

1Q 2019 Review & Outlook





Disclaimer

This presentation material is prepared for investors' reference, based on data that have not been filed with the financial supervisory commission.

Actual business performance may not necessarily be consistent with the projections herein, as a result of unexpected changes in the market environment and other conditions.

The financial information in this document are consolidated earnings results based on K-IFRS.

I . Results & Outlook

1Q 2019 Total Results

Sales 519bwn (YoY 73bwn decreased), Operating Profit 29bwn (YoY 27bwn decreased)

Sales/ Sales profit decrease by Electric Infra & Automation

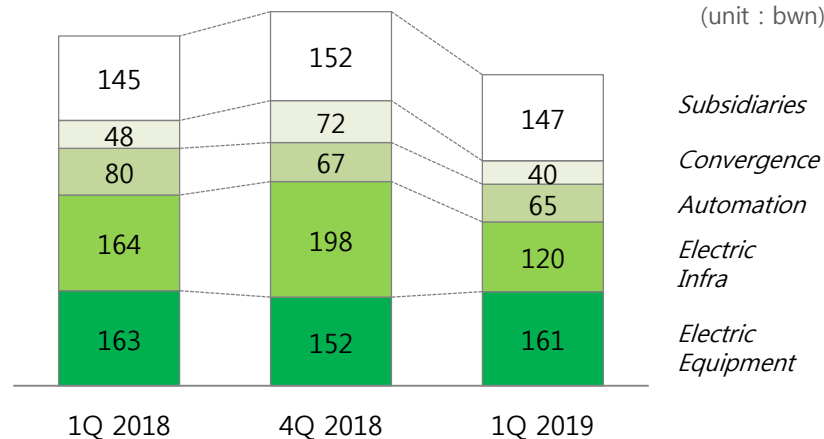
Income Statement

(unit : bwn)

Segment	1Q 2018	4Q 2018	1Q 2019	YoY	QoQ
Sales	592	630	519	△73	△112
Operating Profit	55	32	29	△27	△3
Profit before tax	53	23	37	△16	14
Net income	43	14	27	△15	13

Sales Breakdown by Business

(unit : bwn)



* Subsidiaries includes LS Metal, LS Sauter, LS Mecapion, LSIS Wuxi, LSIS Dalian and LS-Vietnam

** Convergence Business includes Trans SOC, Solar, Smart-Grid and EV components.

*** Sales of subsidiaries are before the consolidated adjustments.

1Q 2019 Financial Position

Total assets 2,397bwn (YoY 42bwn increased)

Total liabilities/Equity Ratios keep 85%p (stable financial structure)

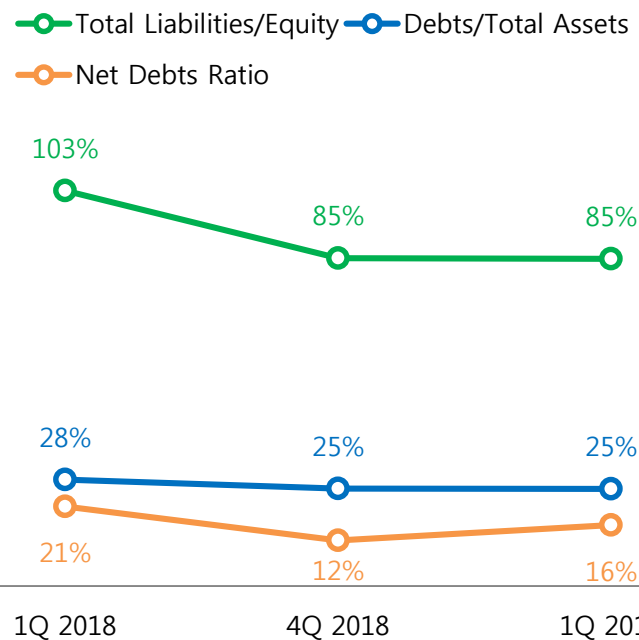
Financial Statement

(unit : bwn)

Segment	1Q 2018	4Q 2018	1Q 2019	YoY	QoQ
Total Assets	2,355	2,406	2,397	42	△9
Current Assets	1,526	1,536	1,504	△22	△32
Cash & cash equivalent	413	456	402	△10	△53
Total Liabilities	1,195	1,108	1,103	△92	△5
Debts	653	610	607	△46	△3
Net Debts	241	155	205	△36	50
Equity	1,160	1,297	1,294	134	△4

Financial Ratios

(unit : %)

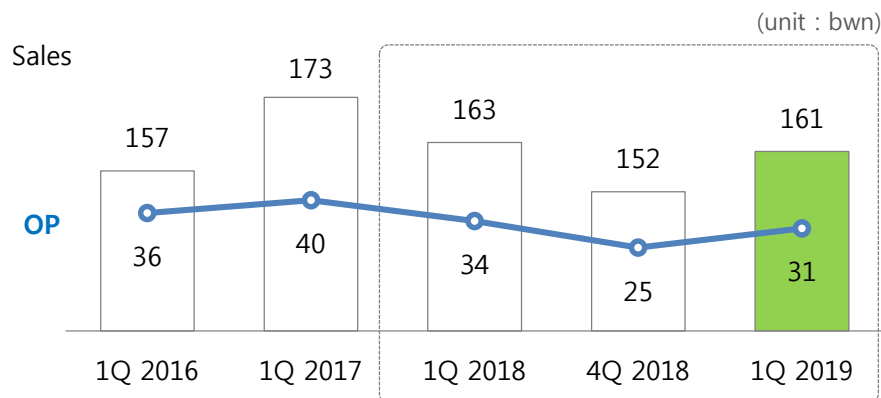


Business Results & Outlook

Electric Equipment – Sales decreased in Domestic & Iran mkt

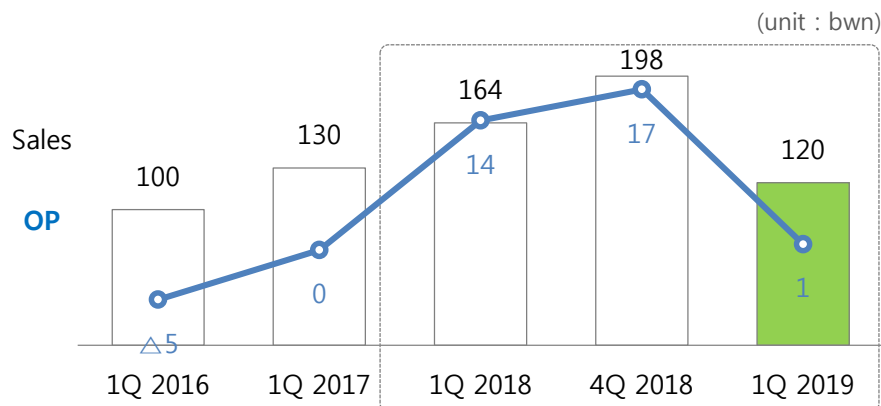
Electric Infra – Sales profit decreased due to in Domestic mkt (Major Company)

Electric Equipment



- Sales decreased YoY 1%, OP decreased YoY 7%
 - Sales decreased by Domestic mkt (Major Company)
 - Sales decreased in Middle East (Iran sanctions)
- Sales increased in Global DC Equipment mkt
 - Boosted sales in Europe Renewable mkt
 - Expanded Korea Photovoltaic mkt

Electric Infra



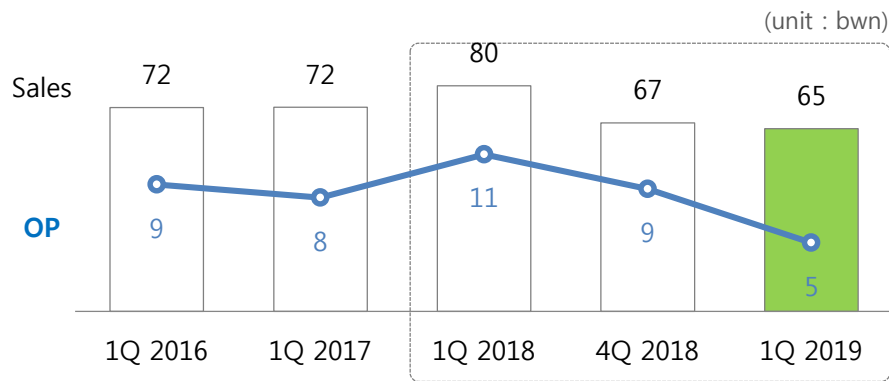
- Sales decreased YoY 27%, OP decreased YoY 95%
 - Domestic sales decreased by Plant investment decrease
 - decrease profitability due to SWGR projects reduce
- Won a HVDC contract in western Sea
2nd PJT in western Sea (contract amount 81 bwn)

Business Results & Outlook

Automation – Sales decreased in Domestic mkt (Machinery)

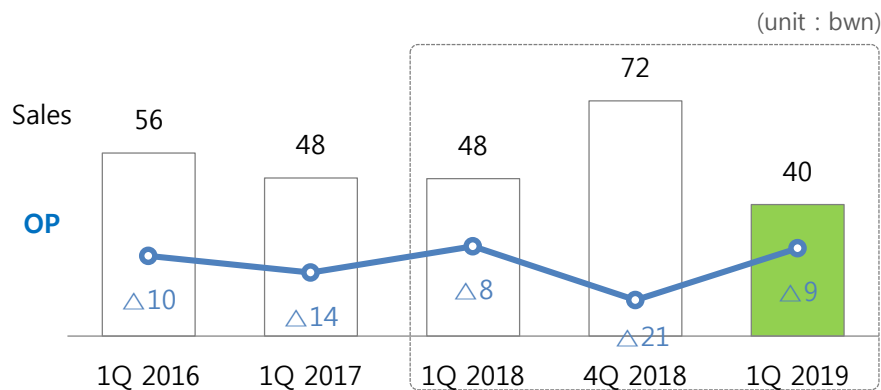
Convergence- Sales decrease in Railway sys. & Solar

Automation



- Sales decreased YoY 19%, OP decreased YoY 56%
 - Sales decrease in Domestic mkt (Machinery)
 - Sales decreased in Overseas (Middle East - Iran)
- Strengthen Overseas sales in Target Area (South-East Asia, North America)

Convergence Business

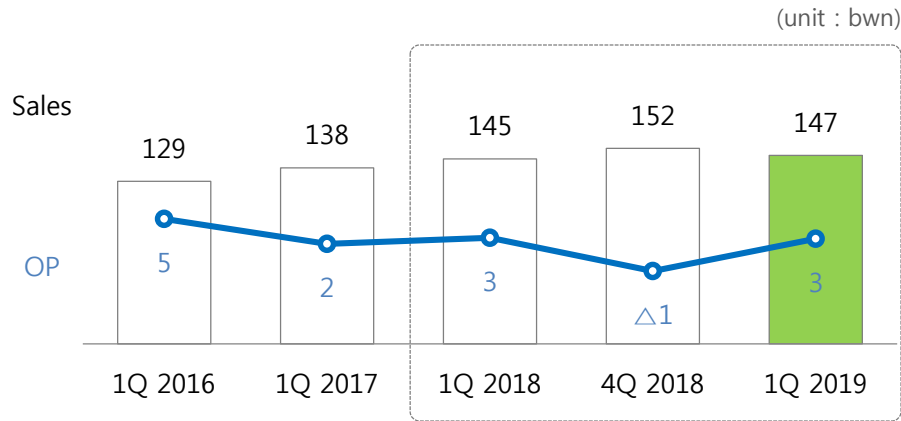


- Sales decreased YoY 16%, OP decreased YoY 6%
 - Sales decreased Railway & Solar business
 - EV components keep profit status
- Increase in large size Solar EPC PJT in Korea mkt
 - floating Solar EPC (20~40MW Scale)
 - ESS system connected PV mkt
- Boosted EV components Sales in China mkt

Business Results & Outlook

Wuxi & Dalian Sales increased by Electric equipment / Korean PJT
LS Metal – Sales decreased by Copper & Stainless steel

Subsidiaries



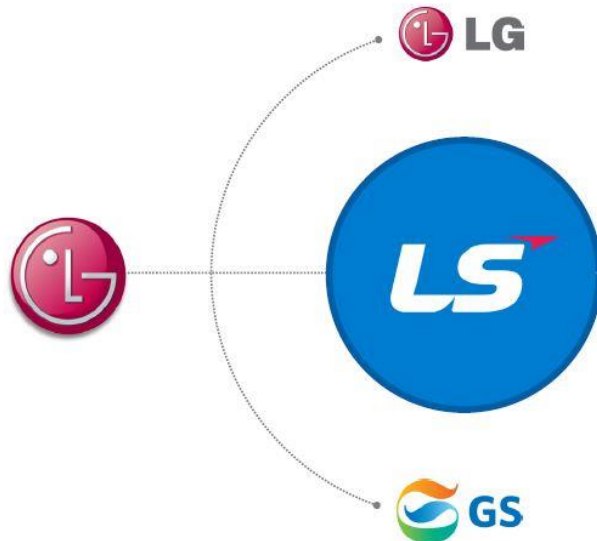
- Sales increased YoY 2%, OP YoY 4% decreased
 - LS Metals sales decreased in construction and Electronic mkt
 - Wuxi performance increased in Equipment mkt
 - Dalian sales increased by Korean PJT mkt
- LS Metals performance keep improving in Shipbuilding mkt
 - Wuxi performance improving by better Electric Car mkt condition in China.

II. Company & Business Introduction

Growing into a World's Best from the Nation's First!

Leading company in the industrial electric, electronics, materials and energy field following its separation from LG in 2003

LS History



Leader in Power Solutions, Automation & Green Business

The Leading Company in the Power Distribution & Automation Industry

The first to build a Smart Grid, Green Village and Green Factory

Founded	1974
Sales	2,485billion(KRW)
Employees	3,161
Headquarters	LS Tower, Gyeonggi-do, Korea
Plants	Total 7 Plants
Overseas subsidiaries	China, Vietnam, Japan, etc.
Overseas branches	USA, Europe, Russia, Vietnam, etc.

(As of 2017)



1. A History of Challenging the Future (1970's ~ 2007)

1970's '74 Jul. Established Goldstar Instrument & Electrical Co., Ltd

1980's '87 Mar. Established Goldstar Industrial Systems Co., Ltd.



2007 Feb. Opened Marketing Subsidiary in Dubai

2005 Mar. Renamed from LG to LS Industrial Systems
Sep. Constructed the Electric & Automation equipment factory in Wuxi, China



2003 Nov. Disaffiliated from LG Group, joined LS Group

2001 Jun. Constructed Dalian factory

2000 Sep. Established high-voltage testing agency

1990's '94 Jul. Listed Goldstar Industrial Systems on the Korea Stock Exchange

'95 Feb. Renamed from Goldstar to LG Industrial Systems (LGIS)

'95 Sep. LGIS merged Goldstar I&E & Goldstar Mechanical & Electrical

'99 Apr. LGIS merged LG Metal

'99 Aug. Sold copper smelting, Vending Machine, Elevator & Escalator unit

2. Shifting the strategy to growth paradigm (2007 ~ 2012)

- 2008**
- Apr. Relocated its headquarters to Anyang LS Tower
 - Sep. Received the Korea Best Company Award (Electricity & Cable industry category)
 - Oct. LS Industrial Systems(currently LSIS) Opened R&D Center in Shanghai, China



- 2009**
- Mar. Published the Green Business Vision
 - Oct. Share in Mecapion acquired
 - Oct. European sales corporation established

- 2012**
- May. completed a EV Relay factory in Cheongju, Korea
 - Jun. Awarded the Best Korean Company Grand Award
 - Dec. Selected as one of the Top 100 Global Innovators by Thompson Reuters
 - Dec. US and Chinese patent acquired for smart meter technology

- 2011**
- Oct. Completed the Busan HVDC Plant
 - Nov. Included in the Fortune Korea's 500 Fastest Growing Companies
 - Nov. Selected as one of the Top 100 Global Innovators by Thompson Reuters



- 2010**
- Jan. LS Power Semittech J/V established
 - Feb. LS Sauter established
 - Apr. LS Metal spun off from LSIS and newly established LS Metal
 - Apr. Construction of Busan plant completed
 - May. LS Hogae Electric established in China
 - May. LS Industrial Systems(currently LSIS) got the largest number of Green Certification as the first company in Korea
 - Jul. LS Industrial Systems(currently LSIS) opened R&D Center in Beijing, China

3. Challenging for the future of Smart Energy (2013 ~ 2015)

- 2013**
- Apr. Awarded the Great Place to Work Award for 2 consecutive years
 - May. MOU with China's Dongfang Group for developing green automobile parts
 - May. Concluded contract for the transfer of HVDC technology, and partnered with KAPES and Alstom
 - Jun. Awarded the Best Korean Company Grand Award
 - Oct. Selected as one of the Top 100 Global Innovators by Thompson Reuters
 - Nov. Awarded the 39th Korea National Quality Grand Award
 - Dec. Won the 500 million Trade Tower Award

- 2015**
- Jan. Declared value-based management
 - Mar. Newly constructed R&D campus in Anyang



- 2014**
- Jan. Launched new strategic automation product lines for A&D
 - May. LSIS Vice Chairman Ja-kyun Koo Received Gold Tower Order of Industrial Service Merit
 - May. Won the World's Largest Order for Smart Grid Project in Iraq
 - Jun. Awarded the Best Korean Company Grand Award for 7 consecutive years
 - Jul. Marked the 40th anniversary of the foundation
 - Sep. Ranked number one in the Korean Standard – Quality Excellence Index for 2 consecutive years
 - Nov. Selected as one of the Top 100 Global Innovators by Thompson Reuters

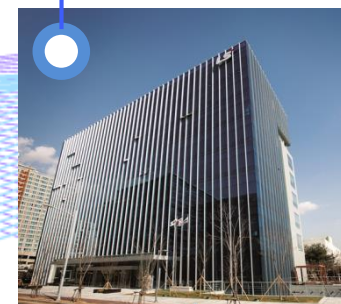
3. Challenging for the future of Smart Energy (2016~)

2016

Mar. Anyang R&D Campus acquired BEMS certification for the first time in Korea.

Sep. Selected as the best business in automobiles in terms of KS-QEI for four years in a row.

Sep. Anyang R&D Campus certified as the first business that established ESS (Emergency Support



2017

Feb. Named one of the world's top 100 businesses in patent applications in Europe.

Jun. Named Best Business in Korea for ten consecutive years.

Sep. Won a prize from the Minister of Trade, Industry, and Energy as a praiseworthy business in strategic items.

Oct. Finished the work for the construction of the largest (28MW) PV plant in Chitose, Hokkaido, Japan.

Dec. Finished the work for the construction of a 3MW floating PV plant on Cheongpungho lake, the largest of its kind in Korea.

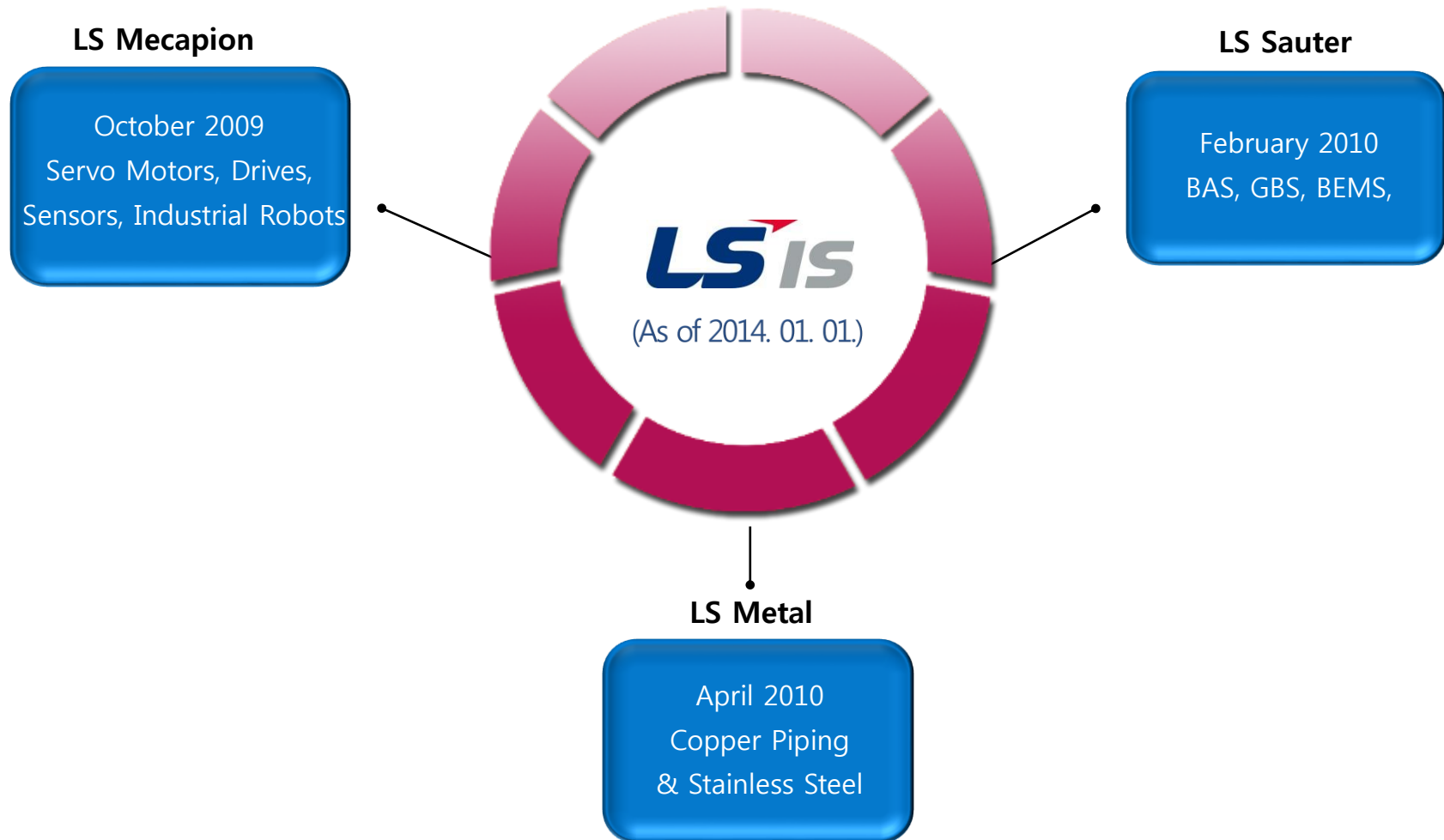
2018

Jan. Selected as one of the world's top 100 innovative businesses.

Apr. Finished the work for the construction of MW ESS-linked PV plant at the Hwamyong Water Treatment Plant in Busan.

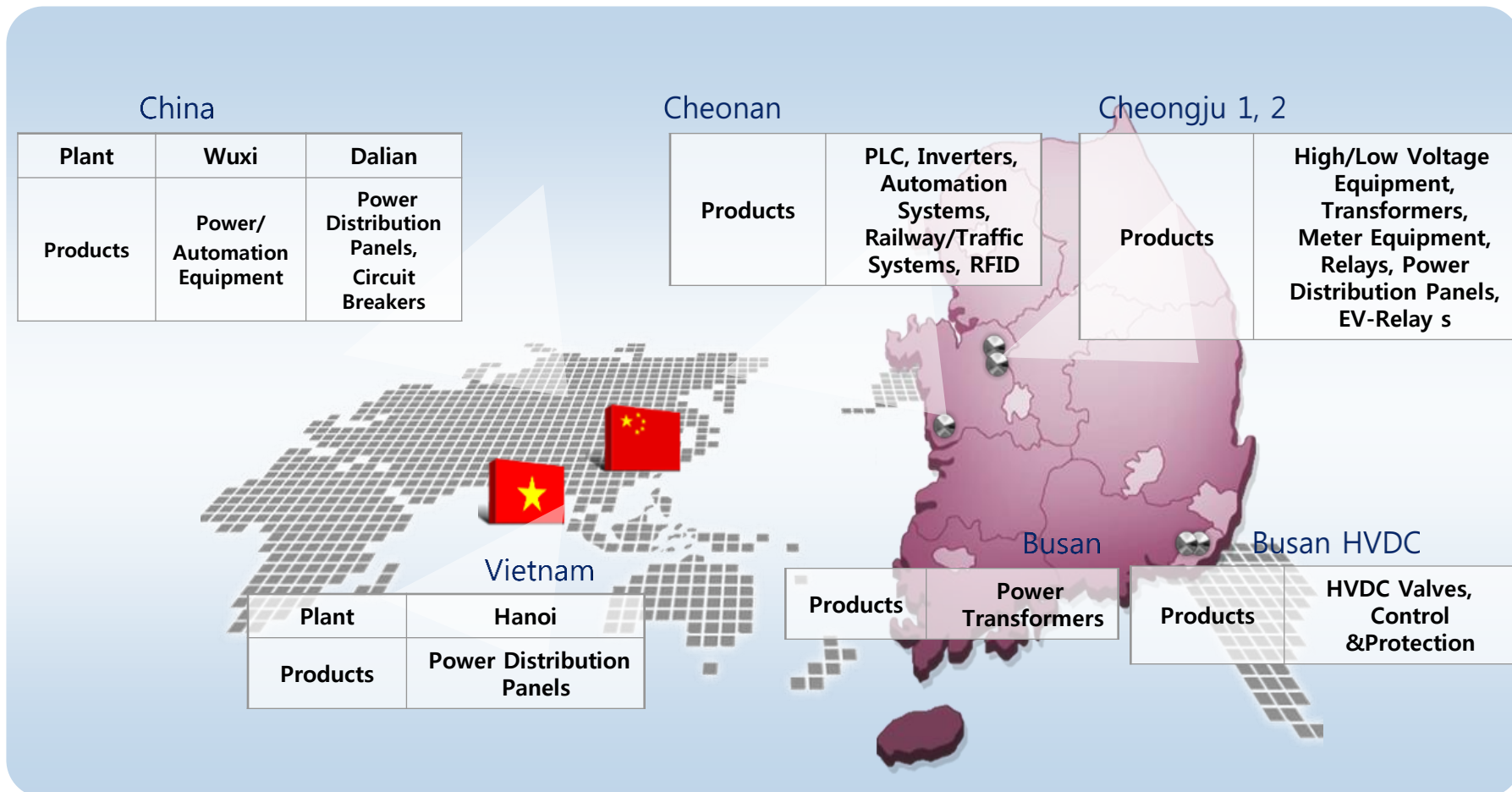
Dec. Acquires ESS Unit of North America's ESS Leader Parker-Hannifin

Strengthening the Business Portfolio through M&As



We manufacture high-quality products in nine plants around the world

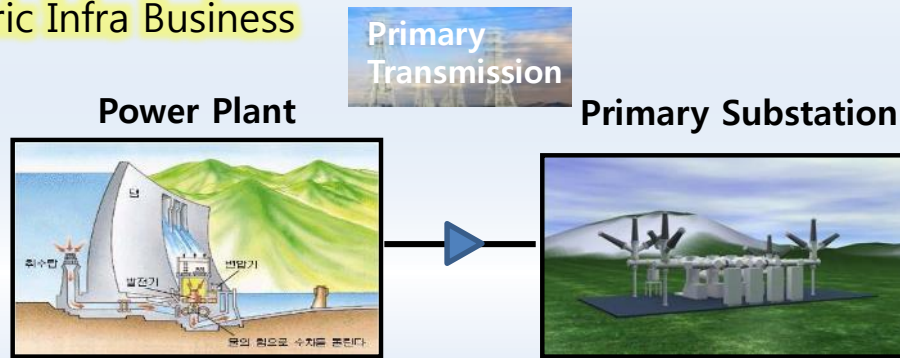
- Domestic: 5 Plants (Cheongju 1 & 2, Cheonan, Busan, Busan HVDC)
- Overseas: 4 Plants (China: Dalian, Wuxi, Hubei / Vietnam: Hanoi)



Business Introduction

Leading Provider of Total Electric Power, Automation & Green Business Solutions

Electric Infra Business



Ultra-high voltage power transmission & distribution system equipment such as gas insulated switchgear (GIS)

< Main Products >

- Gas Insulated Switchgear (GIS)
- Power Transformers
- Remote Monitoring & Diagnosis Equipment
- HVDC
- Switchgear (SWGR)



Electric Equipment Business

Factory/Building/Household



Substation



Top low and medium voltage electrical equipment for electricity users

<Main Products>

- Vacuum Circuit Breakers (VCB)-MV
- Air Circuit Breakers (ACB)
- Molded Case Circuit Breakers (MCCB)
- Magnetic Contactors (MC)



Business Introduction

Automation Business

Factory / Building (FA/PA)



Discrete Automation



Process Automation



Building Automation

From simple automation control to large-scale manufacturing facilities and process control, LSIS provides the optimal solutions to diverse industrial fields.

< Main Products >

- Variable Frequency Drive
- PLC (Programmable Logic Controller)
- HMI (Human Machine Interface)
- Servo Drive & Motor
- DCS (Distributed Control System)
- RTU (Remote Terminal Unit)

Convergence Business



Smart Grid



Green Car Solution



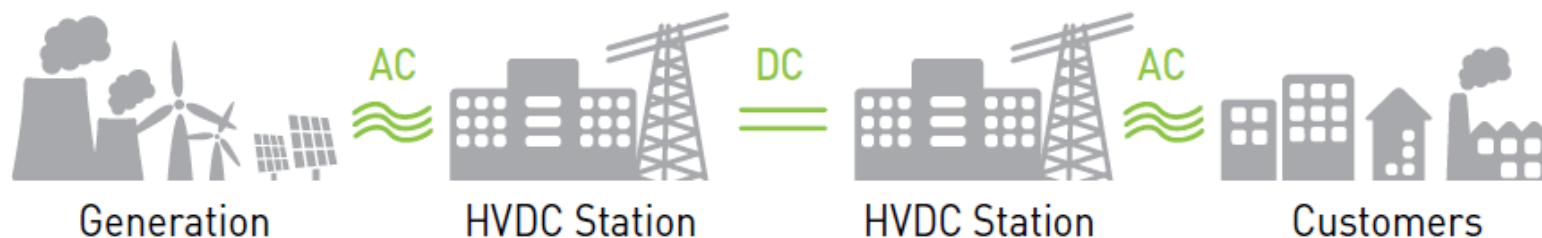
Photovoltaic System



Railway System

HVDC

HVDC system converts AC to DC to transmit long distance and then converts back again to AC
Connect with the AC grid with very low loss



Long Distance Transmission with Lower Cost

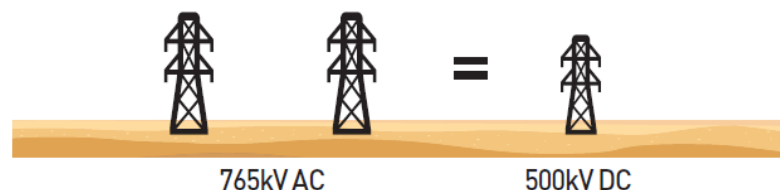
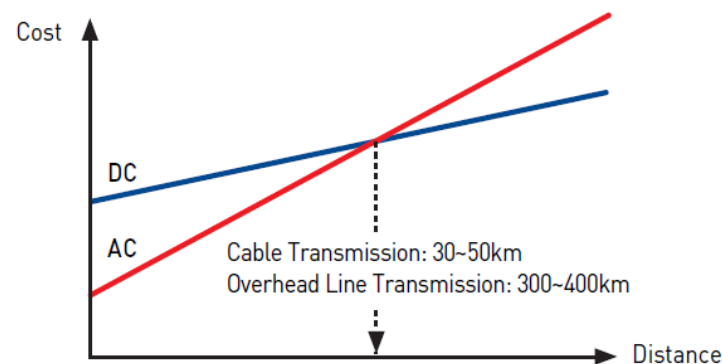
HVDC is the only option for the overhead transmission longer than 300km or submarine/underground 40km thanks to DC characteristics.

Eco-friendly Transmission

HVDC system has lower environmental impact because it requires fewer overhead lines comparing to AC system. The technology is also the key component in the future energy system based on renewable energy sources.

Optimal Grid Management

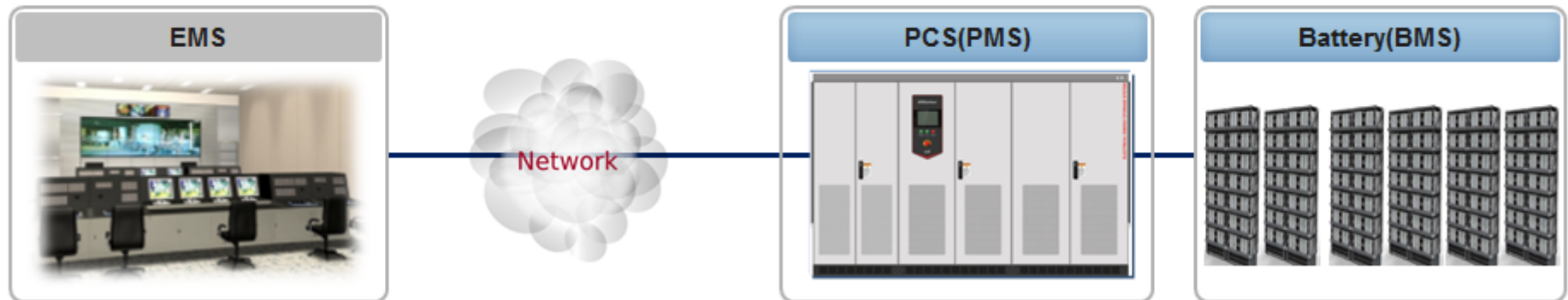
HVDC can directly interconnect load centers with huge energy sources efficiently. Therefore, negative impact on the grid is minimized. HVDC also improves the performance of AC grid by means of additional controllability.



ESS Applications

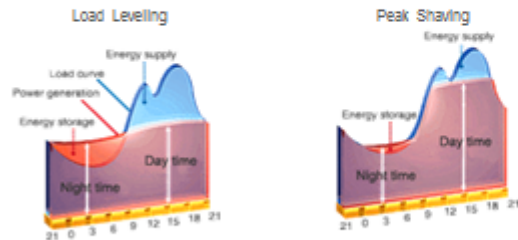
ESS(Energy Storage System) includes PCS(Power Conversion System) and battery, and make an efficient way of use electricity power

Concept of ESS



Function of ESS

➤ Peak Shaving, Load Leveling



➤ Renewable Energy Smoothing



➤ Frequency Regulation



• EMS : Energy Management System

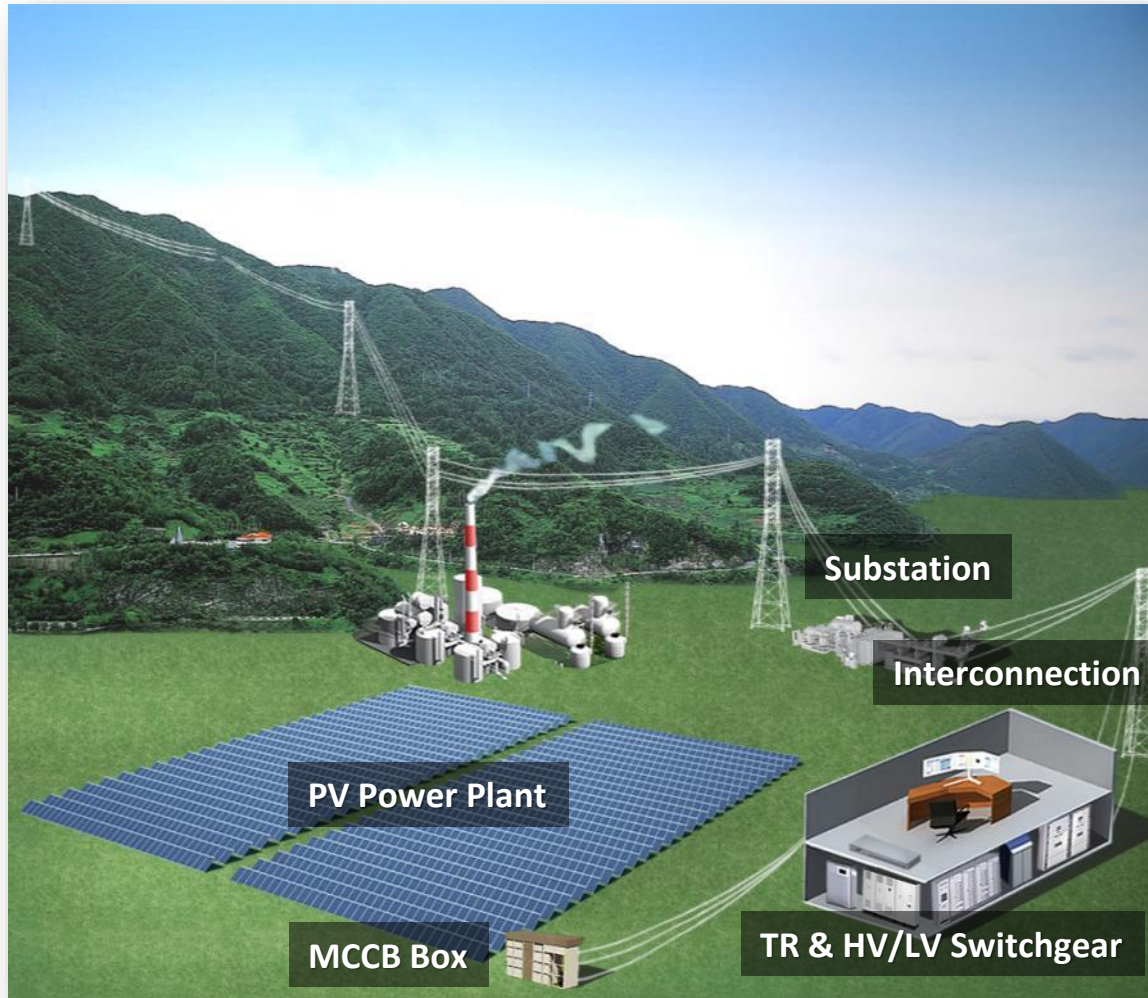
• PCS : Power Conditioning System

• PMS : Power Management System

• BMS : Battery Management System

PV Power Plant

We provide total solution for PV Power Plant. In addition to PV products, we can provide customers with all kinds of electric power equipment manufactured by LSIS.



System Components

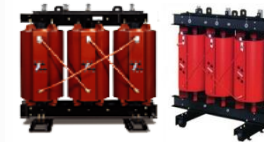


PV Power System

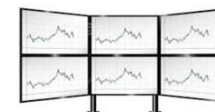
- Module
- Inverter
- Balance of System



- HV Switchgear
- MV Switchgear
- LV Switchgear



Transformer



Monitoring(SCADA)

III. Appendix

Appendix 1. Condensed Statement

Income statement

(unit : bwn, %)

Segment	1Q 2018	4Q 2018	1Q 2019	YoY	QoQ
Sales	592	630	519	△12.3%	△17.7%
Cost of Sales	△469	△525	△421	△10.3%	△19.8%
Gross Profit	123	106	98	△20.2%	△7.4%
(%)	(20.7%)	(16.8%)	(18.9%)	-	-
SG&A	△67	△74	△69	2.9%	△6.5%
Operating Profit	55	32	29	△48.3%	△9.6%
(%)	(9.4%)	(5.0%)	(5.5%)	-	-
Non-OP and Loss	△3	△9	8	△410.7%	△192.8%
Profit before tax	53	23	37	△30.4%	59.8%
Net Income	43	14	27	△35.9%	90.4%
(%)	(7.2%)	(2.3%)	(5.3%)	-	-
EBITDA Margin	13.0%	7.2%	9.8%	-	-

Statement of Financial position

(unit : bwn, %)

Segment	1Q 2018	4Q 2018	1Q 2019	QoQ	YoY
Total Assets	2,355	2,406	2,397	2%	△0%
Current Assets	1,526	1,536	1,504	△1%	△2%
Cash&Cash Equivalents	413	456	402	△2%	△12%
Inventories	189	197	199	5%	1%
Other Current Assets	924	884	903	△2%	2%
Non-Current Assets	829	870	893	8%	3%
Tangible Assets	573	554	552	△4%	△0%
Intangible Assets	119	127	127	7%	△0%
Other Non-Current Assets	138	189	214	56%	13%
Total Liabilities	1,195	1,108	1,103	△8%	△0%
Current Liabilities	737	700	674	△9%	△4%
Short-term borrowings	204	211	208	2%	△1%
Non-Current Liabilities	459	408	429	△6%	5%
Long-term borrowings	449	399	399	△11%	0%
Equity	1,160	1,297	1,294	12%	△0%
Current Ratio	207%	219%	223%	8%	2%
Equity/Total Assets	49%	54%	54%	10%	0%
Total Liabilities/Equity	103%	85%	85%	△17%	△0%
Net debts Ratio	21%	12%	16%	△24%	33%

Statements of Cash Flows

(unit : bwn)

Segment	'18.1Q	'19.1Q	YoY
Cash and cash equivalents at the beginning of year	262	456	194
Cash Flows From Operating Activities	61	△11	△72
Cash Flows From Investing Activities	94	△38	△132
Capex	△13	△17	△5
R&D	△3	△3	0
Others	109	△18	△127
Cash Flows From Financing Activities	△6	△5	1
Effect of exchange rate changes on cash and cash equivalents	3	1	△2
Cash and cash equivalents	413	402	△10

Appendix 2. Results for the past 3 years

HQ

(unit : bwn)

Segment				16					17					18					19		Y-o-Y (4Q)
				1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total	1Q	Total	
HQ	Electric Equipment	Sales	Domestic	95	101	102	101	399	115	111	109	100	435	111	107	106	95	419	109	109	△1%
			Overseas	61	62	55	57	235	59	61	56	55	230	52	56	50	57	215	52	52	△1%
		Total		157	163	157	157	634	173	172	165	155	665	163	163	156	152	634	161	161	△1%
		Operating Profit		36	36	37	33	142	40	36	37	26	139	34	32	30	25	121	31	31	△7%
	Electric Infra	Sales	Domestic	64	82	105	141	392	90	106	131	120	447	134	115	107	161	516	90	90	△33%
			Overseas	36	33	20	46	134	41	40	38	55	174	30	44	23	37	134	30	30	△0%
		Total		100	114	125	187	526	130	147	169	175	621	164	159	130	198	650	120	120	△27%
		Operating Profit		△5	0	△7	8	△4	0	2	13	14	29	14	10	4	17	45	1	1	△95%
	Automation	Sales	Domestic	46	48	47	45	186	48	49	51	44	193	54	56	48	49	207	44	44	△19%
			Overseas	26	23	19	20	88	24	24	26	20	94	26	21	21	18	86	21	21	△20%
		Total		72	71	66	65	274	72	73	77	64	287	80	78	69	67	293	65	65	△19%
		Operating Profit		9	6	6	6	27	8	10	12	6	36	11	12	9	9	40	5	5	△56%
	Convergence Business	Sales	Domestic	38	46	30	56	171	26	36	31	52	145	32	90	68	56	246	25	25	△24%
			Overseas	17	17	31	42	107	23	26	24	15	89	16	27	23	16	82	16	16	△1%
		Total		56	63	61	98	278	48	63	55	68	234	48	117	91	72	328	40	40	△16%
		Operating Profit		△10	△15	△11	△31	△67	△14	△9	△8	△28	△60	△8	1	△3	△21	△31	△9	△9	△6%
	Subtotal	Sales	Domestic	244	277	284	343	1,148	278	303	322	317	1,220	330	369	328	360	1,388	267	267	△19%
			Overseas	141	134	125	164	564	146	151	145	145	587	124	148	117	128	518	118	118	△5%
		Total		385	411	409	507	1,712	425	454	467	461	1,807	455	517	445	489	1,905	386	386	△15%
		Operating Profit		29	27	25	16	97	34	38	53	18	143	50	55	39	30	175	28	28	△44%

Appendix 2. Results for the past 3 years

Subsidiaries

(unit : bwn)

Segment				16					17					18					19		Y-o-Y (4Q)
				1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total	1Q	Total	
Subsidiaries	LS Metal	Sales	Domestic	25	28	33	40	126	34	37	41	43	156	39	41	33	40	153	43	43	11%
			Overseas	45	36	29	37	147	49	39	37	43	167	48	38	38	46	169	31	31	△34%
		Total		70	64	62	77	273	83	76	79	85	323	87	79	71	85	322	75	75	△14%
		Operating Profit		1	1	△1	△0	0	0	△0	△1	1	△0	△0	△0	1	1	2	△2	△2	△818%
	Subsidiaries (Korea)	Sales		10	11	13	25	58	16	22	19	16	72	15	15	17	13	59	10	10	△36%
		Operating Profit		△0	△0	1	2	2	1	3	2	1	7	2	2	1	△0	4	△1	△1	△166%
	Subsidiaries (China)	Sales		49	53	42	44	188	39	45	38	48	170	39	82	63	41	225	57	57	47%
		Operating Profit		5	5	4	2	16	1	3	0	3	6	1	10	8	△2	16	5	5	273%
	Subsidiaries (Vietnam)	Sales		0	0	0	0	0	0	0	0	0	0	4	6	6	13	29	6	6	38%
		Operating Profit		0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	717%
	Subtotal	Sales		129	128	117	146	519	138	143	135	149	565	145	182	156	152	636	147	147	2%
		Operating Profit		5	5	4	4	18	2	6	1	4	13	3	12	10	△1	23	3	3	△4%

Consolidated

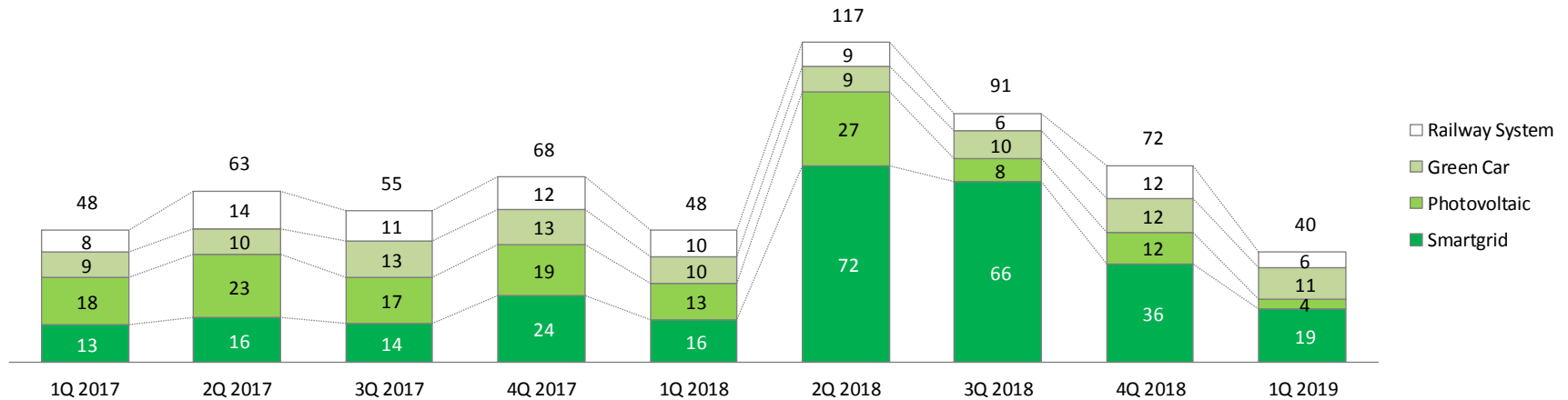
(unit : bwn)

Segment				16					17					18					19		Y-o-Y (4Q)
				1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total	1Q	Total	
Consolidation adjustment for Sales				△12	△14	△2	10	△18	△3	△9	△11	△5	△29	△8	△39	1	△10	△56	△14	△14	△82%
Consolidation adjustment for OP				0	0	1	8	9	0	△0	1	1	3	2	△2	4	3	7	△2	△2	△201%
Total Sales				501	525	524	663	2,214	559	588	591	605	2,344	592	661	602	630	2,485	519	519	△12%
Total Operating Profit				35	32	30	28	124	36	44	55	23	158	55	65	53	32	205	29	29	△48%

Appendix 3. Sales details for Convergence & Subsidiaries

Convergence

(unit : bwn)



Subsidiaries

(unit : bwn)

