



# Ryosan Company, Limited

## **FY2018 First Half Results Meeting**

Results for the six months ended September 30, 2018

FY2018 : Year ending March 31, 2019

November 14, 2018

## Results for FY2018 First Half

## Business Plan for Full Year FY2018

## Implementation Status of the 10th Medium-Term Business Plan

### Notice

Business forecasts and all statements related to the future contained in this presentation are based on information currently possessed by Ryosan Company, Limited (the Company) and on certain assumptions which are judged to be rational. Actual business performance may differ greatly depending on a variety of factors. The following is a list of major factors:

- Economic conditions in key markets (Japan and the rest of Asia), rapid changes in consumption trends and supply-demand balance for products
- Sharp fluctuations in the dollar-yen exchange rate
- Substantial fluctuation in prices in capital markets

# Consolidated Statements of Operation

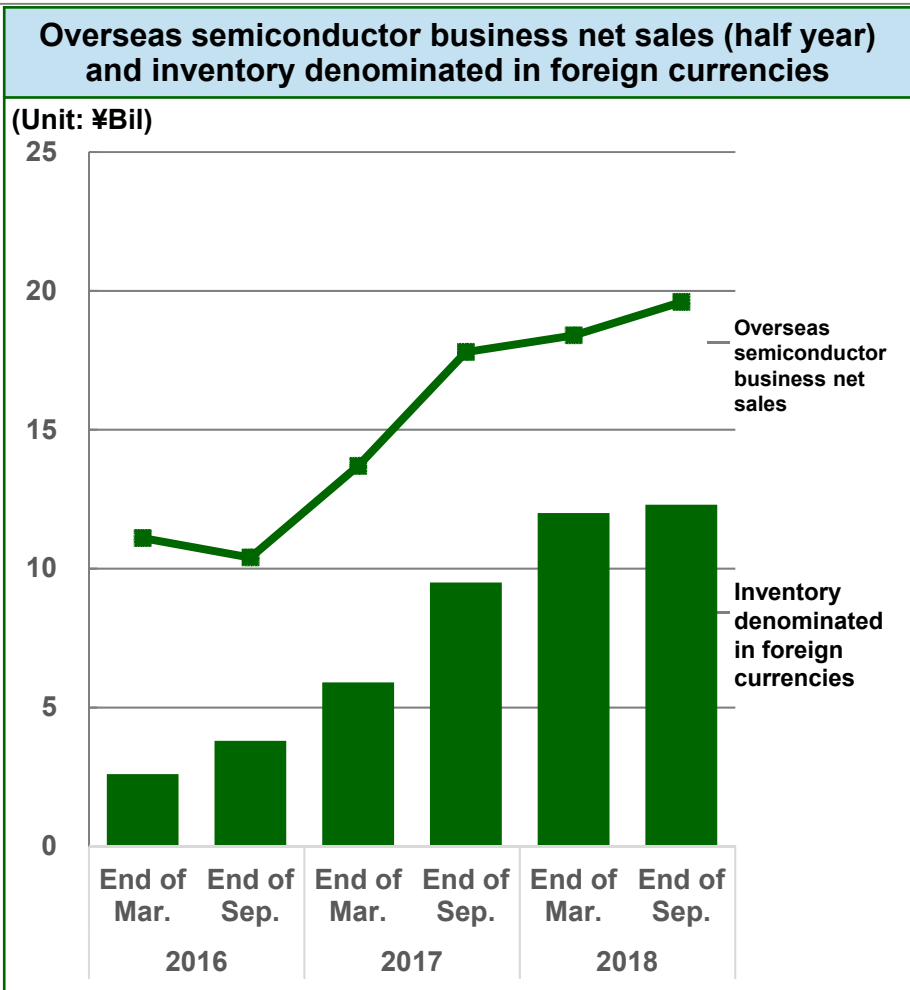
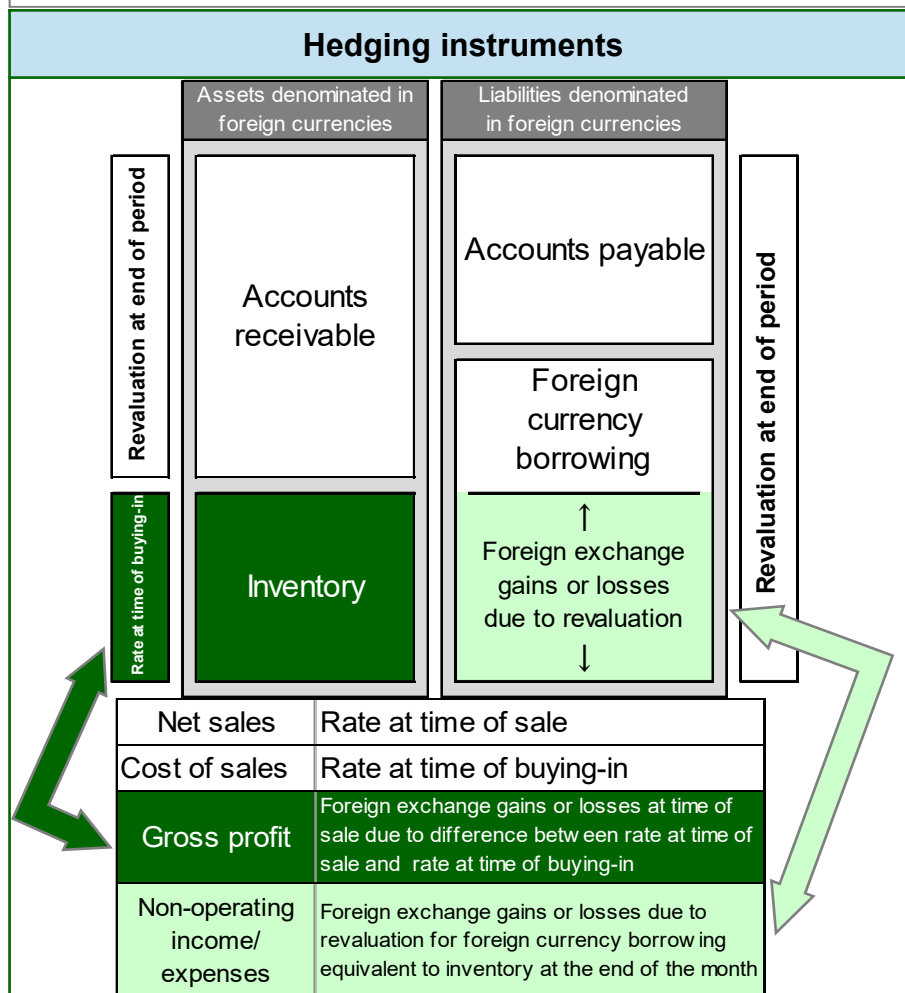
Results for FY2018  
First Half

- Net sales and operating income exceeded the initial plan mainly due to strong demand in the 'consumer' segment.
- Depreciation of Yen toward the end of the first half of FY2018 led to foreign exchange losses of ¥917 mil, pushing down ordinary income and net profit.

(Unit: ¥Bil)	FY2017 1H	FY2018 1H			
	Amount	Amount	Change	Initial Plan	Comparison with Initial Plan
<b>Net Sales</b>	123.6	<b>128.9</b>	+4.3%	127.5	+1.2%
<b>Gross Profit</b>	10.4	<b>10.7</b>	+2.1%	10.5	+2.0%
<b>% of Net Sales</b>	8.5%	<b>8.3%</b>	(0.2%)	8.2%	+0.1%
<b>Operating Income</b>	3.2	<b>2.8</b>	(10.2%)	2.7	+7.2%
<b>% of Net Sales</b>	2.6%	<b>2.2%</b>	(0.4%)	2.1%	+0.1%
<b>Ordinary Income</b>	3.1	<b>1.6</b>	(49.2%)	2.5	(35.2%)
<b>% of Net Sales</b>	2.6%	<b>1.3%</b>	(1.3%)	2.0%	(0.7%)
<b>Net Profit</b>	2.2	<b>1.0</b>	(52.5%)	1.8	(41.3%)
<b>% of Net Sales</b>	1.8%	<b>0.8%</b>	(1.0%)	1.4%	(0.6%)
<b>EPS (¥)</b>	82.66	<b>43.62</b>	(47.2%)	73.51	(40.7%)
<b>US Dollar Average Rate (¥)</b>	111.06	<b>110.26</b>	(0.7%)	105.00	+5.0%

# Coping with Foreign Exchange Risks

- Ryosan balances its assets and liabilities denominated in foreign currencies using foreign currency borrowing. It hedges 'foreign exchange gains and/or losses from gross profit' by 'foreign exchange losses and/or gains generated at foreign currency borrowing'.
- Inventory denominated in foreign currencies increased as a result of an expansion of overseas semiconductor business, which increased impact of exchange fluctuations at the end of the period.



# Segment Information

Results for FY2018  
First Half

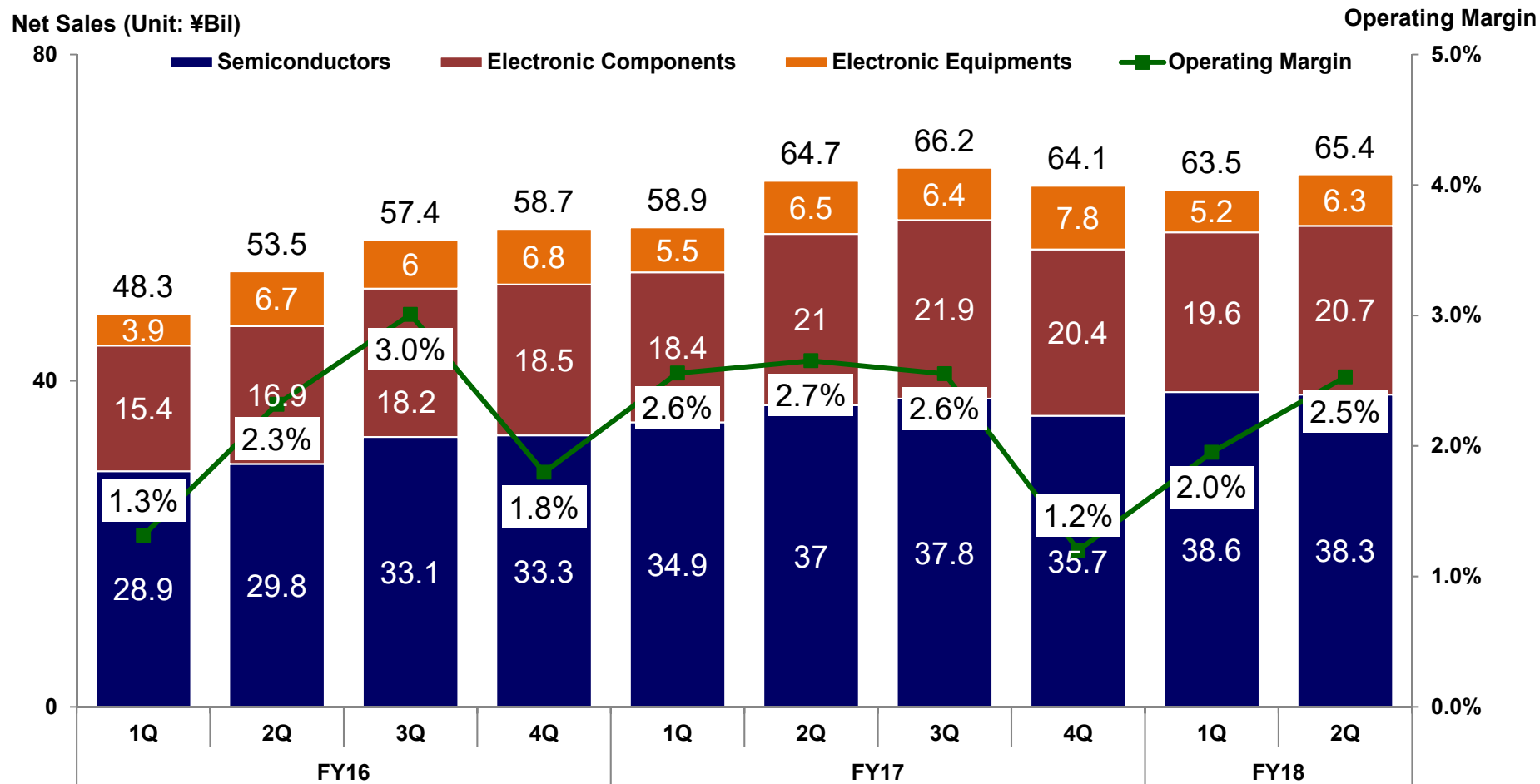
- The semiconductors business recorded increase in sales due to consolidation of EDAL ELECTRONICS Co., Ltd. (“EDAL”) (net sales approximately ¥5 bil during the first half of FY2018).
- The electronic components business continued to perform stable mainly at ‘consumer’ segment. The operating margin was also at a high level.
- The electronic equipment business recorded a decrease in sales and profits due to the end of a large-amount transaction.

(Unit: ¥Bil)		FY2017 1H	FY2018 1H			
		Results	Results	Change	Initial Plan	Comparison with Initial Plan
<b>Semiconductors</b>	Net Sales	72.0	<b>77.0</b>	+6.9%	76.4	+0.8%
	Operating Income	1.8	<b>1.3</b>	(23.6%)	1.5	(6.9%)
	% of Net Sales	2.5%	<b>1.8%</b>	(0.7%)	2.0%	(0.2%)
<b>Electronic Components</b>	Net Sales	39.5	<b>40.4</b>	+2.3%	39.0	+3.7%
	Operating Income	1.3	<b>1.4</b>	+12.5%	1.3	+14.4%
	% of Net Sales	3.3%	<b>3.7%</b>	+0.4%	3.3%	+0.4%
<b>Electronic Equipment</b>	Net Sales	12.0	<b>11.5</b>	(4.1%)	12.1	(4.6%)
	Operating Income	0.2	<b>0.1</b>	(37.3%)	0.1	+14.0%
	% of Net Sales	2.3%	<b>1.5%</b>	(0.8%)	1.2%	+0.3%
<b>Total</b>	Net Sales	123.6	<b>128.9</b>	+4.3%	127.5	+1.2%
	Operating Income	3.2	<b>2.8</b>	(10.2%)	2.7	+7.2%
	% of Net Sales	2.6%	<b>2.2%</b>	(0.4%)	2.1%	+0.1%
<b>US Dollar Average Rate (¥)</b>		111.06	<b>110.26</b>	(0.7%)	105.00	+5.0%

# Trend in Net Sales and Operating Margins by Quarter

Results for FY2018  
First Half

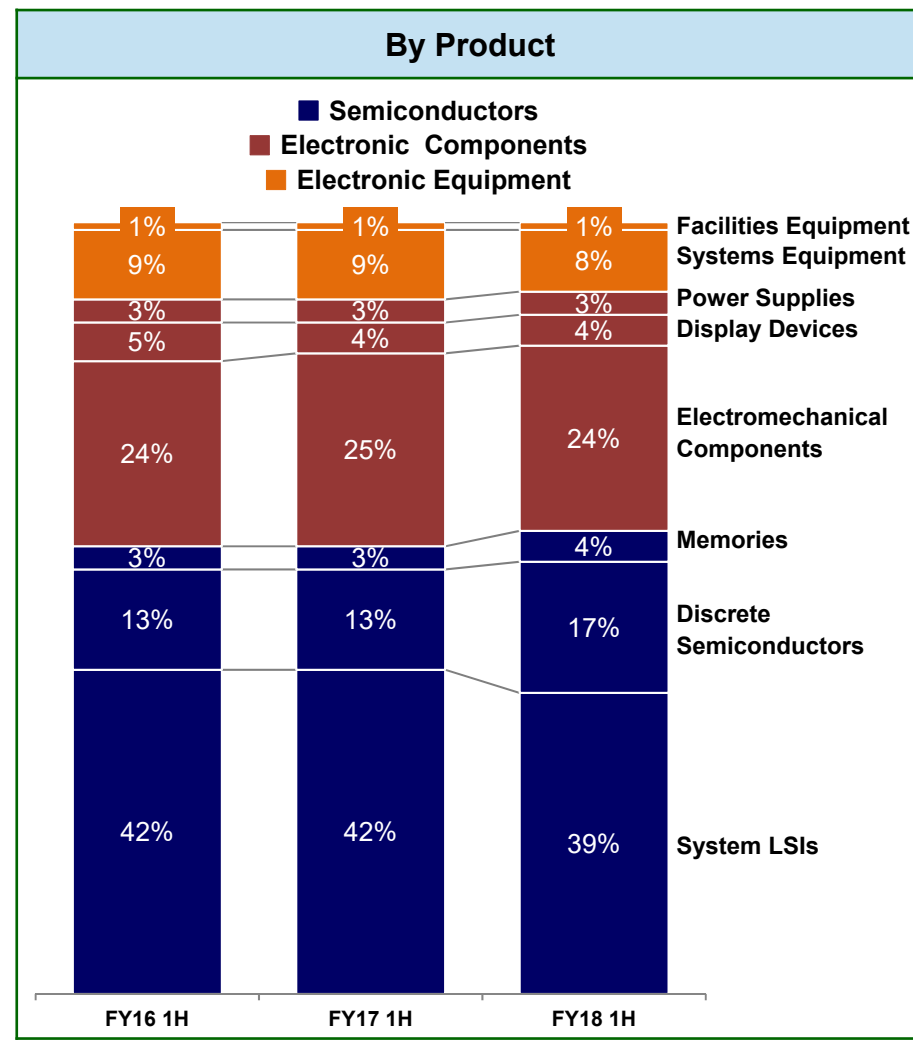
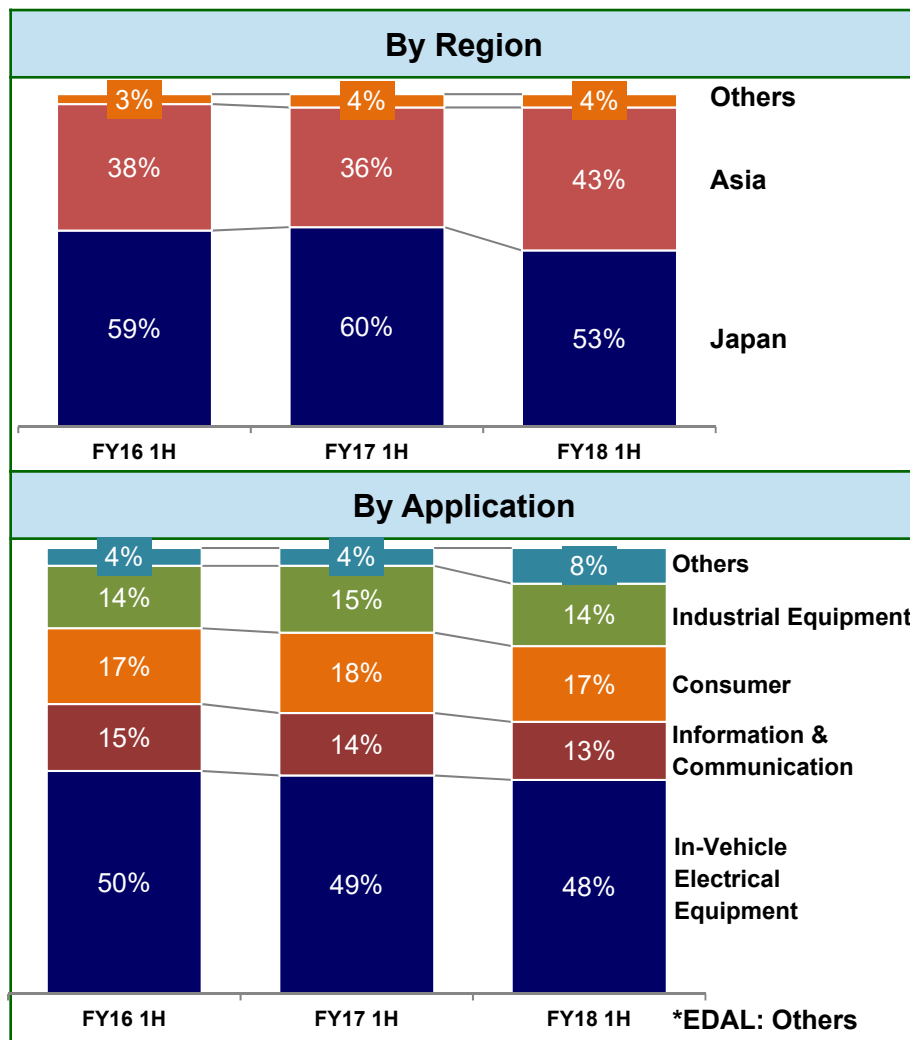
- Net sales recorded steadily around the ¥60 bil range following increases in sales over 6 consecutive quarters since FY2016 1Q.
- Operating margin improved from FY2017 4Q and FY2018 1Q, mainly due to a decrease in costs associated with inventory.



# Segment Trend Information

Results for FY2018  
First Half

■ The consolidation of EDAL led to an increase in the net sales ratio by region in Asia, and by product for discrete semiconductors.



- Net assets decreased to ¥90.3 bil, due mainly to the purchase of treasury shares (¥3.8 bil) and cash dividends paid (¥1.8 bil). The ratio of net assets to total assets decreased to 56.0%.
- Some notes and accounts receivable were fluidized as a measure to improve asset efficiency. Cash flows from operating activities went up to ¥9.0 bil. Cash and cash equivalents increased by ¥1.7 bil compared with the same period last year.

(Unit: ¥Bil)	End of Mar.18	End of Sep.18	Increase and Decrease
<b>Total Assets</b>	162.2	<b>161.3</b>	(0.9)
<b>Current Assets</b>	143.5	<b>143.0</b>	(0.5)
<b>Non-Current Assets</b>	18.7	<b>18.3</b>	(0.4)
<b>Liabilities</b>	67.9	<b>70.9</b>	+3.0
<b>Net Assets</b>	94.3	<b>90.3</b>	(4.0)
<b>Net Assets to Total Assets (%)</b>	58.1%	<b>56.0%</b>	(2.1%)

(Unit: ¥Bil)	FY2017 1H	FY2018 1H	Increase and Decrease
<b>Cash Flow from Operating Activities</b>	(15.8)	<b>9.0</b>	+24.8
<b>Cash Flow from Investing Activities</b>	0.6	<b>(0.2)</b>	(0.8)
<b>Cash Flow from Financing Activities</b>	(8.0)	<b>(5.1)</b>	+2.9
<b>Cash and Cash Equivalents at the End of the Period</b>	15.4	<b>17.1</b>	+1.7



Results for FY2018 First Half

Business Plan for Full Year FY2018

Implementation Status of the 10th Medium-Term  
Business Plan

# Business Objectives

Business Plan for  
Full Year FY2018

- In addition to the results for the first half of FY2018, Ryosan expects a slowdown in market conditions, such as a lull in the FA market, and has revised its initial plan downward.
- The exchange rate in the plan is ¥105. Forecasts for the second half of FY2018 do not take into consideration the impacts of foreign currency exchanges.

(Unit: ¥Bil)	FY17	FY18					
	Full Year	1st Half	2nd Half Plan	Full-Year Plan	Change (FY18-17)	Initial Plan	Comparison with Initial Plan
<b>Net Sales</b>	254.0	128.9	125.0	254.0	0.0%	258.0	(1.6%)
<b>Gross Profit</b>	20.3	10.7	10.3	21.1	+3.7%	21.5	(1.9%)
<b>% of Net Sales</b>	8.0%	8.3%	8.3%	8.3%	+0.3%	8.3%	0.0%
<b>Operating Income</b>	5.6	2.8	2.7	5.6	(1.2%)	6.0	(6.7%)
<b>% of Net Sales</b>	2.2%	2.2%	2.2%	2.2%	0.0%	2.3%	(0.1%)
<b>Ordinary Income</b>	6.3	1.6	2.3	4.0	(37.5%)	5.6	(28.6%)
<b>% of Net Sales</b>	2.5%	1.3%	1.9%	1.6%	(0.9%)	2.2%	(0.6%)
<b>Net Profit</b>	4.4	1.0	1.7	2.8	(37.5%)	4.0	(30.0%)
<b>% of Net Sales</b>	1.8%	0.8%	1.4%	1.1%	(0.7%)	1.6%	(0.5%)
<b>EPS (¥)</b>	173.98	43.62	73.59	117.21	(32.6%)	163.36	(28.3%)
<b>US Dollar Average Rate (¥)</b>	110.85	110.26	105.00	107.63	(2.9%)	105.00	+2.5%

# Overview of Business Plan by Business Segment

Business Plan for  
Full Year FY2018

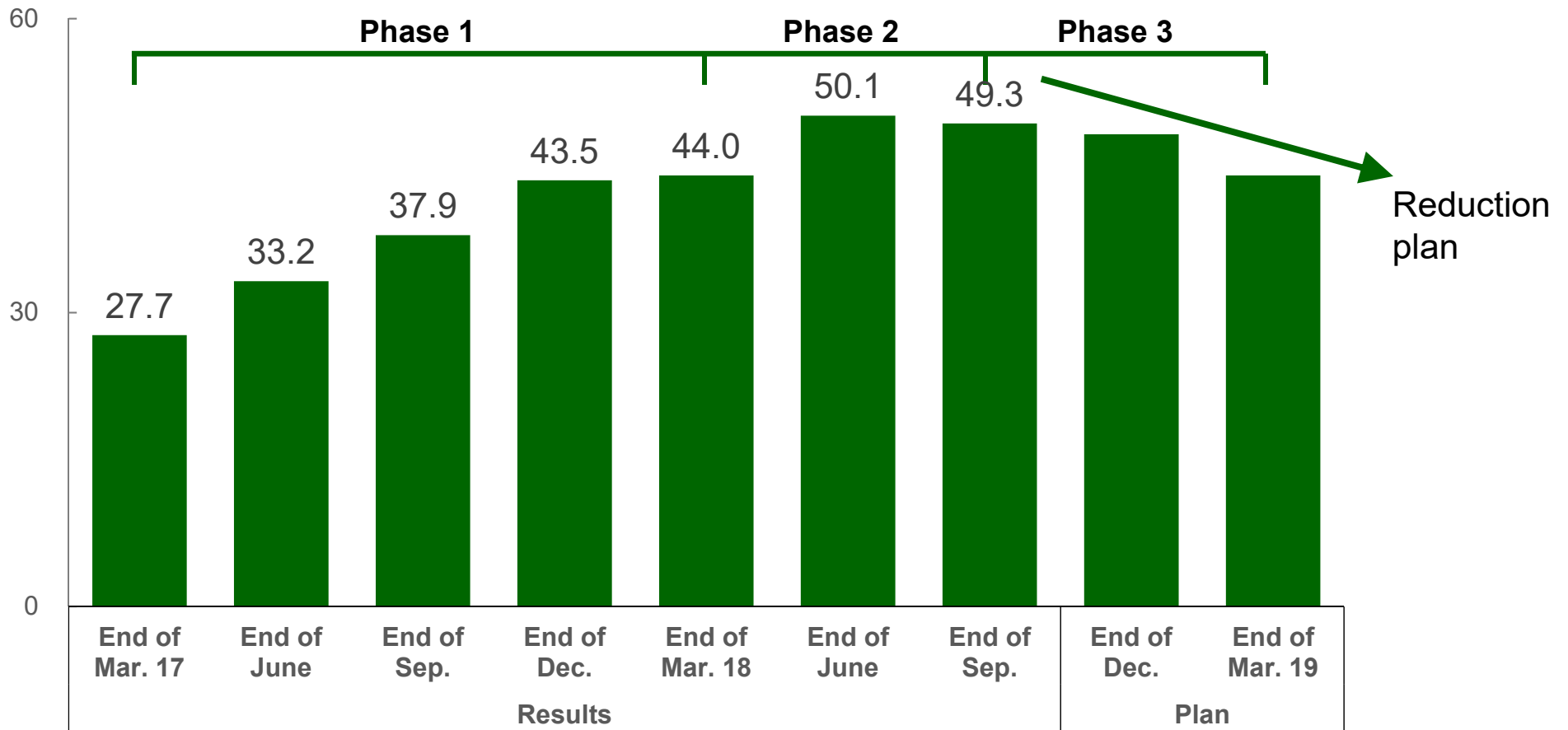
- In the semiconductors business, in-vehicle electrical equipment, which constitutes the majority of this business, is expected to perform well, with an increase in both sales and profits compared with the same period last year, despite the impacts of a slowdown in FA market,
- The electronic components business is showing signs of decline in the 'consumer' segment, which has driven growth until now. In the electronic equipment business, the termination of large-amount transactions during 1H leads to a decrease in both sales and profits compared with the same period last year.

(Unit: ¥Bil)		FY17	FY18					
		Full Year	1st Half	2nd Half Plan	Full-Year Plan	Change (FY18-17)	Initial Plan	Comparison with Initial Plan
Semiconductors	Net Sales	145.7	77.0	74.9	<b>152.0</b>	+4.3%	154.5	(1.6%)
	Operating Income	2.6	1.3	1.3	<b>2.7</b>	+4.7%	3.4	(20.3%)
	% of Net Sales	1.8%	1.8%	1.8%	<b>1.8%</b>	0.0%	2.2%	(0.4%)
Electronic Components	Net Sales	81.9	40.4	38.0	<b>78.5</b>	(4.2%)	79.5	(1.3%)
	Operating Income	2.8	1.4	1.3	<b>2.8</b>	(0.4%)	2.7	+3.7%
	% of Net Sales	3.4%	3.7%	3.4%	<b>3.6%</b>	+0.2%	3.4%	+0.2%
Electronic Equipment	Net Sales	26.3	11.5	11.9	<b>23.5</b>	(10.9%)	24.0	(2.1%)
	Operating Income	0.6	0.1	0.2	<b>0.4</b>	(34.1%)	0.3	+14.3%
	% of Net Sales	2.3%	1.5%	1.9%	<b>1.7%</b>	(0.6%)	1.5%	+0.2%
Total	Net Sales	254.0	128.9	125.0	<b>254.0</b>	0.0%	258.0	(1.6%)
	Operating Income	5.6	2.8	2.7	<b>5.6</b>	(1.2%)	6.0	(6.7%)
	% of Net Sales	2.2%	2.2%	2.2%	<b>2.2%</b>	0.0%	2.3%	(0.1%)
US Dollar Average Rate (¥)		110.85	110.26	105.00	<b>107.63</b>	(2.9%)	105.00	+2.5%

# Inventory Plan

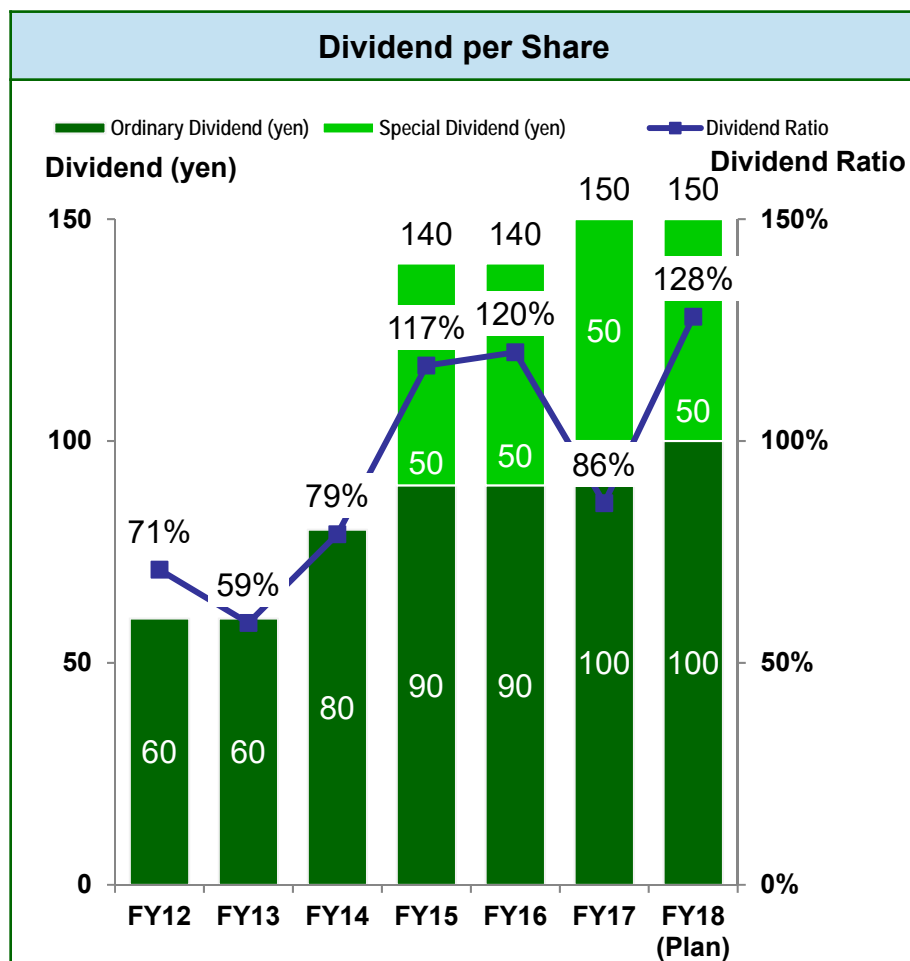
- Inventory increased due to a request for BCP from automotive business customers and due to an expansion of overseas semiconductor supplier businesses (Phase 1).
- Inventory increased due to a consolidation of Edal and an increase at FA businesses (Phase 2).
- Ryosan plans to decrease inventory by 10% through a control of purchase orders (2H, FY18) (Phase 3).

Amount of consolidated inventory (Unit: ¥Bil)



# Plan for Return to Shareholders

- For FY2018, Ryosan plans to issue ordinary dividends of ¥100 and special dividends of ¥50, a total of ¥150.
- Ryosan is also continuing to acquire treasury shares this fiscal year.



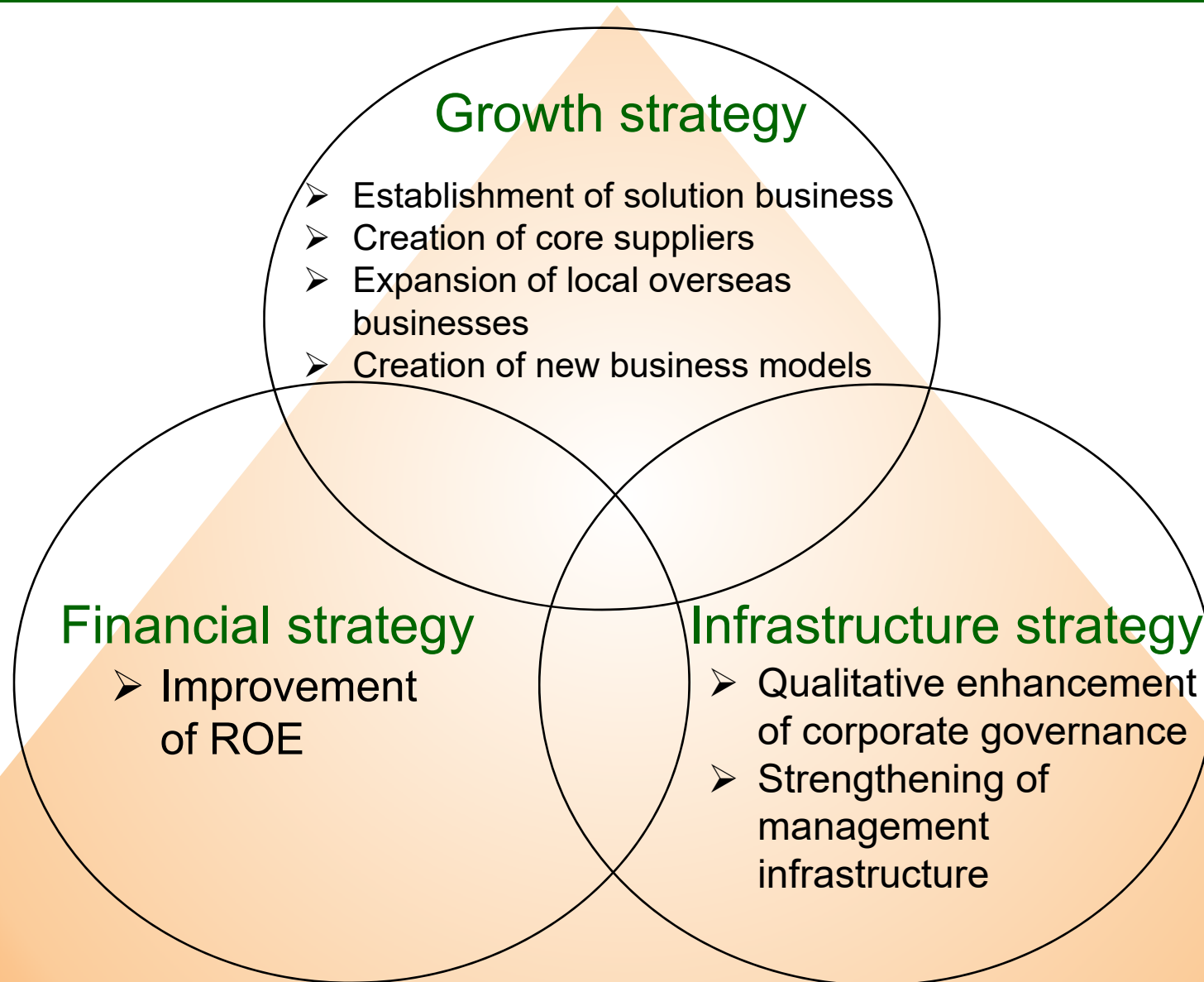
### Acquisition of Treasury Shares

FY	No. of Acquired Shares (10 thousand)	Amount (¥Bil)
FY12	100	1.9
FY13	100	1.9
FY14	45	1.8
FY15	155	4.6
FY16	137	4.4
FY17	361	15.9
FY18 (as of Nov. 5)	105	4.2

Results for FY2018 First Half

Business Plan for Full Year FY2018

Implementation Status of the 10th Medium-Term  
Business Plan



## Establishment of solution business

- Strengthened relations through additional investments in AIO Core Co., Ltd.
- Commenced new services for in-vehicle decoration, in-bound and vital sensing.
- Exhibited at the 21st Embedded Systems Expo (ESEC).

## Creation of core suppliers

- Smoothed its drastic expansion. Underwent a pivotal shift to streamlining of operations aimed at improving profitability.
- Promoted non-organic initiatives to realize further business expansion.

## Expansion of local overseas business

- Promoted initiatives to create synergy between EDAL and Quigdao Sanyuan Taike Electronics Technology (China)\*. Made achievements in actualizing electronic components business. Future challenge is to enlarge synergy further.  
\*Company which develops, manufactures and sells motor controllers that Ryosan invested in in January 2018.

## New business models

- Promoted projects under the direct control of the president.

## Initiatives for the second half

- Commercialize new business models
- Provide support for AIO Core Co., Ltd. to get into commercialization

- Optimize system investments and personnel allocation aimed at streamlining operations
- Find new business investment opportunities

- Further expand business in Greater China
- Reconstruct local overseas businesses in the electronic components segment
- Promote M&A with overseas trading companies

- Create new businesses in which Ryosan “brings together” existing clients



### Qualitative enhancement of corporate governance

- Continue values training (round-up system) as a means of **putting the Ryosan spirit into practice**.
- Improve supply chain management frameworks as part of **ESG initiatives**. Optimize PDCA cycle for risk assessment. In addition, compile non-financial information for reinforcing information disclosure.
- Accelerate initiatives aimed at **strengthening internal controls** based on an expansion of the group's scope through M&A.

### Strengthening of management infrastructure

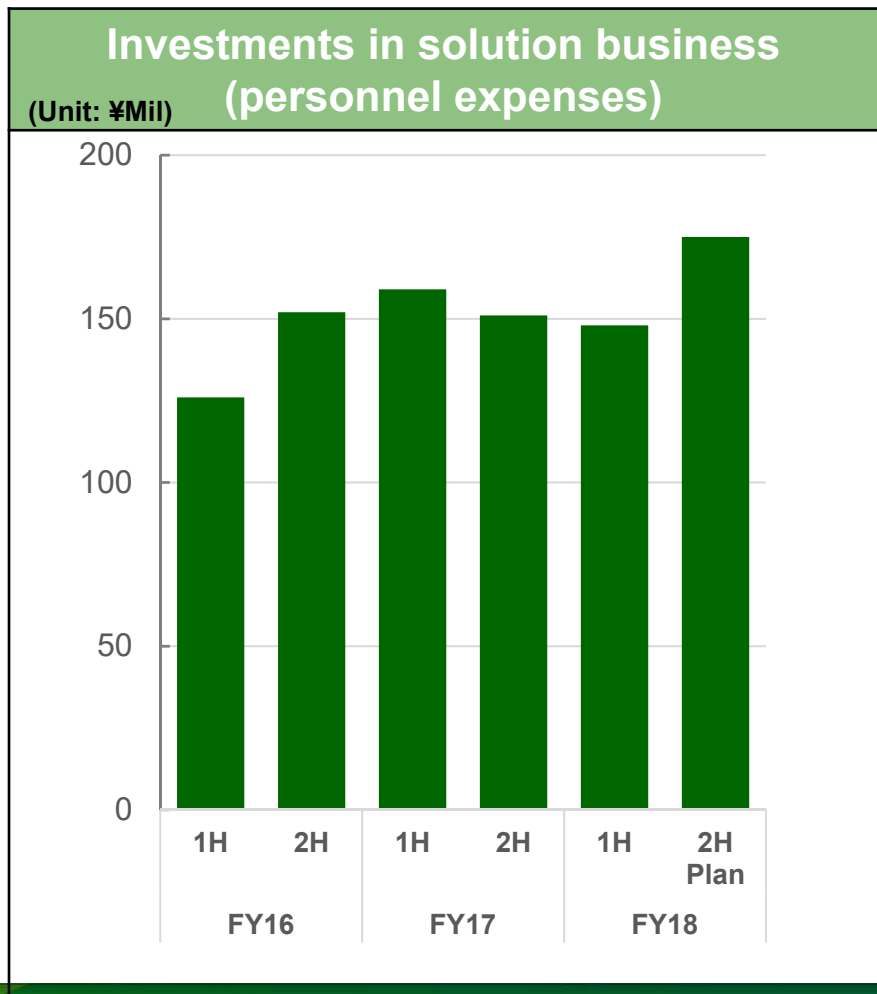
- Promote **reforms of business process on cross-sectional basis** from the perspective of **streamlining indirect operations**. Plan to introduce a budget control system for deliveries that is separate from main BPR systems.
- Continue to review organization and HR framework to make them in line with market characteristics as a means of further reinforcing business infrastructure.

# Establishment of Solution Business

- Create business under the 3 themes of system solutions, in-vehicle solutions and analog sensor solutions.
- Come up with a range of measures aimed at commercializing solution business.

## ◆ Initiatives in the second half

System solutions	<ul style="list-style-type: none"> <li>▪ Establish fee-based businesses.</li> </ul>
In-vehicle solutions	<ul style="list-style-type: none"> <li>▪ Evolve in-vehicle decoration business to Tier1 companies.</li> </ul>
Analog sensor solutions	<ul style="list-style-type: none"> <li>▪ Strengthen ties with AIO Core Co., Ltd. through additional investments. Promote design-in activities aimed at business expansion.</li> <li>▪ Promote initiatives for collaborative-type robot business.</li> </ul>



# Expansion of Local Overseas Business

- Consolidate EDAL from FY2018.
- Aim to seek out new business focusing on electronic components, as well as further expand our existing Renesas business, mainly in the China and Korea areas.

◆ **China area** Main fields: In-vehicle electrical equipment/industrial Large household appliances

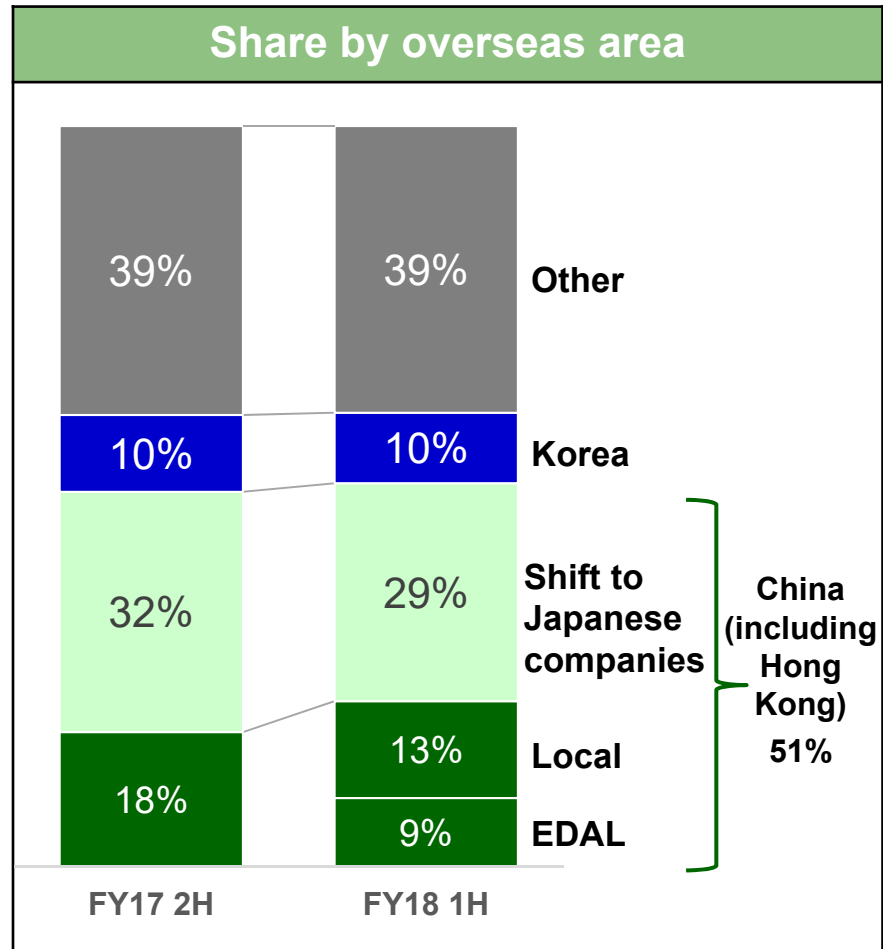
- Utilize EDAL and Quigdao Sanyuan Taike Electronics Technology (China). Expand sales to local customers.

◆ **Korea area** Main fields: In-vehicle electrical equipment

- Expand sales of advanced materials, applied products, high-performance products and sensor modules to local in-vehicle electrical equipment customers.

◆ **Alliances with strategic partners**

- Promote M&A with local overseas trading companies in the China and Europe areas. Continue to explore investment opportunities for which business synergy can be expected.



# Financial Strategy: Improve Capital Efficiency

Implementation Status  
of the 10th Medium-  
Term Business Plan

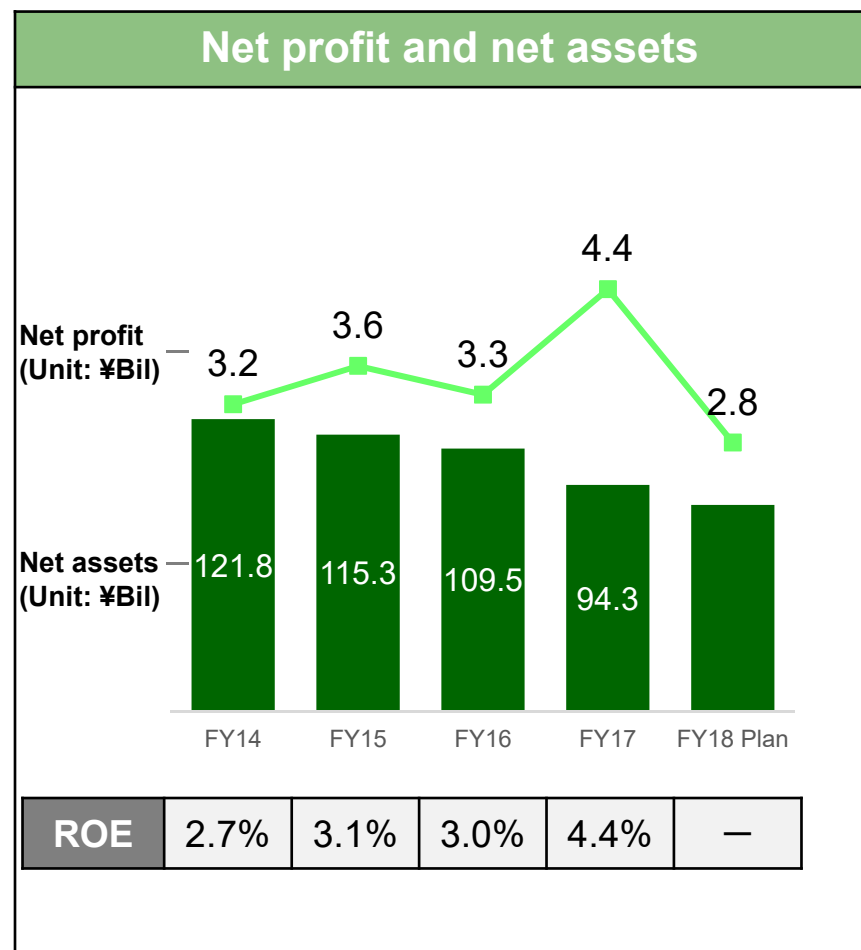
- Take measures to improve capital efficiency by improving profitability, improving asset efficiency and achieving optimal shareholders' equity ratio, aiming at ROE 5% in FY2019.

## Measures for improving capital efficiency

M. term measures	Details
Improve profitability	<ul style="list-style-type: none"> <li>Scout out excellent candidates for strategic investments</li> <li>Increase expense efficiency</li> </ul>
Improve asset efficiency	<ul style="list-style-type: none"> <li>Fluidize accounts receivables</li> <li>Reduce strategic shareholdings</li> </ul>
Achieve optimal equity ratio	<ul style="list-style-type: none"> <li>Acquire treasury shares (2 mil shares in FY2018)</li> <li>Issue special dividends (¥50 in FY2018)</li> </ul>



**Aim at ROE 5% in FY2019**



# References

— Introduction to Solution Business —

Started receiving orders for service charge business as a new business.  
Services commenced in September 2018 as a joint venture with Sier.

Customers		Uses	Services
Municipal authorities	Municipalities, tourist areas, etc.	Analysis of tourist behavior	<ul style="list-style-type: none"> <li>• Reports</li> <li>• Dashboard (data overview/list display)</li> </ul>
Public infrastructures	Public transport, facilities, etc.	Analysis of customer trends Coordination with existing ICT services	<ul style="list-style-type: none"> <li>• Reports</li> <li>• Analyzed data</li> </ul>
Retail	Shopping arcades, department stores, shopping centers, etc.	Market research (traffic diagram research, analysis, etc.)	<ul style="list-style-type: none"> <li>• Reports</li> <li>• Analyzed data</li> </ul>

## Real-time sensors under development with partners for new services

Features: Real-time (by fixed interval) provision of peripheral data from sensors

Uses: Sier's ICT real-time services

Addition to in-bound services, like signage



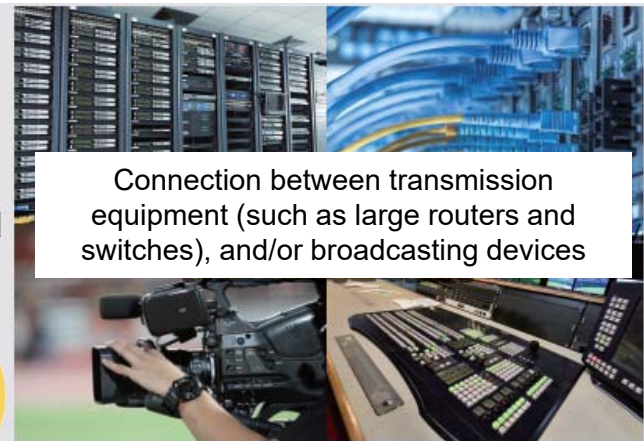
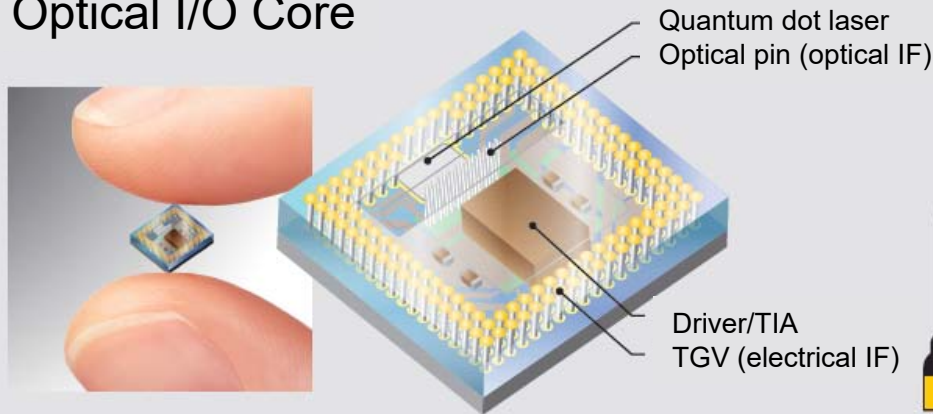
[Sensor (under development)]



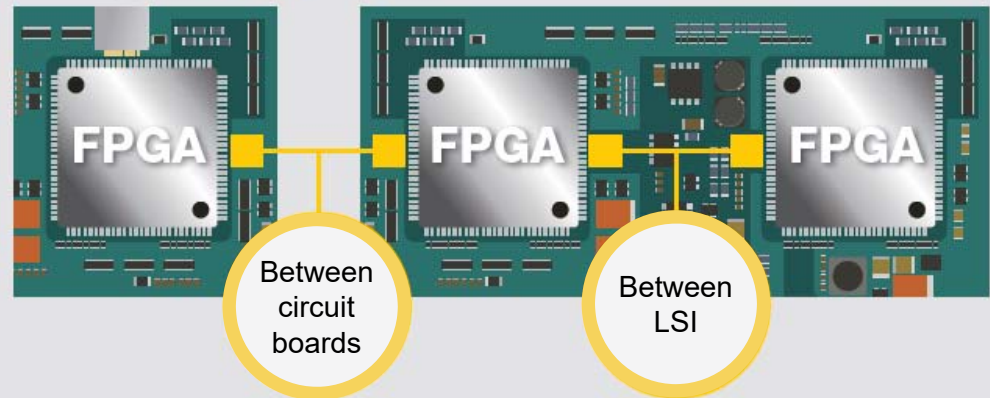
Achieve the smallest size in the world as a 100Gb/s class optical module using silicon photonics technology (integration of 25Gbpsx4ch function for both Tx/Rx, within a size of 5 mm)

**Aim to create new optical communication markets using small/low-power consumption Optical I/O Core**

## Optical I/O Core



Performance	
Transmission capacity	25Gbps x 4ch
Power consumption	<1W
Operable temperatures	-40°C to 85°C
Optical IF joining precision	±10μm

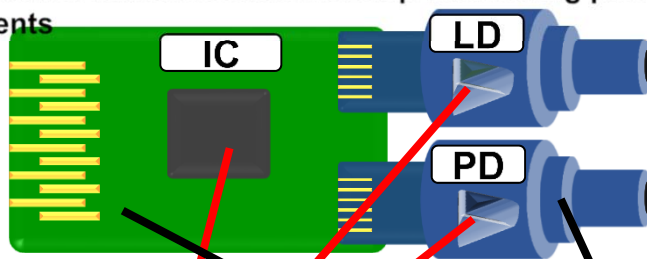




## Miniaturization makes Optical I/O Core customizable for a range of uses

### Existing optical transceivers

Optical transceiver manufacturers develop connecting parts through comparing and adjustments



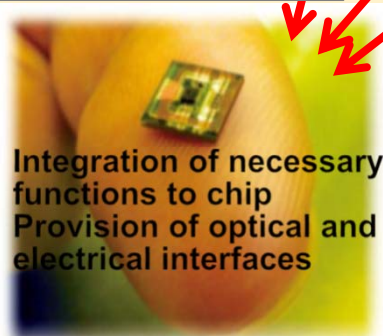
### Standards for optical transceivers



Optical connector  
Electrical connector  
Size, performance...

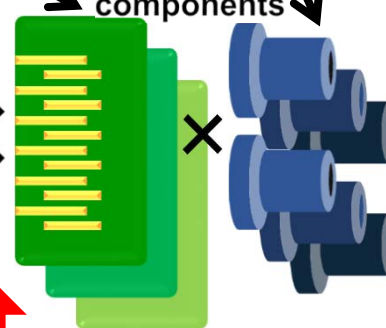
Limited uses

### Optical I/O Core

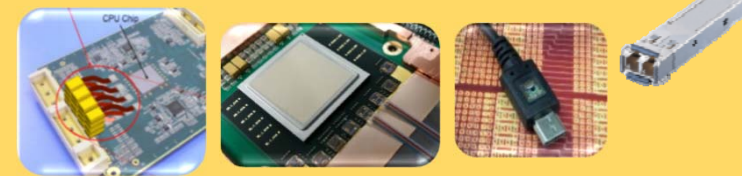


Integration of necessary functions to chip  
Provision of optical and electrical interfaces

Peripheral components



### Built-in optical module



### A range of possible uses

· Can be built into systems in ways not possible with existing optical transceivers.

Optical/electrical user interface for chip

Standardization of optical/electrical interface.  
User/customer customizes peripheral components.

Optical connection that does not require high precision positioning



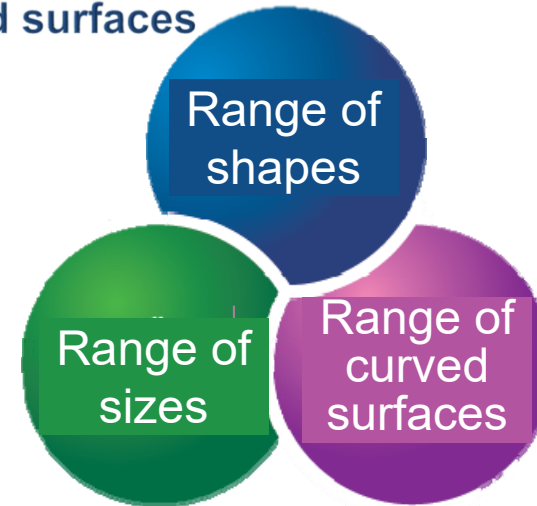
## [Feature 1]

Range of possible contact interfaces



## [Feature 2]

Range of possible sizes, shapes and curved surfaces



Example uses: robots, FA equipment

- For sensing of complex shapes
- For improving safety
- For sensing without affecting the design
- For adding user interfaces to key devices, voice recognition and something extra

