



Doosan Corporation Quarterly Business Review 3Q 2014

2014. 10. 30



Disclaimer

The following report has been made for informational purposes only and contains preliminary data which may be materially different from final figures. Forecasts and projections contained in this material are based on the current business environment and management strategies and have been made in good faith. Certain data were obtained from various external sources.

Doosan does not guarantee or take responsibility for the use of this report. The final decision and responsibility for actions rest solely with the reader.

Key Highlights

1

Recorded historic-high quarterly sales and OP(parent basis) in 3Q

2

Significant YoY and QoQ in-house OP growth achieved in 3Q thanks to solid performance of Electro-Materials and Industrial Vehicle

3

New growth and order momentum secured by acquiring and operating Fuel Cell as in-house business on Oct 1st

4

Continued shareholder friendly policy via dividends and share buyback

Table of Contents

I. 3Q Business Results

II. Divisional Business Results and Outlook

III. Fuel Cell Business Outlook

IV. Appendix

3Q Business Results (Parent)

- 3Q sales and OP grew remarkably on YoY and QoQ comparison
 - In-house OP increased both YoY and QoQ to KRW 140bn due to strong earnings from Electro-Materials supported by new product releases in front industry and solid performance of Industrial Vehicle
 - Dividend income and others increased due to cash inflow from the disposal of KFC

(unit: KRW billion, %)

	'13. 3Q	'14. 2Q	'14. 3Q	YoY	QoQ
Sales	419	448	584	+39.5%	+30.5%
OP (%)	53 (12.6%)	21 (4.6%)	140 (24.0%)	+164.2% (+11.4%P)	+582.9% (+19.4%P)
▪ In-house	28	25	31	+12.0%	+22.7%
▪ *Dividend income and others	26	-5	109	+328.2%	-

* Dividend income, brand royalties and others

3Q Business Results (Consolidated)

- Consolidated 3Q sales and OP decreased slightly on YoY comparison
 - In-house OP increased significantly both YoY and QoQ, thanks to the strong performance of E-Ms and Industrial Vehicle divisions and increase of dividend income
 - OP of subsidiaries decreased due to order delays and seasonality

(unit: KRW billion, %)

	'13. 3Q	'14. 2Q	'14. 3Q	YoY	QoQ
Sales	5,161	5,299	4,943	-4.2%	-6.7%
▪ In-house	355	420	432	+21.6%	+2.9%
▪ Subsidiaries	4,806	4,880	4,512	-6.1%	-7.5%
OP (%)	246 (4.8%)	329 (6.2%)	207 (4.2%)	-16.0% (-0.6%P)	-37.0% (-2.0%P)
▪ In-house	28	25	31	+12.0%	+22.7%
▪ Subsidiaries	219	303	176	-19.5%	-42.0%
Net Income	-23	33	77	TB	+132.4%

Table of Contents

I. 3Q Business Results

II. Divisional Business Results and Outlook

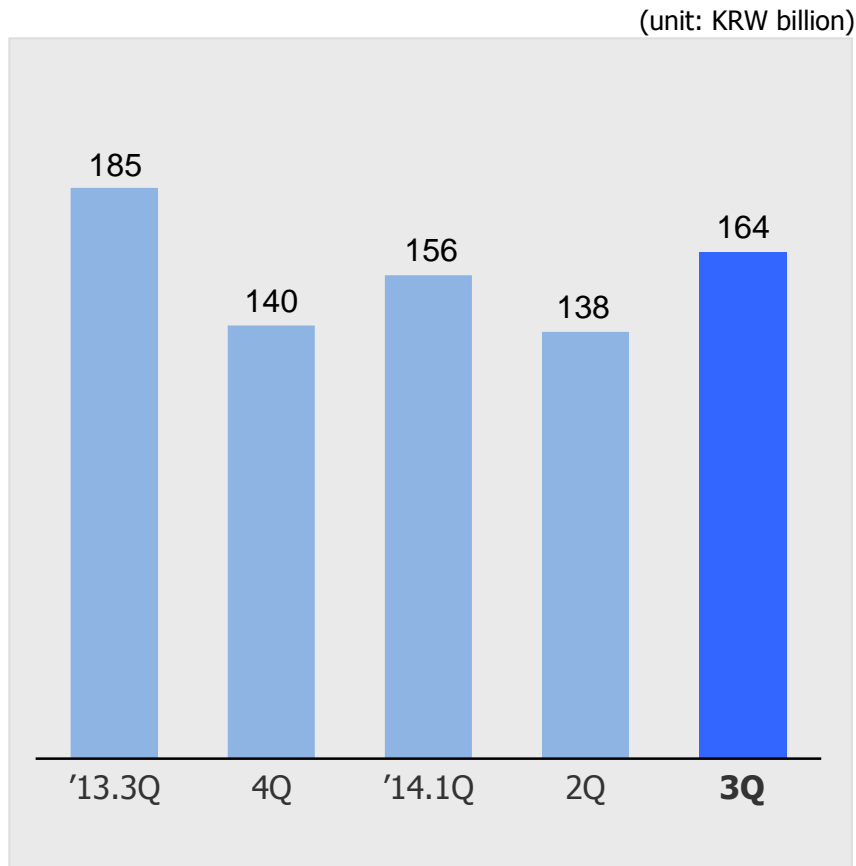
III. Fuel Cell Business Outlook

IV. Appendix

Electro-Materials – 3Q Results (Parent)

- 3Q sales increase QoQ to KRW 164bn thanks to new smartphone release by major clients and sales increase of Package CCL

Quarterly Sales



3Q Results

1

Strengthen overseas & new businesses

- Market expansion in China and Vietnam
- Sales from the new Coverlay business, which is part of our efforts to provide full line-up for FPC materials
- Expanded sales to global SET makers with additional applications (Package CCL)
- Stabilized profitability of Circuit Foil Luxembourg by improving yield rate

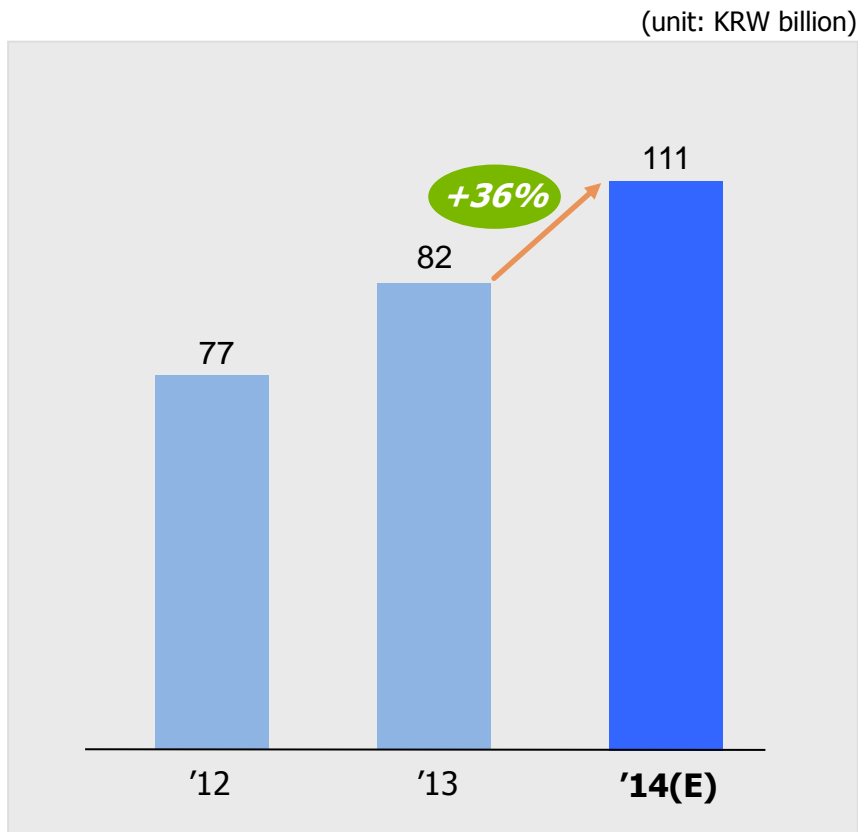
2

Cost innovation

- Lowered raw material costs such as copper foil/film
- Diversified sourcing from Chinese companies
- Cost innovation through product simplification and enhanced production efficiency

Electro-Materials – 4Q Outlook & Strategy

Sales Trend of Package CCL



4Q Strategy

1

Increase sales of Package CCL

- Increase sales to existing clients (Company S,H)
- Sales for additional applications to new clients (Company I,N,K)

2

Diversify client base

- Expand Chinese accounts by enhancing sales network and strengthening technology support
- Increase sales to Chinese set makers and Company A

3

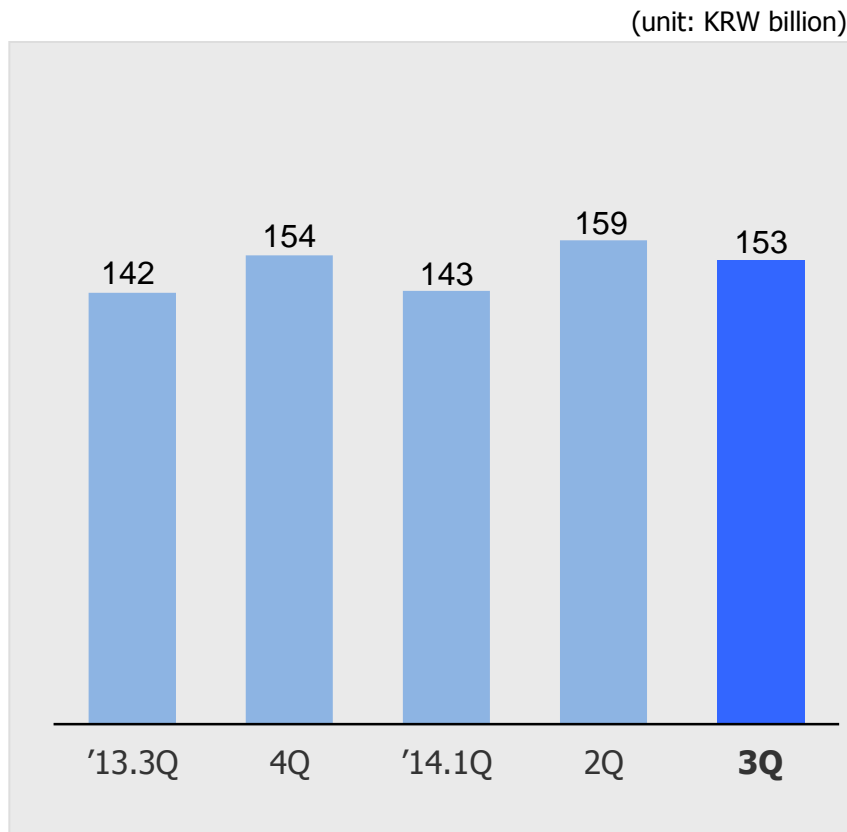
New growth opportunity & Secure profitability

- Expand line-up to related area such as automobile CCL
- Maximize synergy between Circuit Foil and seek new business opportunity such as functional film

Industrial Vehicle – 3Q Results (Parent)

- Domestic sales grew 12% YoY in line with market share gains, while exports also increased QoQ due to economic recovery of developed markets and improving market conditions in Eastern Europe/emerging markets

Quarterly Sales



3Q Results

1

Strengthened domestic market leadership

- Maintain No.1 position in domestic market due to stable supply of mid/small-size products and fleet-deal orders
- Sales promotion during slow season
- Better A/S coverage and brand value compared to peers by extending warranty for key components

2

Enhanced overseas market position

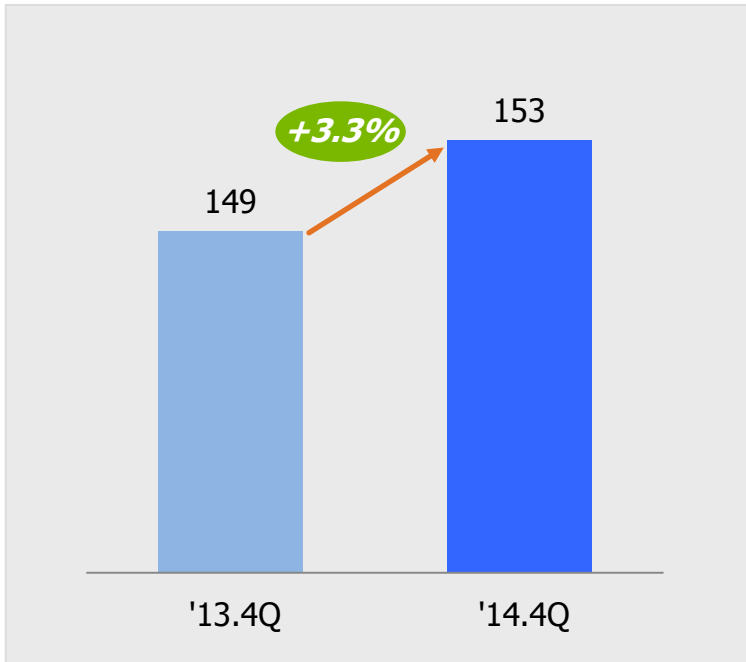
- Introduced T4 products in Europe and strengthened product line-up in North America and EU
- Promoted brand value and technology by hosting dealer meeting in North America and launching ceremony in UK
- Secured fleet-deal orders in emerging markets
 - Mexico, Colombia, Venezuela etc.

Industrial Vehicle – 4Q Outlook & Strategy

- Despite unfavorable condition in emerging market and adverse exchange rate, we expect 4Q sales to increase YoY thanks to the strong demand in domestic and developed markets
 - Domestic : Promote rental business and support dealer’s incentive program
 - North America/EU : Strengthen class 3 product line-up and launch T4 product
 - Central and South America : Build up network by hosting dealer’s conference
 - Middle East/Africa : Conduct service training program to regional dealers

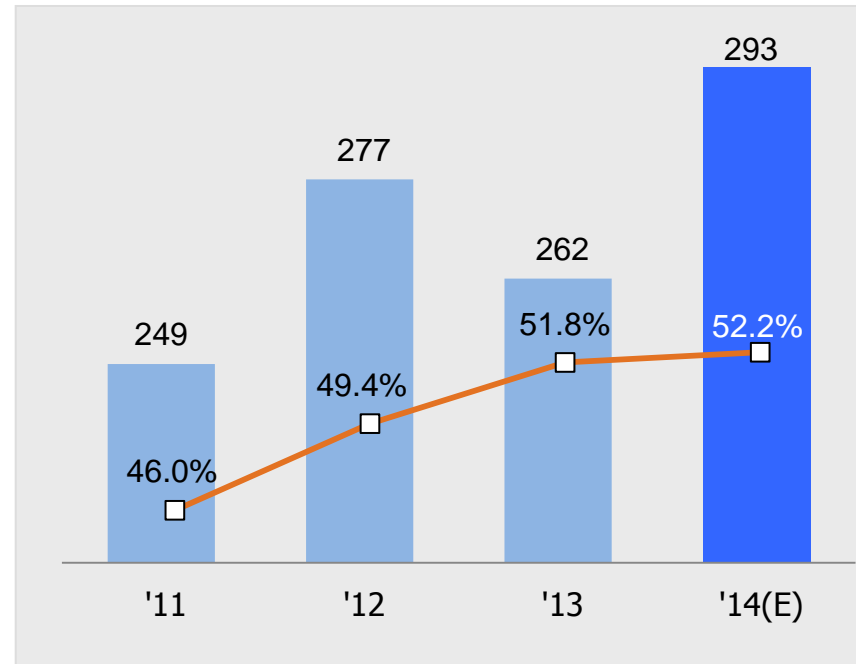
4Q Sales Forecast

(unit: KRW billion)



Domestic M/S and Sales

(unit: KRW billion, %)

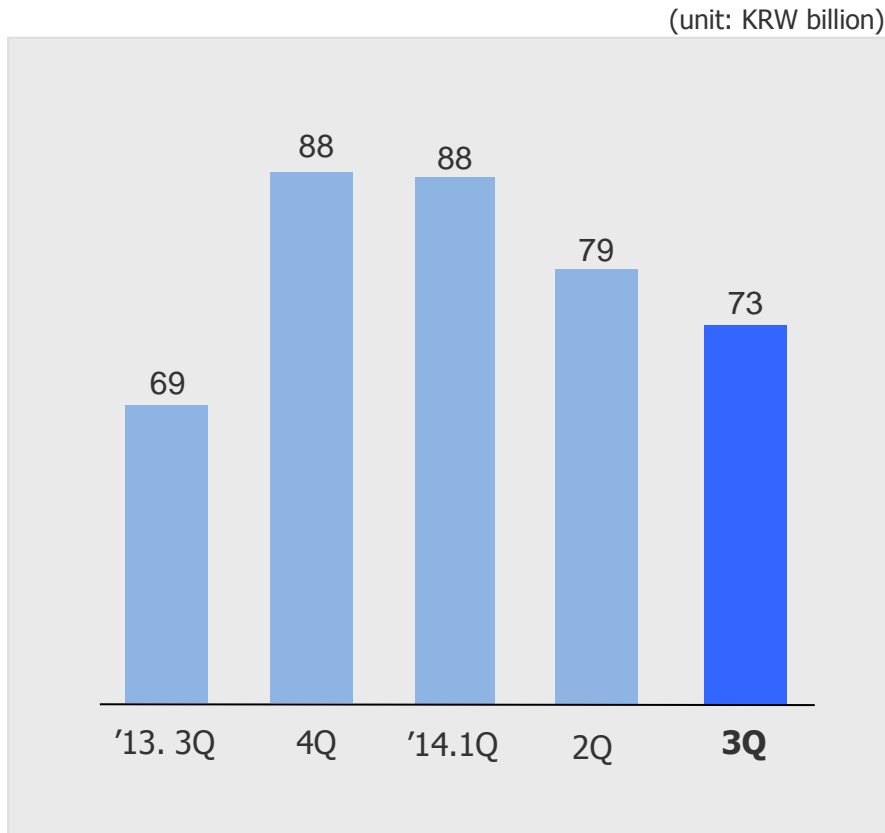


* 4Q13 sales(parent basis) excludes dividend from overseas subsidiaries(KRW5.7bn)

Mottrol – 3Q Results (Parent)

- 3Q sales grew 5% YoY to KRW73bn and OP improved both YoY and QoQ basis
- OP turned positive thanks to our cost reduction efforts despite the market slowdown in China and Europe

Quarterly sales



3Q Results

1

Diversified Clients and Product Portfolio

- Expanded supply chain in China (travelling/swing/MCV)
 - Supplied swing device to company X and currently testing pump to supply to company L
 - Negotiating with company Su for 3 types of travelling devices, and developing 6 new travelling/swing products
- Increased sales to advanced companies
 - Supplied sample to company J, H and company B

2

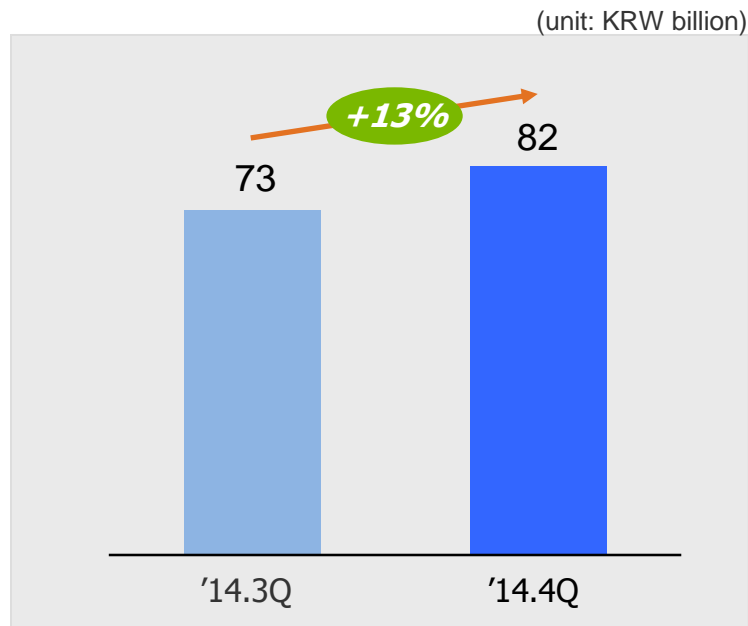
Improved Profitability

- Accelerated local sourcing in China
 - Producing pilot products to company S
- Saved cost via improving production efficiency of domestic plant
 - Integrated painting process, provided internal logistic services and internalized manufacturing zero tail parts

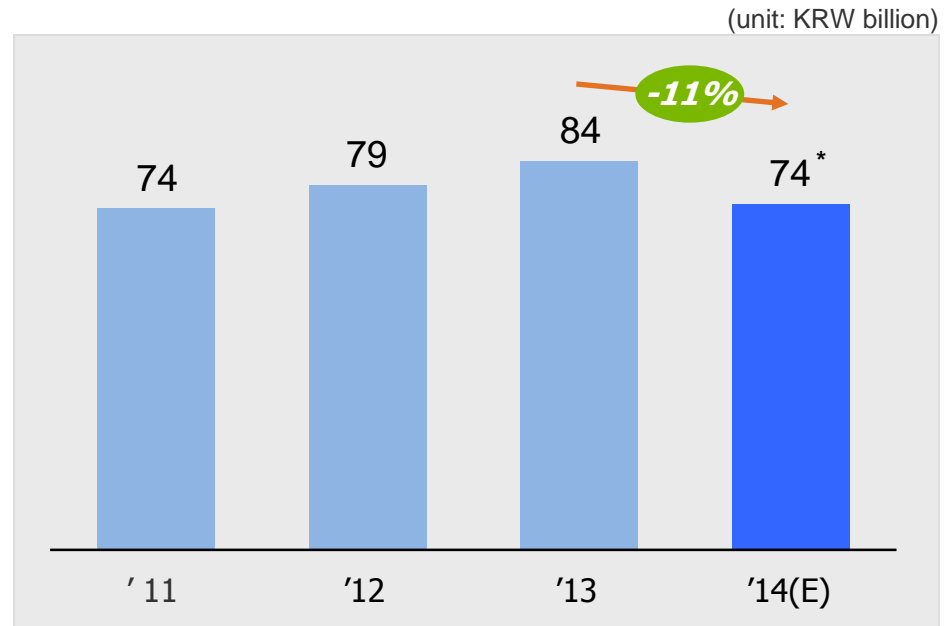
Mottrol – 4Q Outlook

- Expect to receive new orders from major clients in China before the Chinese New Year despite the continuous Chinese market slowdown, and plan to increase sales via product portfolio diversification
 - Continue to expand client base for both local Chinese and advanced companies
 - Expand set-based sales to company X
 - Improve profitability by increasing local sourcing
 - Continue efforts for reducing manufacturing and fixed costs

Sales Outlook for 4Q



Fixed Cost



* Excluding one-off restructuring expenses

Table of Contents

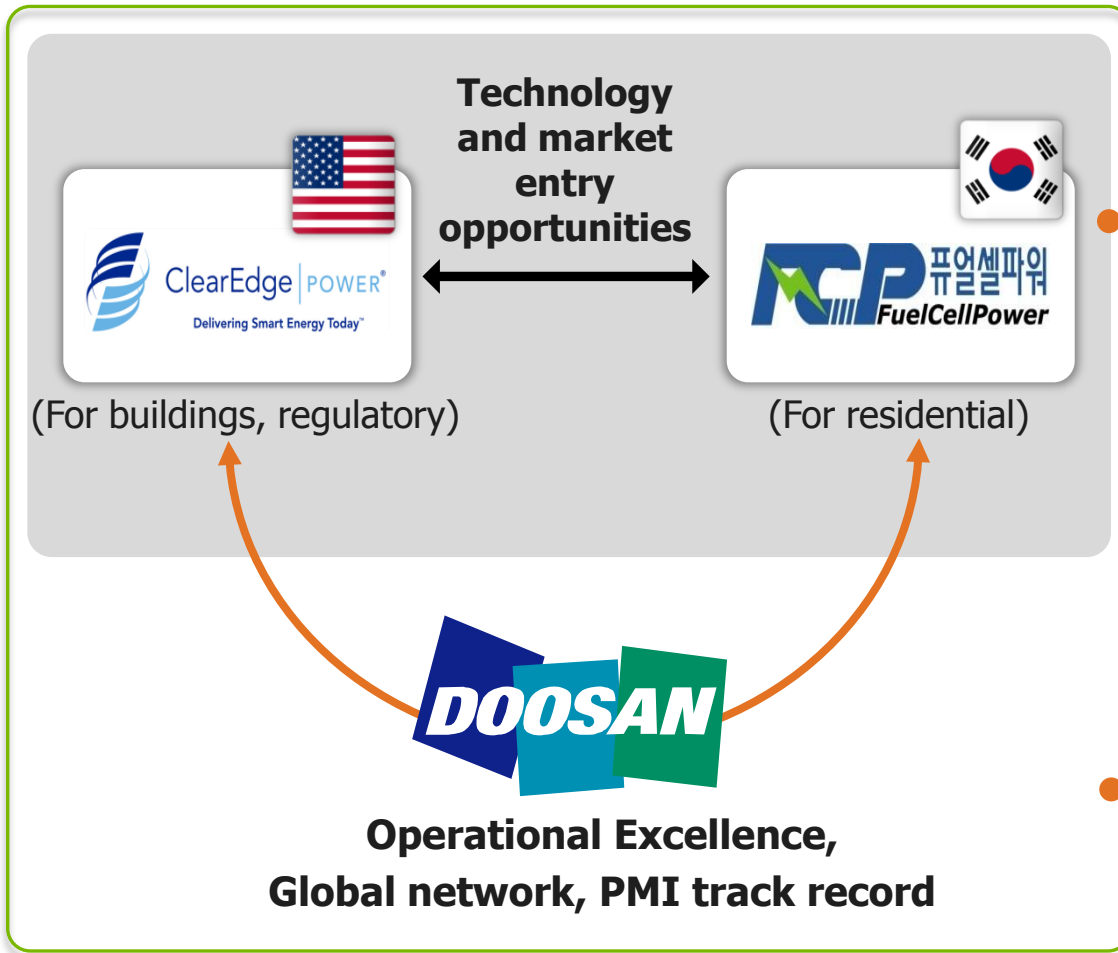
I. 3Q Business Results

II. Divisional Business Results and Outlook

III. Fuel Cell Business Outlook

IV. Appendix

Fuel Cell – Investment Background



- **Maximize synergies by pursuing acquisition and merger of two companies with complementary strengths in products, regions and value chain**

- CEP owns core technologies in mid to large sized fuel cells, while FCP owns technologies of small sized fuel cells with more than 90% M/S in domestic residential markets
- CEP can expand into Korea domestic market through FCP's sales network, FCP can reduce cost and improve quality beyond its current production scale limitation and secure residential sales network in the US through CEP

- **Use Doosan Corp's existing capabilities such as operational excellence and global network to expand to key growth markets**

Fuel Cell – Business Progress

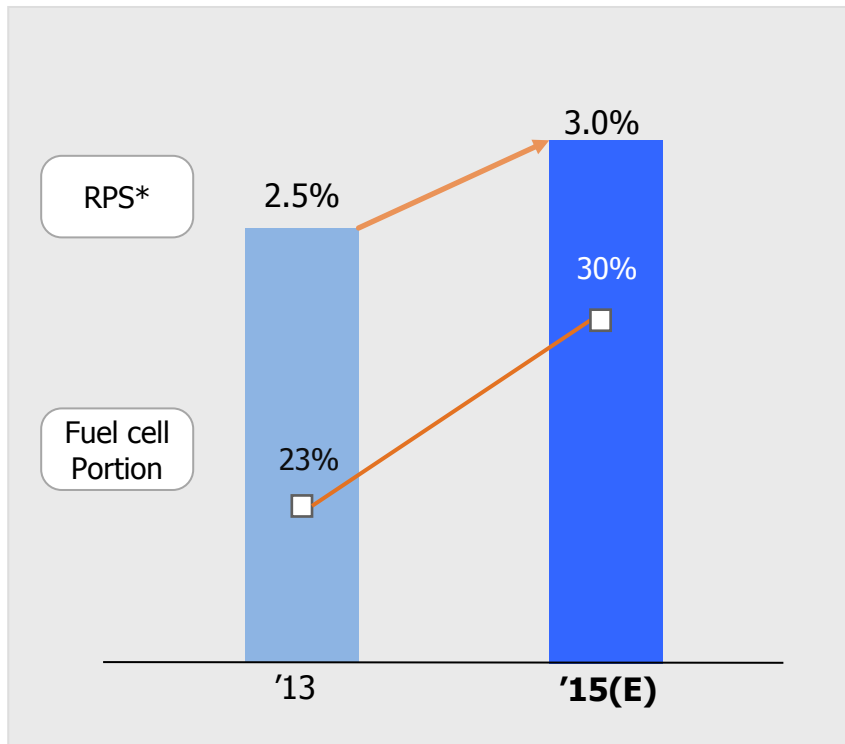
- Stabilized operation in the U.S and Korea and received orders since acquiring CEP on July 2014

	Business Milestone	Doosan FCA (U.S.)	Fuel Cell BG Korea BU (Korea)
Jul. '14	<ul style="list-style-type: none"> • Acquired CEP (July 18) • Held proclamation ceremony of Doosan FCA (July 31) 	<ul style="list-style-type: none"> • Started PMI process • Local manpower reached 40 	<ul style="list-style-type: none"> • MOU to build fuel cell plant in Pyeongtaek (125 unit, 50MW)
Aug.		<ul style="list-style-type: none"> • Held Strategy Workshop • Began to stabilize sales force / supply chain 	<ul style="list-style-type: none"> • Started PMI process of FCP
Sep.	<ul style="list-style-type: none"> • Merged Fuel Cell Power (FCP)(Sep 30) 	<ul style="list-style-type: none"> • Start the process for internalized core parts 	<ul style="list-style-type: none"> • Stabilized PAFC service network and system • Started discussing the terms to receive large sized orders
Oct.	<ul style="list-style-type: none"> • Launched Doosan Fuel Cell BG (Oct 1) • Held proclamation ceremony of Korea BU (Oct 20) 	<ul style="list-style-type: none"> • Local manpower over 90 • Supplied 1 unit to company B (existing customers) 	<ul style="list-style-type: none"> • Secured order pipeline of major large power producers • Developed fuel cells for military application
Nov. ~ Dec.	<ul style="list-style-type: none"> • Initiated production/ sales activities 	<ul style="list-style-type: none"> • Reactivated cell production lines • Prepared to run assembling lines • In the works to receive orders for building (max. 12 units of M400 products) 	<ul style="list-style-type: none"> • Final process to receive large sized orders

Fuel Cell – Order Outlook in Domestic Market

- Expect order growth based on competitive advantages of fuel cell relative to other types of renewable energy and RPS regulation

RPS and Fuel Cell Portion within RPS



* RPS(Renewable Portfolio Standard) : Large power producers (500MW and above) are mandated to use renewable energy sources

** Source : KEMCO

Growth Potential of Fuel Cell

1

Advantage over other renewable energy

- Convenient to install(location, area), no time limit for operation, produce heat as well as electricity/generate warm water
- Satisfies RPS as fuel cell has 2 times REC* weighting
- Minimal issues of environmental pollution and noise

2

Government's RPS Regulation

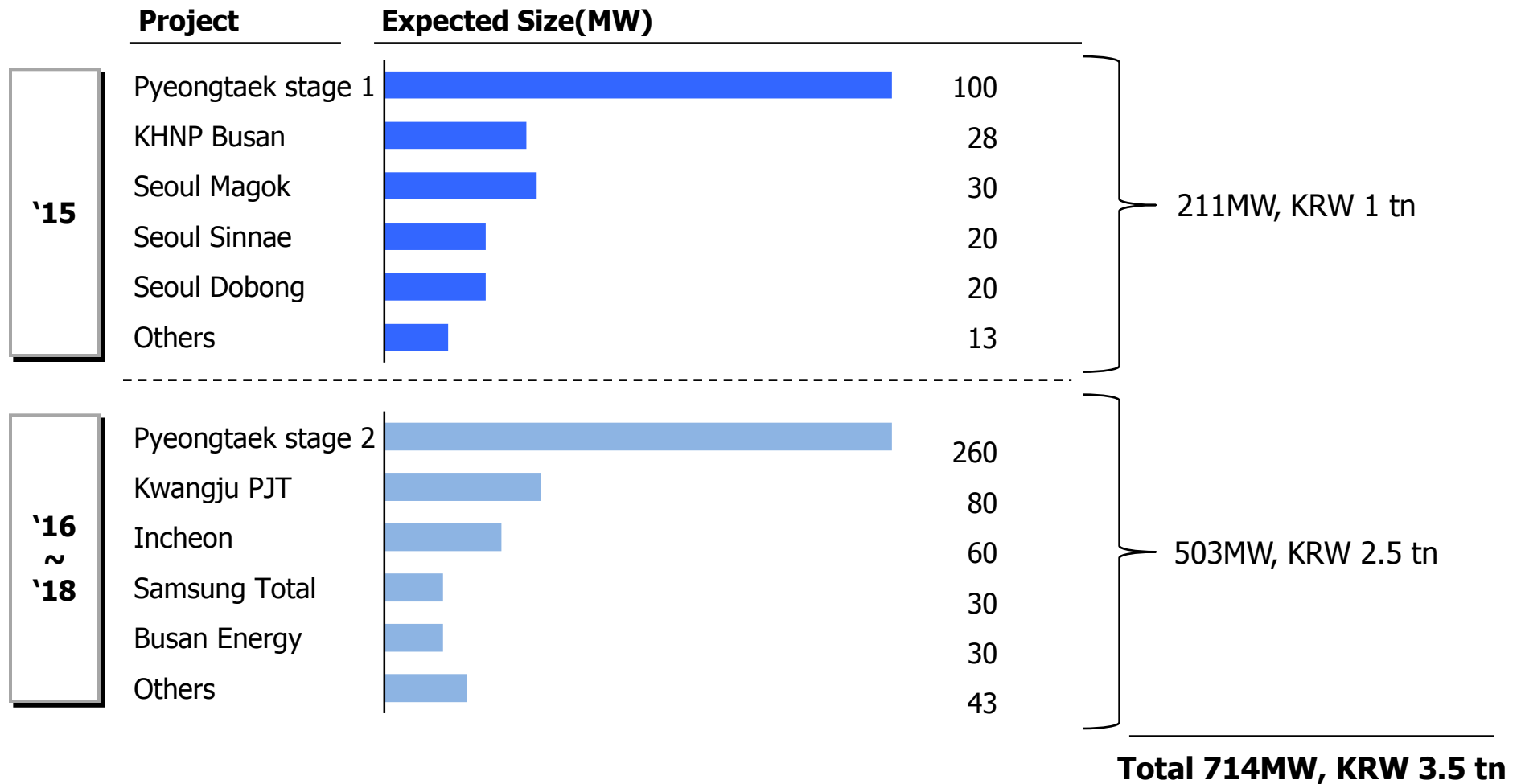
- Plan to increase to 10% in '24 from 2% in '12
- RPS regulation limits multi-fuel fired power** of bio energy
 - Encourage the use of renewable energy by controlling import of wood pellet

* REC(Renewable Energy Certificate) : Certificate to prove supplying electricity in form of renewable energy

** Multi Fuel Fired Power : Combust more than two types of fuels

Fuel Cell – Domestic Order Pipeline

- Market size of more than 700MW is expected in next 5 years in domestic regulatory markets based on current order pipelines, and Doosan is planning to expand its M/S via technological advantages and cost reduction



Fuel Cell – Growth Strategy

Based on Technical Advantage

- Competitive advantage in terms of product life time, efficiency, operational temperature, operating time
 - Durability / Feasibility / Operation flexibility

1

Secure Order Competitiveness

- Strengthen marketing based on product competitive advantage
 - Increase personnel to enhance service, marketing and sales
 - Support service to domestic power producer and increase spec-in activities

2

Cost Reduction

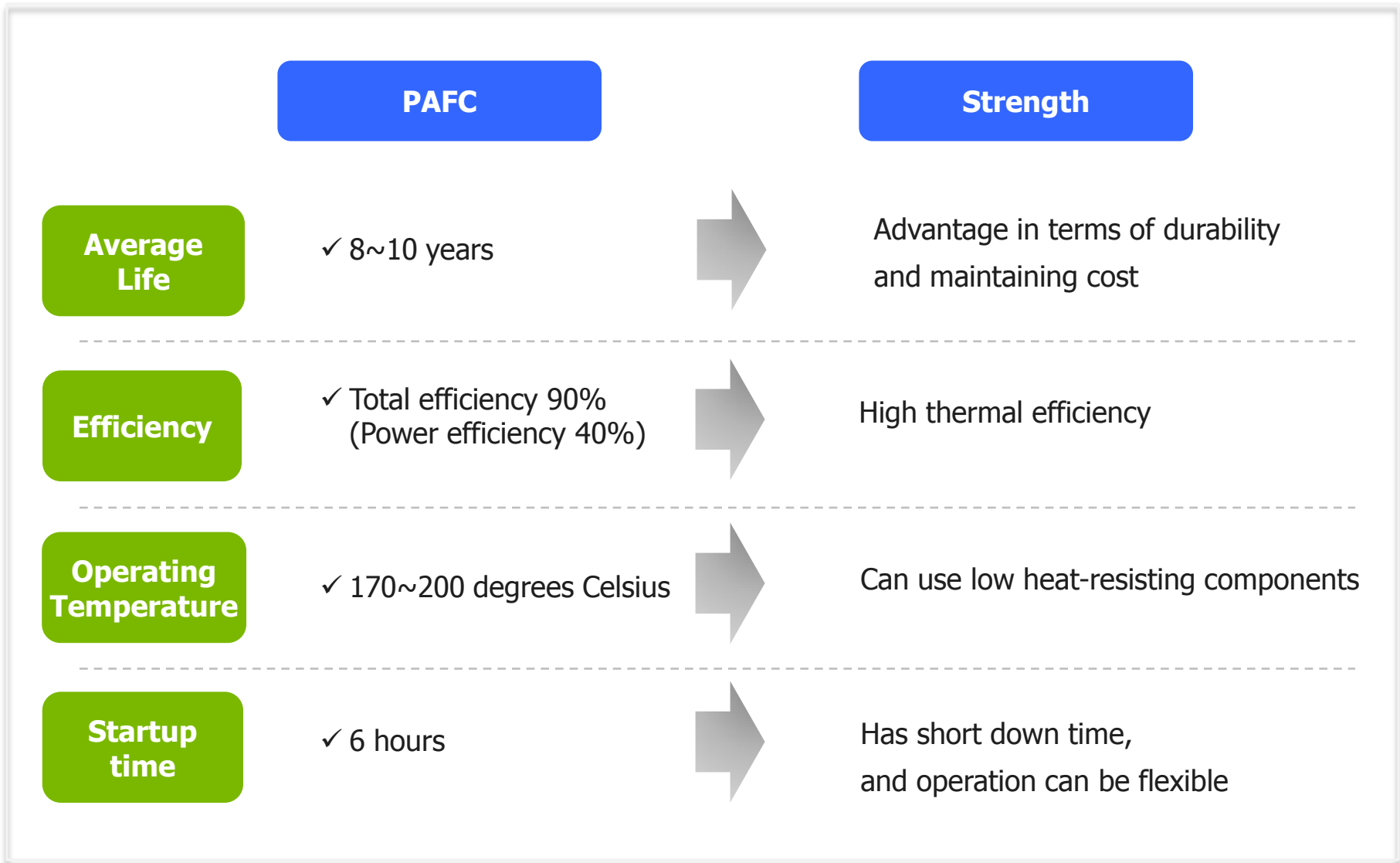
- Improve performance of Cell Stack, develop models for Korean market and power plant
- Strengthen relationship with key suppliers and internalize if necessary
- Diversify supply chain
- Eliminate production inefficiency by optimizing manufacturing process

3

CAPEX Investment

- Plan to establish PAFC plant in Korea
 - Facility investment and hiring of production workers
 - Pursue local sourcing
- Build production line based on component internalization

Fuel cell – Competitiveness of PAFC



Fuel Cell – Cost Reduction Plan

Cost Reduction

1

R&D

- Improve performance and manufacturing efficiency of cell stack, which takes a large portion of cost
- Develop models for Korean market to reduce component cost and manufacture in Korea
- Enhance product competitiveness by slimming down components and developing model for power plant

2

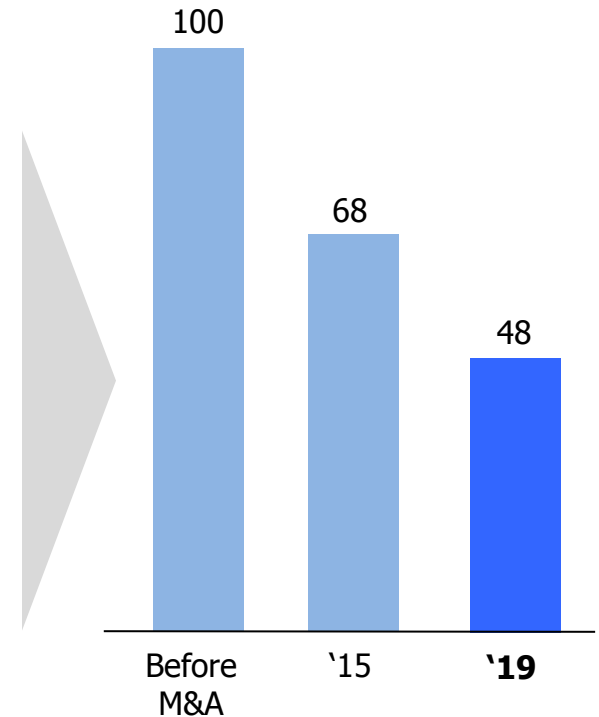
Enhanced
SCM
Capability

- Secure volume by strengthening relationship with key suppliers
 - Review the possibility of switching suppliers and insourcing
- Diversify supply line of key component with core knowledge such as patents and manufacturing process
 - Secure stable supply of components and lower price through negotiation

3

Production
Efficiency

- Improve product quality by increasing rate of automation for manufacturing and testing process
- Production process optimization



- Plan to reduce production cost by more than 50% until 2019

Table of Contents

I. 3Q Business Results

II. Divisional Business Results and Outlook

III. Fuel Cell Business Outlook

IV. Appendix

Appendix. Financial Summary

Financial Summary (B/S)

(unit: KRW billion)

	Parent	
	'14. 2Q	'14. 3Q
Current Assets	678	737
Non-Current Assets	2,718	2,801
Total Assets	3,396	3,537
Current Liabilities	692	763
Non-Current Liabilities	720	692
Total Liabilities	1,412	1,455
Paid-in Capital	133	135
Total Equity	1,983	2,082
L/E Ratio	71%	70%

(unit: KRW billion)

	Consolidated	
	'14. 2Q	'14. 3Q
Current Assets	13,342	13,507
Non-Current Assets	18,586	18,733
Total Assets	31,928	32,240
Current Liabilities	13,414	13,326
Non-Current Liabilities	9,728	10,058
Total Liabilities	23,142	23,384
Paid-in Capital	2,974	3,037
Total Equity	8,786	8,857
L/E Ratio	263%	264%

Debt

(unit: KRW billion)

	Parent	
	'14. 2Q	'14. 3Q
Bank	352	349
Corp. Bonds	530	530
Others	53	53
Debt	934	932
Cash	78	106
Net Debt	857	825
Net D/E Ratio	43%	40%

E O D