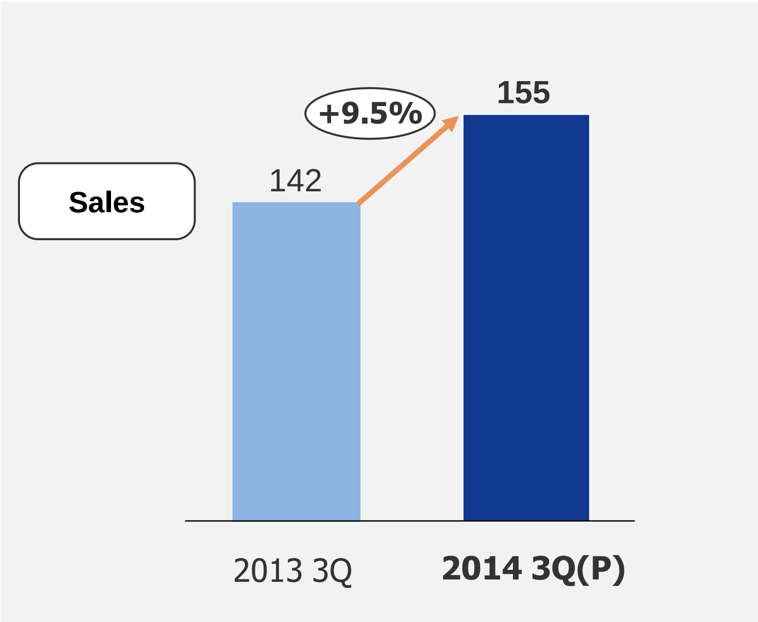
- Increased fleet deal orders in target markets
  - Continued to grow sales of national accounts
  - Started supplying to new rental companies
- Secured production capacity and developed new dealers in western EU as economy recovery is expected
- Strengthened product support to secure large-size clients, as market demand in Turkey is changing from engine type to electric type

Industrial Vehicle – 2014 Outlook (Parent)

- Expect 3Q sales to increase 9.5% YoY thanks to strengthening domestic client service and economic recovery in EU and emerging markets
  – Strengthening price competitiveness in EU, backed by Korea-EU FTA tariff reductions
  – Expect high demand in emerging markets, including South Africa, Turkey, Indonesia
  – Continued growth in orders from major oil company in Saudi Arabia and construction sites in the Middle East
  – Growing component business sales with eco-friendly policy led by government

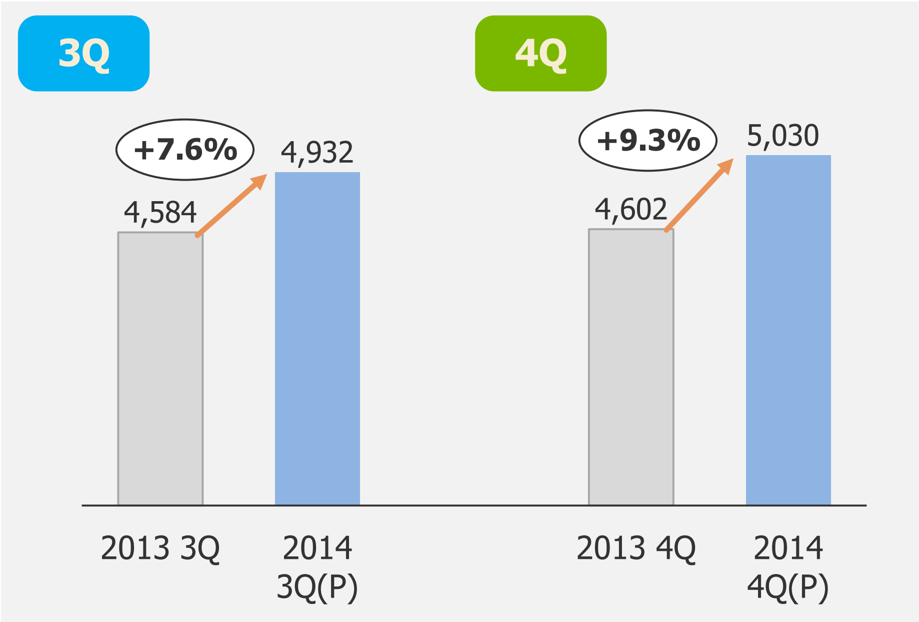
3Q Forecast

(unit: KRW billion)



2H Sales Forecast

(unit: vehicles)

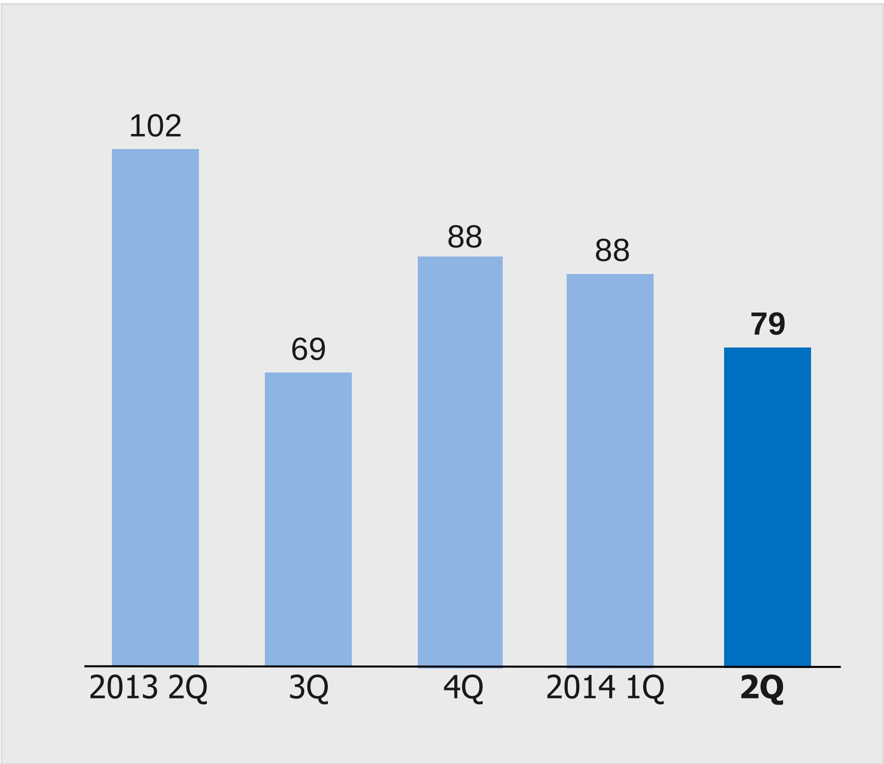


Mottrol – 2Q Results (Parent)

- 2Q sales declined 23% YoY to KRW 79 billion, while OP broke even
- Sales decreased due to tight financial policy by Chinese government, liquidity difficulties at Chinese customers, and a slowdown in EU growth

Quarterly Sales

(unit: KRW billion)



2Q Results

1 Diversified Clients and Product Portfolio

- Supply new products to Chinese manufacturers
  - "Company X": Swing devices
  - "Company L": Travel devices, swing devices, pumps
- Increase set-base sales to Chinese local makers
  - "Company X": set-base pilot (travel, swing, MCV)

2 Improved Profitability

- Local sourcing in China
- Improved production efficiency and reduced manufacturing cost (domestic site)
  - Integration of production lines, reduced costs of expendables

Mottrol – 2014 Outlook (Parent)

- Expect 3Q sales to grow 11% YoY, while annual fixed costs decrease 7% YoY
- Expand market share in China through additional sales to Chinese and foreign manufacturers
- Improve profitability by group-wide Design-to-Cost and maximizing production efficiency

Key Business Plans

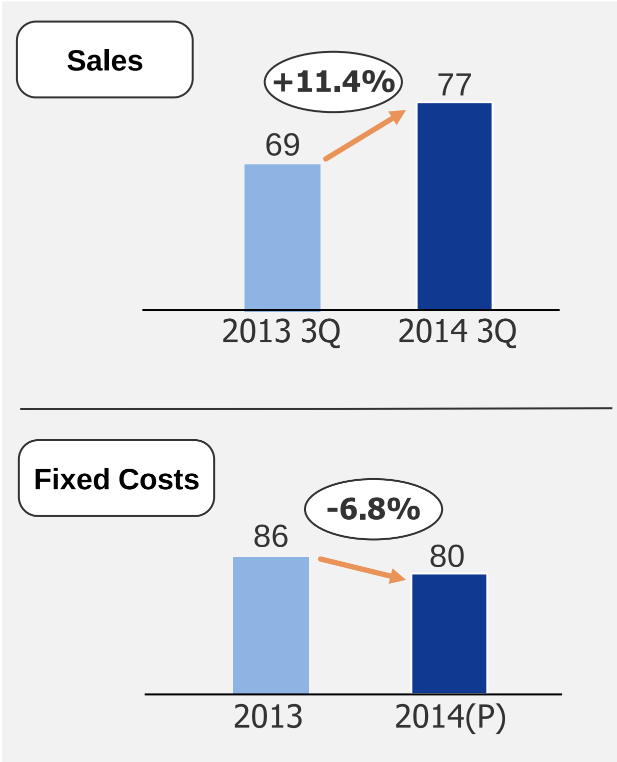
Growth

- Expand market share in China
  - Supply 5 products to major Chinese clients including companies "S" and "X"
  - Supply travel devices to companies "K" and "J"
- Increase set-base sales
  - "Company X": set-base pilot (21 tons)

Profitability

- Reduce manufacturing cost by BG-wide Design-to-Cost
- Maximize production efficiency
- Strengthen cost competitiveness by local sourcing in China
- Improve fixed cost structure

(unit: KRW billion)



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Appendix. 2Q Results of Subsidiaries – Consolidated

- Doosan Heavy Industries' sales and OP increased QoQ due to seasonal factors and profitability enhancement efforts
- Infracore's OP increased YoY thanks to solid performance of machine tool BG and high demand in advanced markets
- E&C's OP declined slightly YoY; however, we expect OP to increase in the second half due to increases in orders in Infra BG and equipment BG
- Engine's sales grew both YoY and QoQ due to improvements in product mix and an increase in new orders

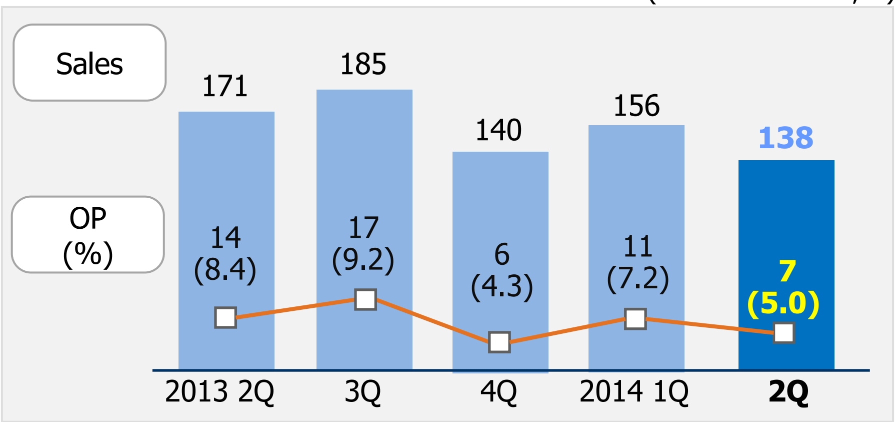
(unit: KRW billion, %)

		2013 2Q	2014 1Q	**2014 2Q**	**YoY**	**QoQ**
Heavy Industries & Construction	Sales	5,171	4,177	**4,660**	-9.9%	+11.6%
	OP (%)	314 (6.1)	203 (4.9)	286 (6.1%)	-9.0% (0%P)	+40.5% (+1.2%P)
Infracore	Sales	2,182	1,809	**2,113**	-3.1%	+16.8%
	OP (%)	121 (5.6)	99 (5.5)	146 (6.9)	+20.0% (+1.3%P)	+47.1% (+1.4%P)
Engineering & Construction	Sales	619	518	**594**	-4.1%	+14.5%
	OP (%)	37 (6.0)	23 (4.5)	32 (5.5)	-12.9% (-0.5%P)	+38.5% (+0.9%P)
Engine	Sales	212	165	**244**	+15.2%	+48.2%
	OP (%)	2 (0.9)	-19 (-11.6)	**-13** (-5.3)	TR	-

Appendix. Quarterly Results – In-House Business

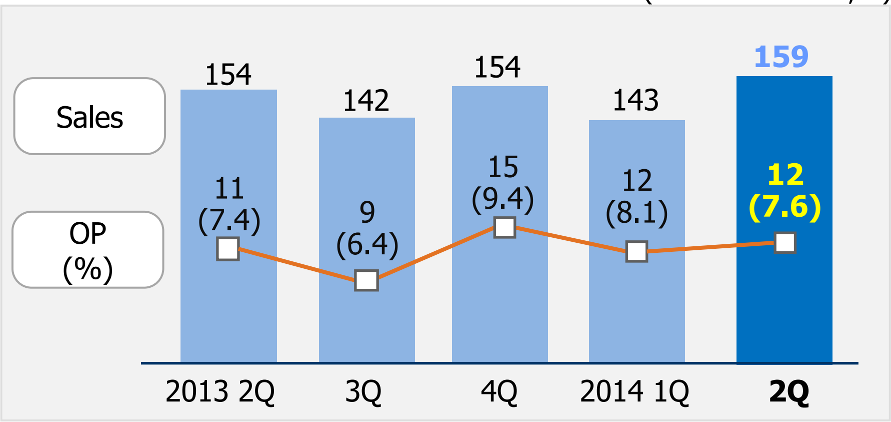
Electro-Materials

(unit: KRW billion,%)



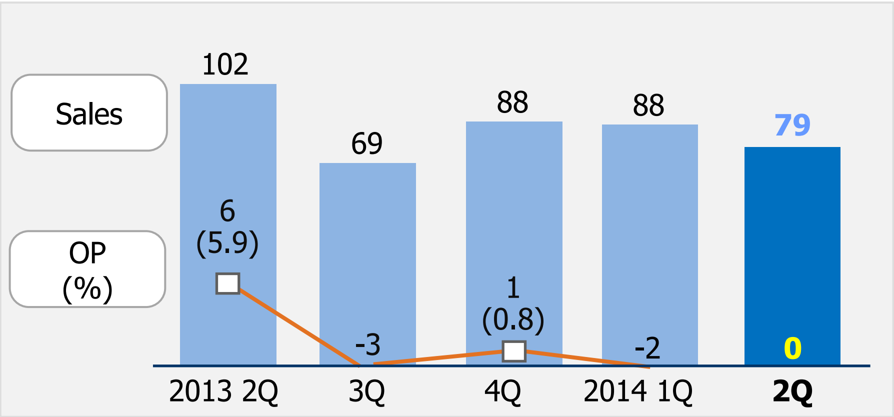
Industrial Vehicle

(unit: KRW billion,%)



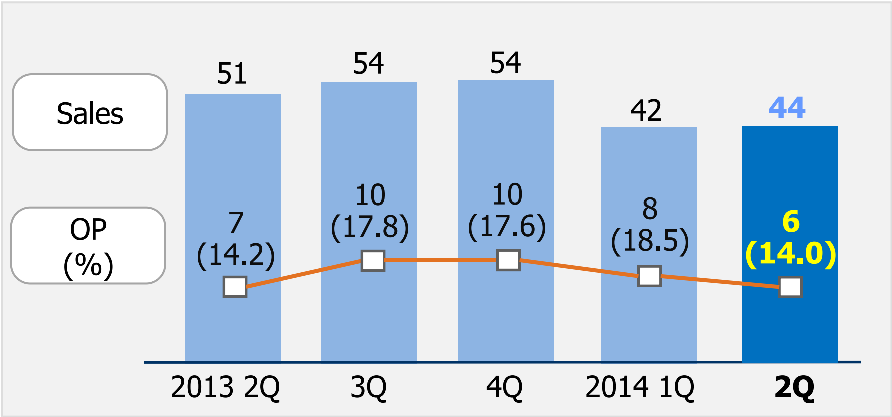
Mottrol

(unit: KRW billion,%)



I&C

(unit: KRW billion,%)



Appendix. Financial Summary

Financial Summary (B/S)

(unit: KRW billion)

	Parent	
	2014 1Q	2014 2Q
Current Assets	690	**678**
Non-Current Assets	2,726	**2,718**
Total Assets	3,415	**3,396**
Current Liabilities	660	**692**
Non-Current Liabilities	783	**720**
Total Liabilities	1,443	**1,412**
Paid-in Capital	133	**133**
Total Equity	1,972	**1,983**

L/E Ratio	73%	**71%**

(unit: KRW billion)

구 분	Consolidated	
	2014 1Q	2014 2Q
Current Assets	13,010	**13,342**
Non-Current Assets	18,917	**18,586**
Total Assets	31,927	**31,928**
Current Liabilities	13,378	**13,414**
Non-Current Liabilities	9,517	**9,728**
Total Liabilities	22,895	**23,142**
Paid-in Capital	3,041	**2,974**
Total Equity	9,032	**8,786**

L/E Ratio	253%	**263%**

Debt

(unit: KRW billion)

구 분	Parent	
	2014 1Q	2014 2Q
Bank	270	**352**
Corp. Bonds	530	**530**
Others	53	**53**
Debt	853	**934**
Cash	68	**78**
Net Debt	785	**857**

Net D/E Ratio	40%	**43%**

E O D