



FUTURING SMART ENERGY

1Q 2020 Review & Outlook

LS[▶]**ELECTRIC**



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 2020 Total Results

Sales 636bwn (YoY 117bwn increased), Operating Profit 40bwn (YoY 12bwn increased)

Sales profit increase by Convergence Segment

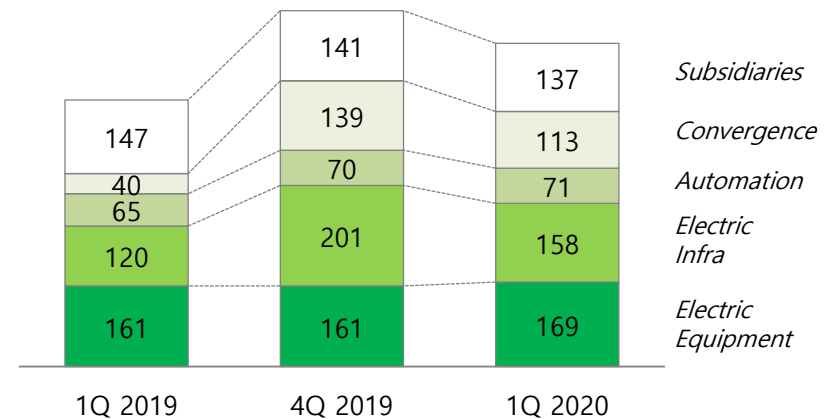
Income Statement

(unit : bwn)

Segment	1Q 2019	4Q 2019	1Q 2020	YoY	QoQ
Sales	519	699	636	117	△64
Operating Profit	29	43	40	12	△3
Profit before tax	36	22	33	△3	11
Net income	26	13	22	△5	9

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 2020 Financial Position

Total assets 2,598bwn (YoY 201bwn increased)

Total Liabilities/Equity Ratios 92%, Debts/Total Assets Ratios 23% (stable financial structure)

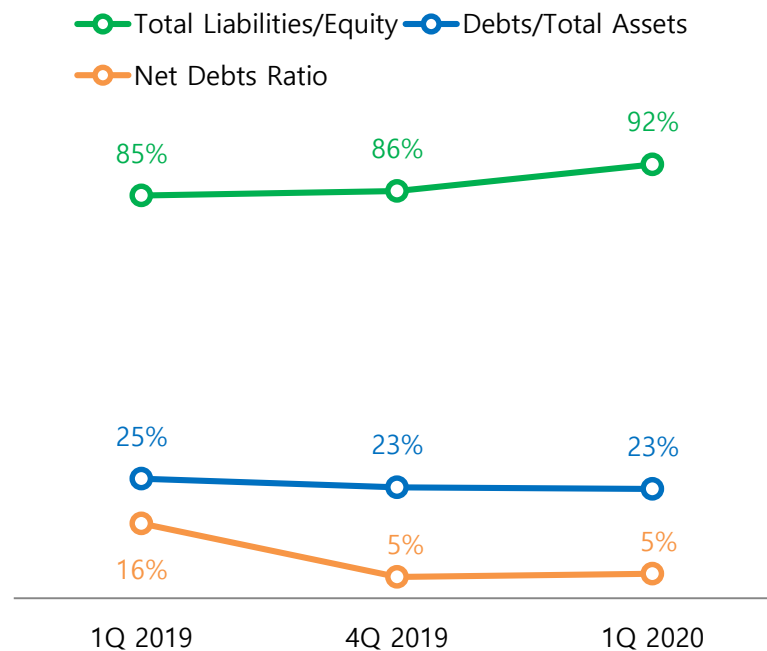
Financial Statement

(unit : bwn)

Segment	1Q 2019	4Q 2019	1Q 2020	YoY	QoQ
Total Assets	2,397	2,538	2,598	201	60
Current Assets	1,504	1,667	1,713	209	46
Cash & cash equivalent	402	535	531	128	△4
Total Liabilities	1,103	1,175	1,244	141	69
Debts	607	596	597	△10	1
Net Debts	205	62	66	△139	4
Equity	1,294	1,363	1,354	60	△9

Financial Ratios

(unit : %)

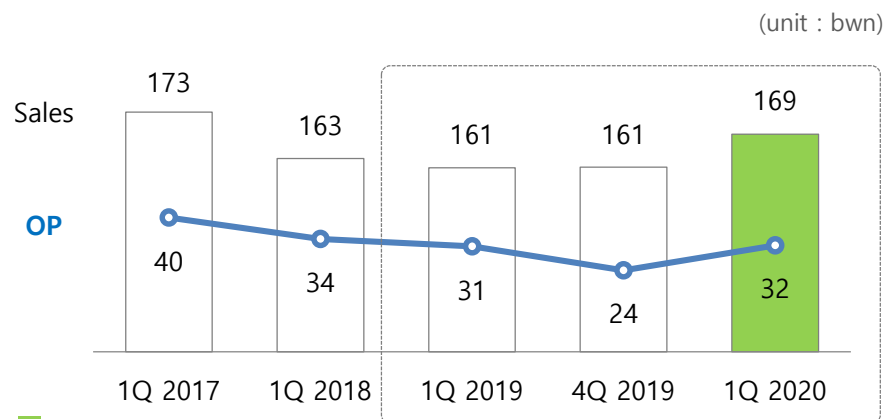


Business Results & Outlook

Electric Equipment – Sales increased in Overseas mkt (Europe/Vietnam)

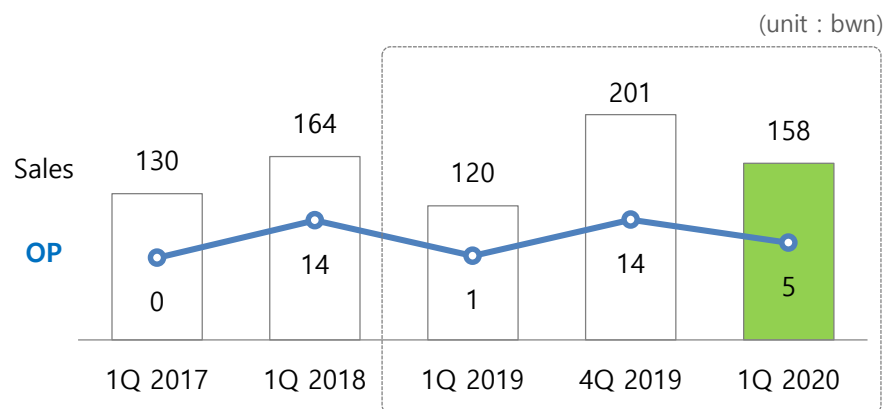
Electric Infra – Sales increased due to Domestic mkt (Major Company, Battery/Chemical)

Electric Equipment



- Sales increased YoY 5%, OP increased YoY 1%
 - Sales increased in Europe/Vietnam mkt
 - Profit increased by foreign exchange rate
- Sales good condition in Global DC Equipment mkt
 - Boosted sales in Europe Renewable mkt
 - Expanded Korea Photovoltaic/ESS mkt

Electric Infra



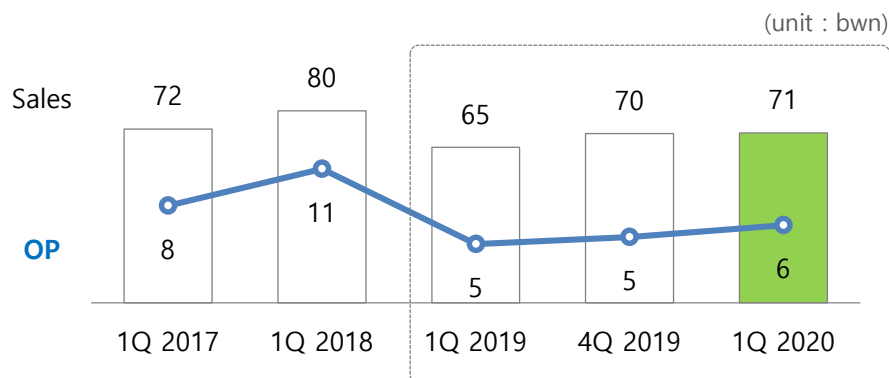
- Sales increased YoY 32%, OP increased YoY 772%
 - Domestic sales increased in Major Company
 - Increase profitability due to Product Mix (SWGR)
- Expecting Investment in Data Center business
- Kepco increase budget(transmission & transformation)

Business Results & Outlook

Automation – Sales increased in Domestic/Overseas mkt (Machinery mkt/Middle East)

Convergence- Sales increased in Smart-Grid(ESS)/Solar, Profit increased in Smart-Grid business

Automation

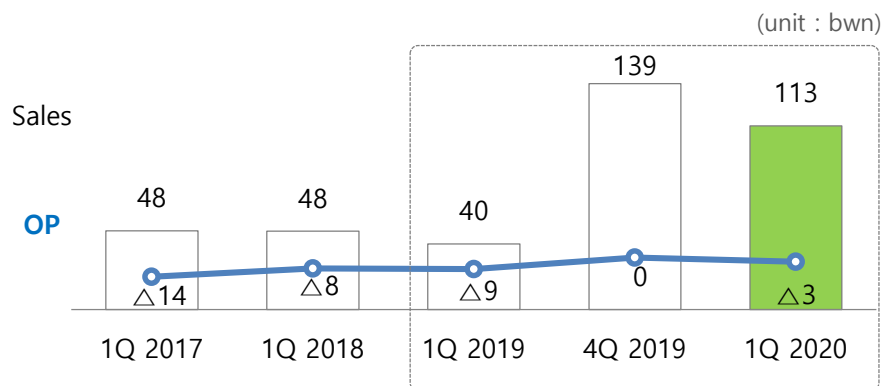


▪ Sales increased YoY 9%, OP increased YoY 32%

- Sales increase in Domestic mkt (Machinery)
- Sales increased in Overseas (Middle East)
- Profit increased by Sales/foreign exchange rate

▪ Expect Japan alternative demand in Domestic mkt

Convergence Business



▪ Sales increased YoY 180%, OP increased YoY 66%

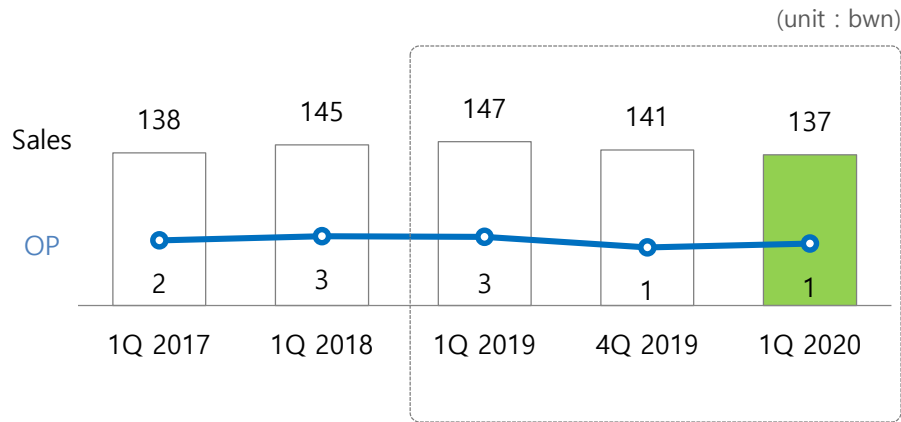
- Sales increased Smart-Grid (ESS)/Solar business
- Profit increased by Smart-Grid(ESS)

▪ Large size Solar EPC PJT increasing in Korea mkt

Business Results & Outlook

China business slowing down due to drop in the utilization rate
LS Metal – Sales/Profit increased by Stainless steel (LNG vessel)

Subsidiaries



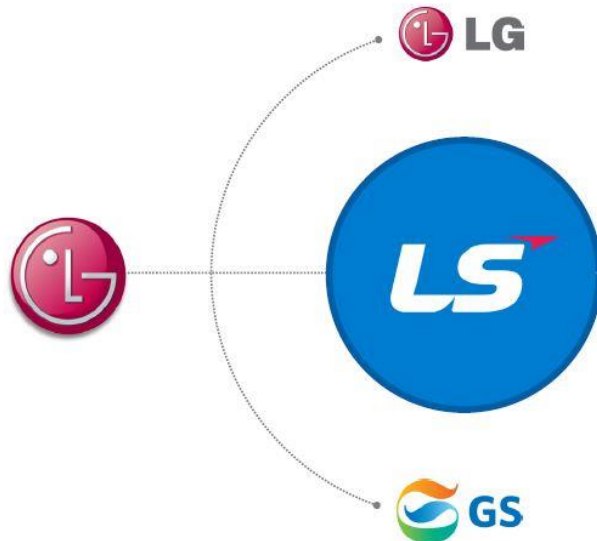
- Sales decreased YoY 7%, OP decreased YoY 47%
 - LS Metals sales/profit increased by STS
 - China business slow down due to low utilization rate
- LS Metals performance keep improving in Shipbuilding mkt
- Wuxi performance improving by Electric Equipment & DC-relay(EV components)

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	2,347billion(KRW)
Employees	3,253
Headquarters	LS Tower, Gyeonggi-do, Korea
Plants	Total 8 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 Hwamyeong Water Treatment Plant in Busan.

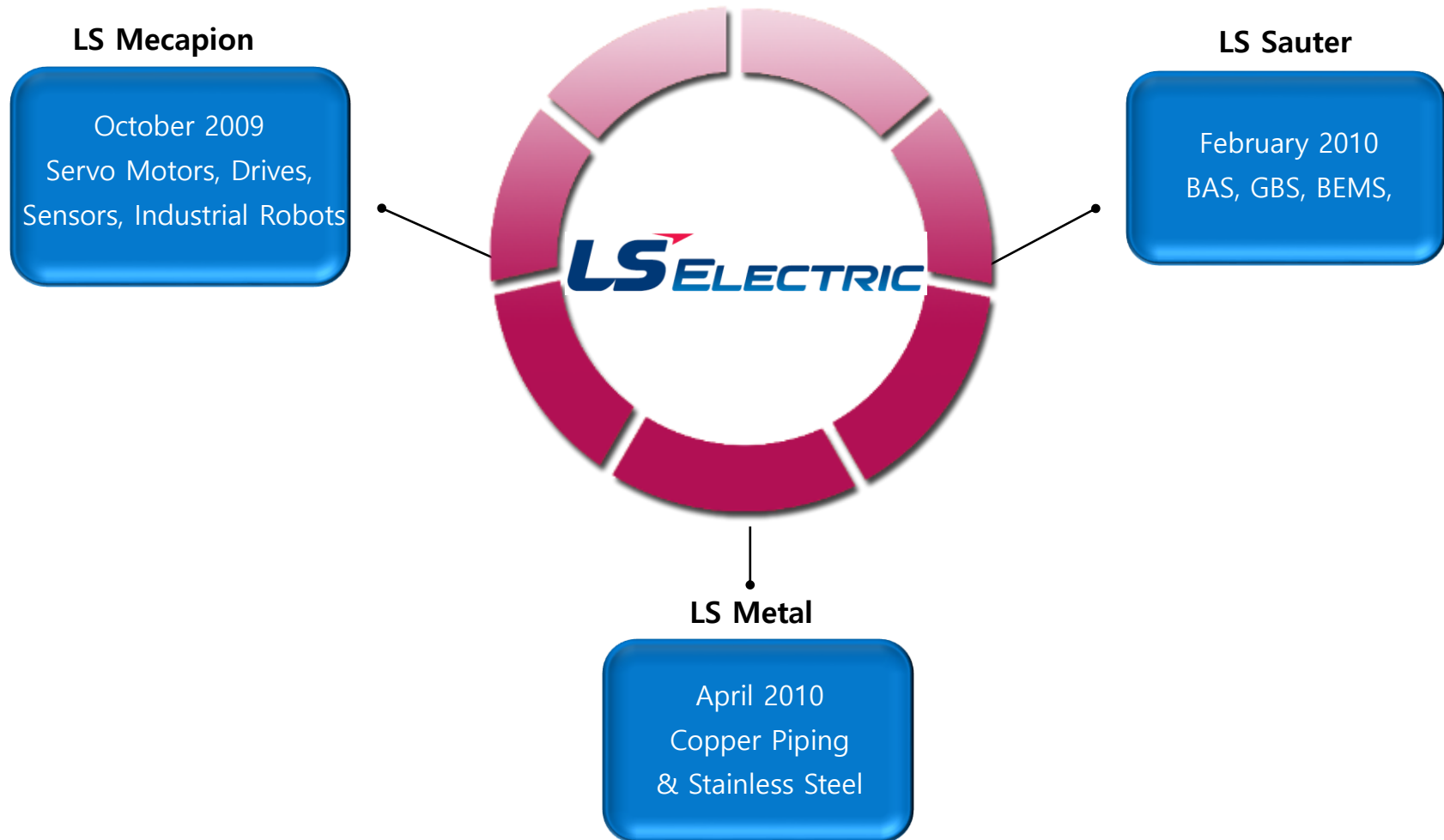
Dec. Acquires ESS Unit of North America's ESS Leader Parker-Hannifin

2019

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

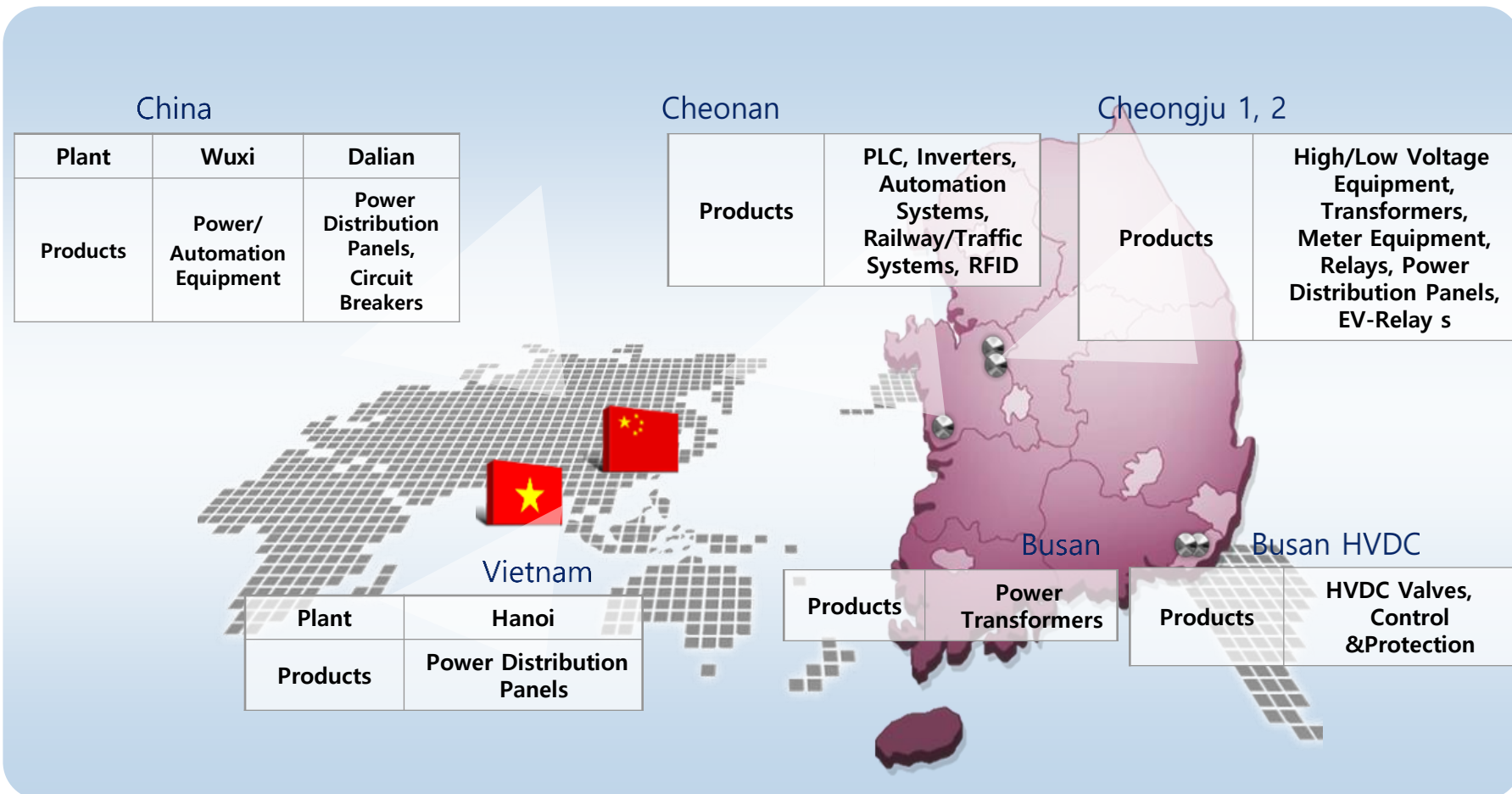
Jun. Finished the work for the construction of 18MW Megasolar plant in Hanamizuki, Japan.

Strengthening the Business Portfolio through M&As



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

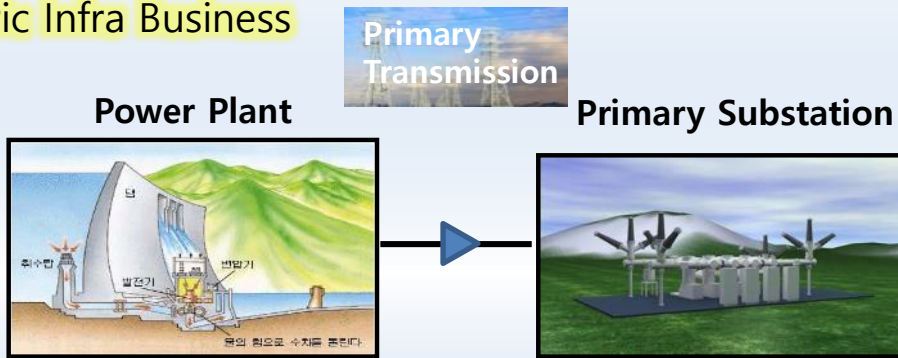
- Domestic: 5 Plants (Cheongju 1 & 2, Cheonan, Busan, Busan HVDC)
- Overseas: 3 Plants (China: Dalian, Wuxi / Vietnam: Hanoi)



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)

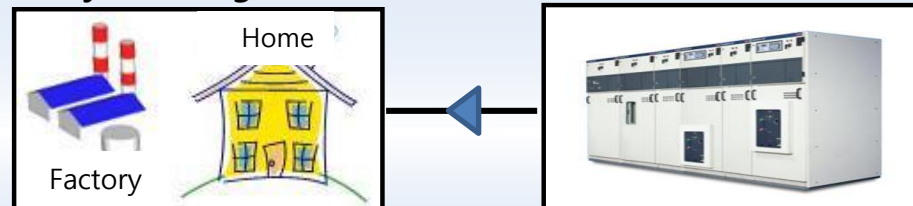
< Main Products >

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



Electric Equipment Business

Factory/Building/Household



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



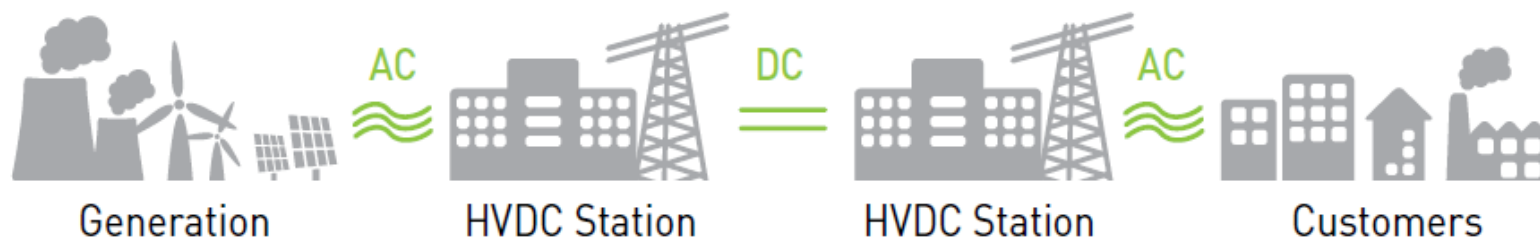
Photovoltaic System



Railway System

HVDC

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



Long Distance Transmission with Lower Cost

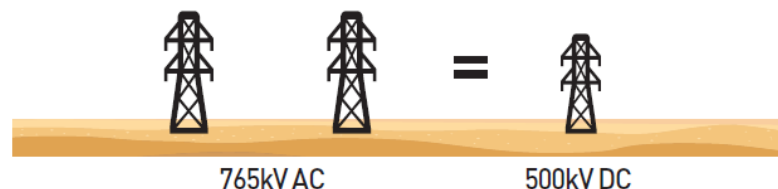
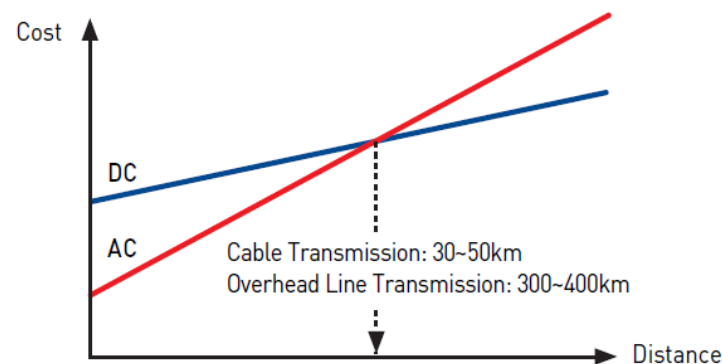
HVDC is the only option for the overhead transmission longer than 300km or submarine/underground 40km thanks to DC characteristics.

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

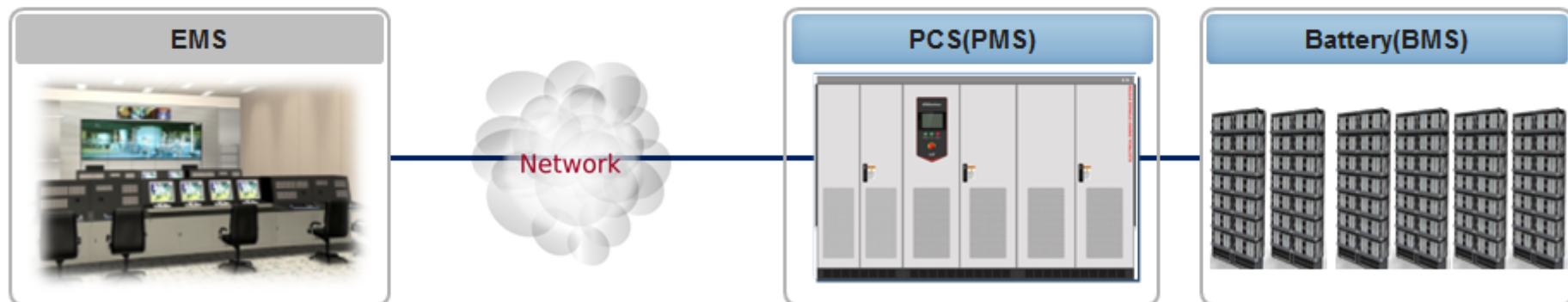
HVDC can directly interconnect load centers with huge energy sources efficiently. Therefore, negative impact on the grid is minimized. HVDC also improves the performance of AC grid by means of additional controllability.



ESS Applications

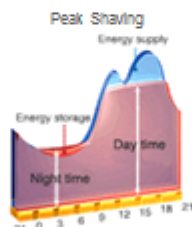
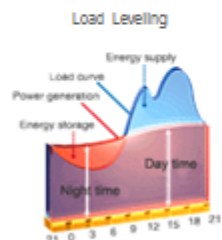
ESS(Energy Storage System) includes PCS(Power Conversion System) and battery, and make an efficient way of use electricity power

Concept of ESS



Function of ESS

➤ Peak Shaving, Load Leveling



➤ Renewable Energy Smoothing



➤ Frequency Regulation



• EMS : Energy Management System

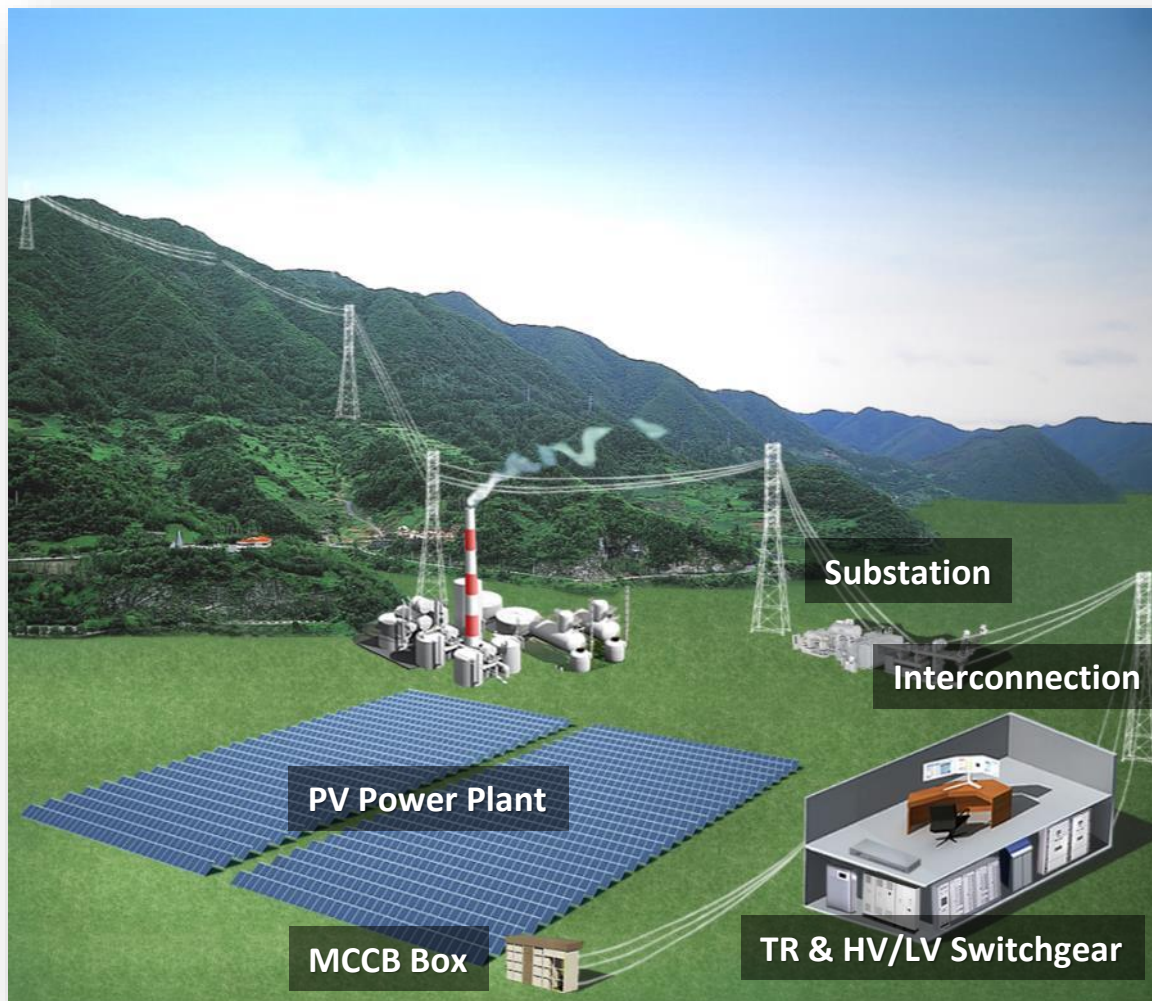
• PCS : Power Conditioning System

• 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 LS ELECTRIC.



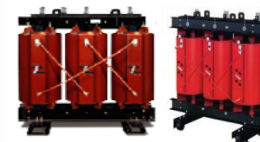
System Components



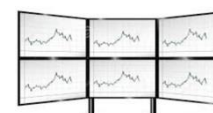
PV Power System
- Module
- Inverter
- Balance of System



- HV Switchgear
- MV Switchgear
- LV Switchgear



Transformer



Monitoring(SCADA)

III. Appendix

Appendix 1. Condensed Statement

Income statement

(unit : bwn, %)

Segment	1Q 2019	4Q 2019	1Q 2020	YoY	QoQ
Sales	519	699	636	22.6%	△9.1%
Cost of Sales	△421	△576	△518	23.0%	△10.1%
Gross Profit	98	123	118	20.7%	△4.3%
(%)	(18.9%)	(17.6%)	(18.6%)	-	-
SG&A	△69	△80	△78	12.2%	△3.2%
Operating Profit	29	43	40	41.2%	△6.4%
(%)	(5.5%)	(6.2%)	(6.4%)	-	-
Non-OP and Loss	7	△22	△7	△207.0%	△65.4%
Profit before tax	36	22	33	△7.4%	52.3%
Net Income	26	13	22	△17.5%	69.0%
(%)	(5.1%)	(1.8%)	(3.4%)	-	-
EBITDA Margin	9.6%	7.0%	8.3%	-	-

Statements of Cash Flows

(unit : bwn)

Segment	'19.1Q	'20.1Q	YoY
Cash and cash equivalents at the beginning of year	456	535	79
Cash Flows From Operating Activities	△11	38	49
Cash Flows From Investing Activities	△38	△36	2
Capex	△17	△18	△1
R&D	△3	△1	1
Others	△18	△17	1
Cash Flows From Financing Activities	△5	△7	△2
Effect of exchange rate changes on cash and cash equivalents	1	2	1
Cash and cash equivalents	402	531	128

Statement of Financial position

(unit : bwn, %)

Segment	1Q 2019	4Q 2019	1Q 2020	QoQ	YoY
Total Assets	2,397	2,538	2,598	8%	2%
Current Assets	1,504	1,667	1,713	14%	3%
Cash&Cash Equivalents	402	535	531	32%	△1%
Inventories	199	196	207	4%	5%
Other Current Assets	903	936	975	8%	4%
Non-Current Assets	893	871	885	△1%	2%
Tangible Assets	552	554	552	0%	△0%
Intangible Assets	127	114	113	△11%	△1%
Other Non-Current Assets	214	204	220	3%	8%
Total Liabilities	1,103	1,175	1,244	13%	6%
Current Liabilities	674	754	812	20%	8%
Short-term borrowings	208	197	198	△5%	0%
Non-Current Liabilities	429	422	432	1%	2%
Long-term borrowings	399	399	399	△0%	0%
Equity	1,294	1,363	1,354	5%	△1%
Current Ratio	223%	221%	211%	△5%	△5%
Equity/Total Assets	54%	54%	52%	△3%	△3%
Total Liabilities/Equity	85%	86%	92%	8%	7%
Net debts Ratio	16%	5%	5%	△69%	8%

Appendix 2. Results for the past 4 years

HQ

(unit : bwn)

Segment				17					18					19					20		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	115	111	109	100	435	111	107	106	95	419	109	103	105	102	418	108	108	△1%
			Overseas	59	61	56	55	230	52	56	50	57	215	52	68	64	60	244	60	60	17%
			Total	173	172	165	155	665	163	163	156	152	634	161	171	169	161	662	169	169	5%
		Operating Profit		40	36	37	26	139	34	32	30	25	121	31	35	34	24	125	32	32	1%
	Electric Infra	Sales	Domestic	90	106	131	120	447	134	115	107	161	516	90	115	113	169	487	118	118	31%
			Overseas	41	40	38	55	174	30	44	23	37	134	30	39	35	32	136	40	40	34%
			Total	130	147	169	175	621	164	159	130	198	650	120	154	148	201	623	158	158	32%
		Operating Profit		0	2	13	14	29	14	10	4	17	45	1	0	△1	14	13	5	5	772%
	Automation	Sales	Domestic	48	49	51	44	193	54	56	48	49	207	44	47	47	51	188	49	49	12%
			Overseas	24	24	26	20	94	26	21	21	18	86	21	21	19	20	81	22	22	4%
			Total	72	73	77	64	287	80	78	69	67	293	65	68	66	70	269	71	71	9%
		Operating Profit		8	10	12	6	36	11	12	9	9	40	5	6	7	5	23	6	6	32%
	Convergence Business	Sales	Domestic	26	36	31	52	145	32	90	68	56	246	25	24	33	118	199	101	101	310%
			Overseas	23	26	24	15	89	16	27	23	16	82	16	16	5	21	57	12	12	△23%
			Total	48	63	55	68	234	48	117	91	72	328	40	39	38	139	256	113	113	180%
		Operating Profit		△14	△9	△8	△28	△60	△8	1	△3	△21	△31	△9	△5	6	0	△6	△3	△3	66%
	Subtotal	Sales	Domestic	278	303	322	317	1,220	330	369	328	360	1,388	267	289	298	439	1,293	376	376	40%
			Overseas	146	151	145	145	587	124	148	117	128	518	118	144	123	132	517	134	134	14%
			Total	425	454	467	461	1,807	455	517	445	489	1,905	386	432	421	571	1,810	510	510	32%
		Operating Profit		34	38	53	18	143	50	55	39	30	175	28	36	46	44	155	41	41	44%

Appendix 2. Results for the past 4 years

Subsidiaries

(unit : bwn)

Segment				17					18					19					20		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	34	37	41	43	156	39	41	33	40	153	43	43	42	45	174	37	37	△16%
			Overseas	49	39	37	43	167	48	38	38	46	169	31	38	25	29	123	46	46	46%
		Total		83	76	79	85	323	87	79	71	85	322	75	81	68	74	297	83	83	10%
		Operating Profit		0	△0	△1	1	△0	△0	△0	1	1	2	△2	2	△0	1	1	0	0	123%
	Subsidiaries (Korea)	Sales		16	22	19	16	72	15	15	17	13	59	10	15	9	13	46	16	16	65%
		Operating Profit		1	3	2	1	7	2	2	1	△0	4	△1	△1	△1	△1	△4	0	0	130%
	Subsidiaries (China)	Sales		39	45	38	48	170	39	82	63	41	225	57	61	57	44	220	34	34	△40%
		Operating Profit		1	3	0	3	6	1	10	8	△2	16	5	9	5	1	20	1	1	△74%
	Subsidiaries (Vietnam)	Sales		0	0	0	0	0	4	6	6	13	29	6	10	5	10	30	4	4	△30%
		Operating Profit		0	0	0	0	0	0	0	0	1	1	0	0	△1	0	1	△1	△1	△244%
	Subtotal	Sales		138	143	135	149	565	145	182	156	152	636	147	167	139	141	594	137	137	△7%
		Operating Profit		2	6	1	4	13	3	12	10	△1	23	3	10	3	1	17	1	1	△47%

Consolidated

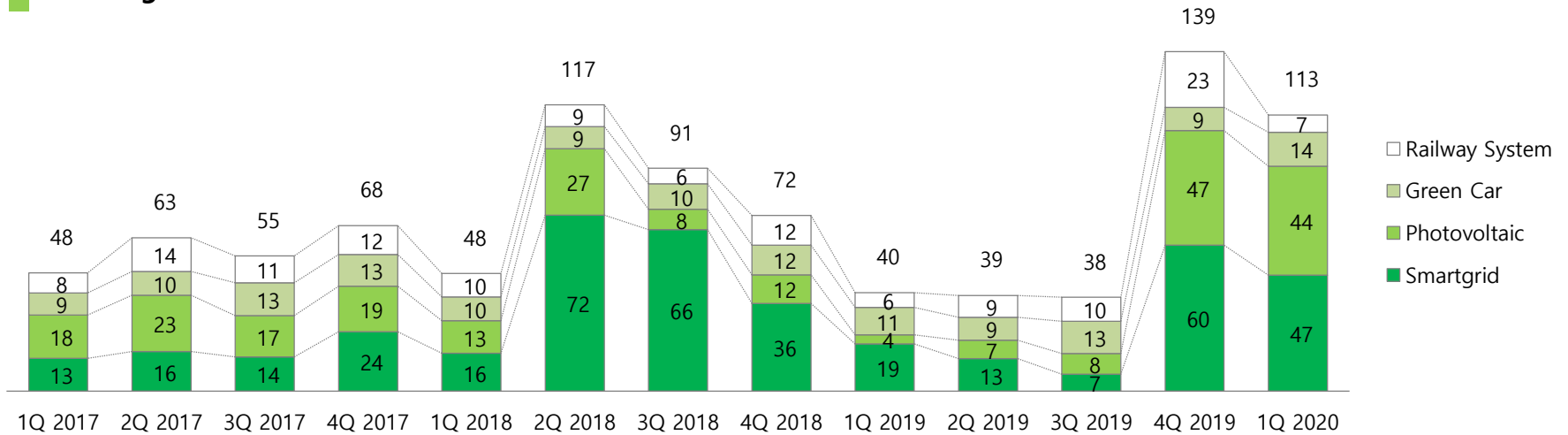
(unit : bwn)

Segment				17					18					19					20		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				△3	△9	△11	△5	△29	△8	△39	1	△10	△56	△14	△18	△11	△13	△57	△11	△11	26%
Consolidation adjustment for OP				0	△0	1	1	3	2	△2	4	3	7	△2	△3	3	△1	△3	△2	△2	30%
Total Sales				559	588	591	605	2,344	592	661	602	630	2,485	519	581	548	699	2,347	636	636	23%
Total Operating Profit				36	44	55	23	158	55	65	53	32	205	29	43	53	43	169	40	40	41%

Appendix 3. Sales details for Convergence & Subsidiaries

Convergence

(unit : bwn)



Subsidiaries

(unit : bwn)

