

Yokogawa Electric Corporation

# Financial Results for 1<sup>st</sup> Half of Fiscal Year 2018

November 6, 2018

## 1. Financial Results for 1<sup>st</sup> Half of Fiscal Year 2018

**Junichi Anabuki**  
Director, Senior Vice President  
Corporate Administration Headquarters

## 2. Appendix

- Quarterly Financial Results
- Orders and Sales by Region in Control Segment
- Non-operating /Extraordinary Income and Expenses
- Order Backlog Trend by Segment
- Trend of R&D Expenses, Depreciation, and CAPEX
- Trend of Balance Sheet
- Trend of Cash Flow
- News
- Trend of Stock Price

## 3. Current Situation and Future Forecast

**Takashi Nishijima**  
President and Chief Executive Officer

Yokogawa Electric Corporation

# Financial Results for 1<sup>st</sup> Half of Fiscal Year 2018

## Junichi Anabuki

Director, Senior Vice President  
Corporate Administration Headquarters

Nov 6, 2018

# Key Points

## ■ FY18 1H results: Increased sales and profits, strong growth

- Summary: Orders was up (+7.5% year on year). Operating income was also up due to increased sales and improvement of the gross margin.
- Segments: Control was strong, measurement was unchanged year on year, and the aviation and other business segment showed a decrease in income and profits.
- Regions: Strong growth in China, orders up in the Middle East and India.
- Industries: Chemical and upstream businesses are growing.

## ■ FY18 forecast: <Change> A year-on-year increase in sales and profits

- Orders +10.0 billion yen, sales +5.0 billion yen, operating income +3.0 billion yen, profit attributable to owners of parent +4.0 billion yen
- Reasons: ①Control was strong: OPEX related investment remains strong  
Some customers have resumed active CAPEX investment
- ②Transfer of subsidiary's shares
- ③Expected change in exchange rate
- Risks: A slowing economy and a decline in investment due to trade friction between the United States and China.

# Summary of FY18 1H Results

- ◆ Orders and sales were up thanks to firm results in the control segment.
- ◆ Operating income was up due to increased sales and improvement of the gross margin.
- ◆ Profit attributable to owners of parent was at nearly the same level as last year; this can be attributed to the recording of 2.5 billion yen of extraordinary income in the same period of the previous fiscal year.

(Billion ¥)

	FY17 1H	FY18 1H	Difference	Growth rate	Impact of exchange rate
Orders	198.9	<b>213.7</b>	+14.8	+7.5%	(2.2)
Sales	188.0	<b>190.4</b>	+2.4	+1.3%	(2.0)
Operating income	12.4	<b>14.8</b>	+2.4	+18.5%	(0.5)
ROS (%)	6.6	<b>7.7</b>	+1.1 pts	—	—
Ordinary income	12.3	<b>16.2</b>	+3.9	+31.3%	(0.4)
Profit attributable to owners of parent	9.6	<b>10.1</b>	+0.5	+5.6%	(0.3)
EPS (¥)	35.88	<b>37.96</b>	+2.08	+5.8%	—
Exchange rate	1\$ = ¥111.29	<b>¥110.72</b>	(0.57)	—	—

# Analysis of Operating Income (FY17 1H/FY18 1H comparison)

(Billion¥)

**Increase in gross profit from higher sales**  
(excluding impact of exchange rate)

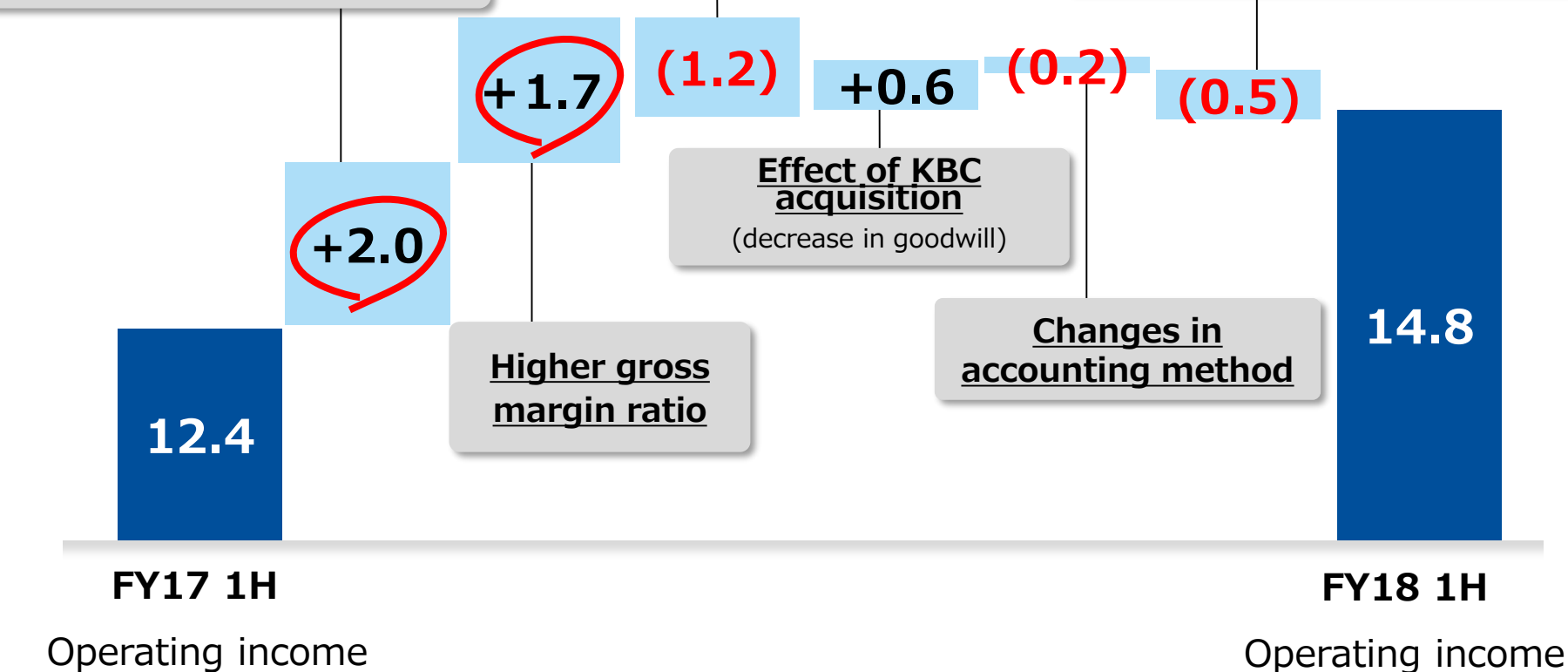
**Organic Increase in SG&A**

(including strategic investments [0.9])

**Exchange rate**

(¥)

	FY17 1H	FY18 1H
US\$	111.29	110.72
EUR	127.77	129.67



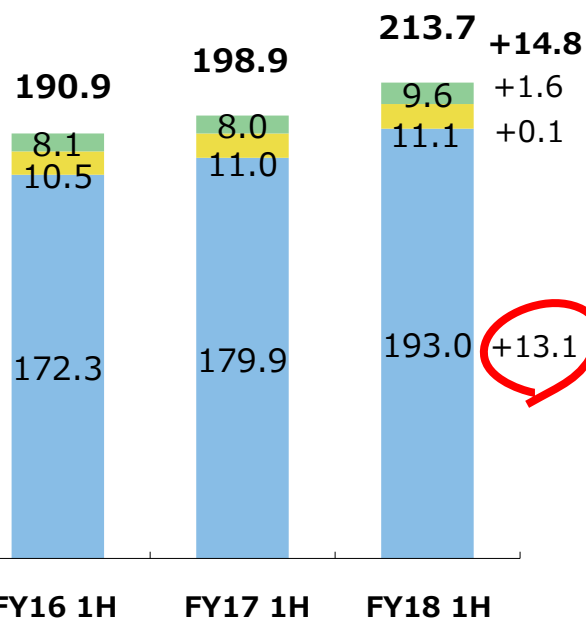
# FY17 1H/FY18 1H Comparison for Orders, Sales, and Operating Income by Segment

- ◆ Control: Orders and sales were up mainly due to rising product demand outside Japan. Operating income was up due to the impact of the increased sales and the improvement of the gross margin mainly in Japan.
- ◆ Measurement: Orders, sales, and operating income unchanged year on year.
- ◆ Aviation and other: operating income declined year on year due to lower sales and lower gross margin.

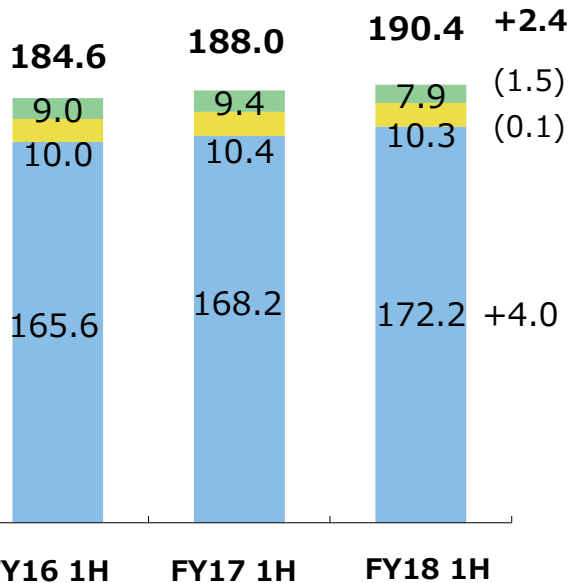
■ Control ■ Measurement ■ Aviation and other

(Billion¥)

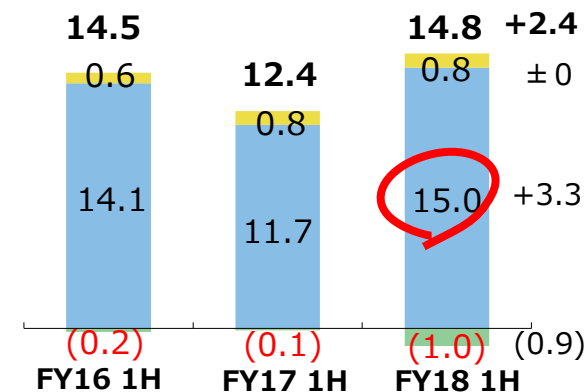
## Orders



## Sales



## Operating income



# Orders and Sales by Region in Control Segment

◆ Orders and sales were up outside Japan, with the largest increase being in Asia.

(Billion¥)

Orders	FY17 1H (A)	FY18 1H (B)	Difference (B-A)
<b>Japan</b>	<b>53.4</b>	<b>54.0</b>	<b>0.6</b>
<b>Asia</b>	<b>60.9</b>	<b>65.4</b>	<b>4.5</b>
(South-eastern Asia and Far East)	35.0	33.8	(1.2)
(China)	20.8	23.5	2.7
(India)	5.1	8.1	3.0
Europe and CIS	25.3	28.0	2.7
Middle East and Africa	24.5	26.7	2.2
North America	12.0	14.8	2.8
Central and South America	3.8	4.1	0.3
<b>Outside Japan</b>	<b>126.5</b>	<b>139.0</b>	<b>12.5</b>
<b>Consolidated</b>	<b>179.9</b>	<b>193.0</b>	<b>13.1</b>

Sales	FY17 1H (A)	FY18 1H (B)	Difference (B-A)
<b>Japan</b>	<b>47.7</b>	<b>48.5</b>	<b>0.8</b>
<b>Asia</b>	<b>53.6</b>	<b>58.1</b>	<b>4.5</b>
(South-eastern Asia and Far East)	30.9	32.1	1.2
(China)	17.3	20.8	3.5
(India)	5.4	5.2	(0.2)
Europe and CIS	22.8	24.2	1.4
Middle East and Africa	25.9	23.5	(2.4)
North America	14.3	14.6	0.3
Central and South America	3.9	3.4	(0.5)
<b>Outside Japan</b>	<b>120.5</b>	<b>123.7</b>	<b>3.2</b>
<b>Consolidated</b>	<b>168.2</b>	<b>172.2</b>	<b>4.0</b>

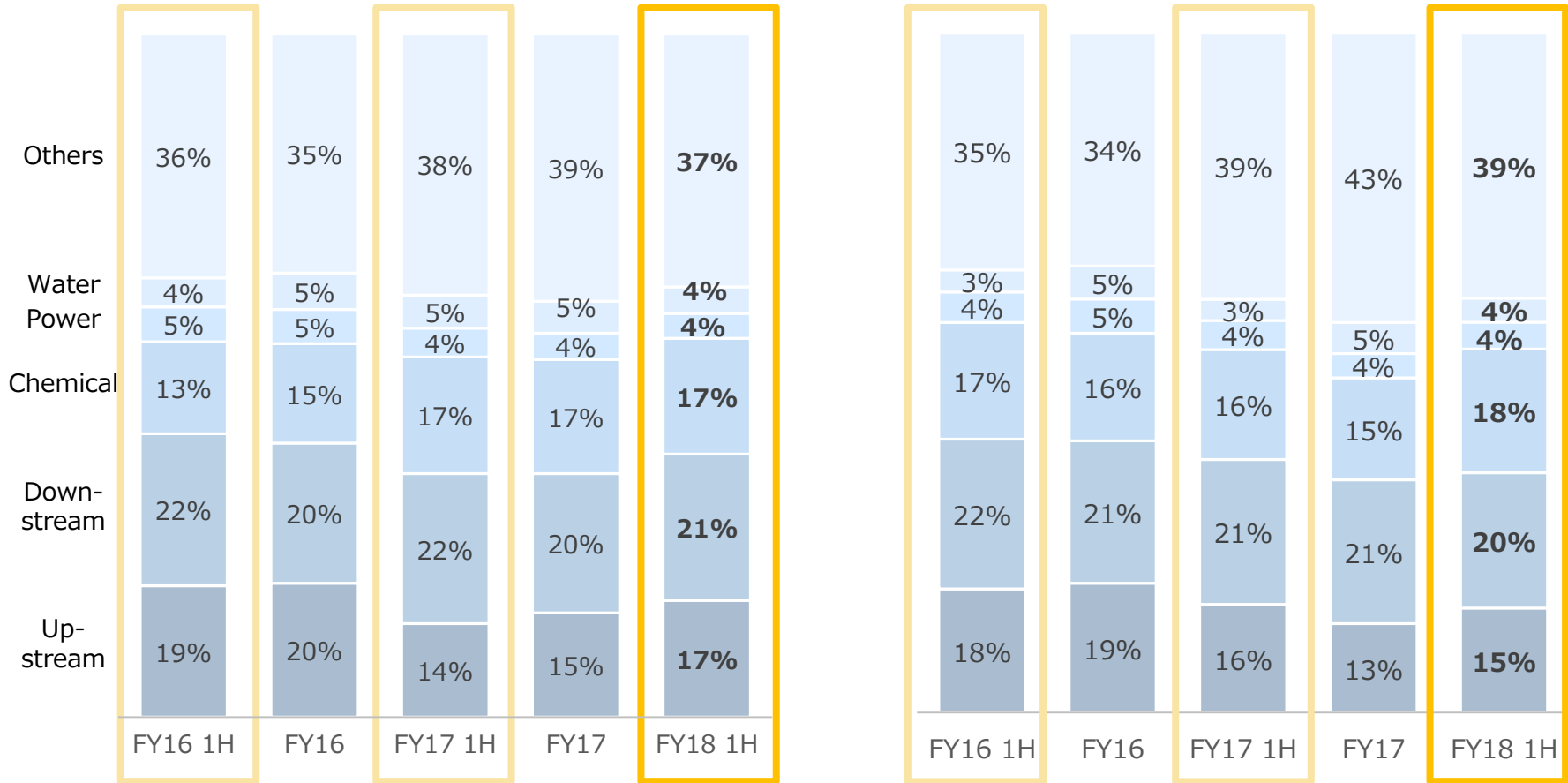


# <Reference> Ratio of Orders and Sales by Industry in Control Segment (Composition ratio) \* Using FY18 budget rate

◆ Chemical and upstream were up.

## Orders

## Sales



# FY18 Forecast → Change from May 8, 2018

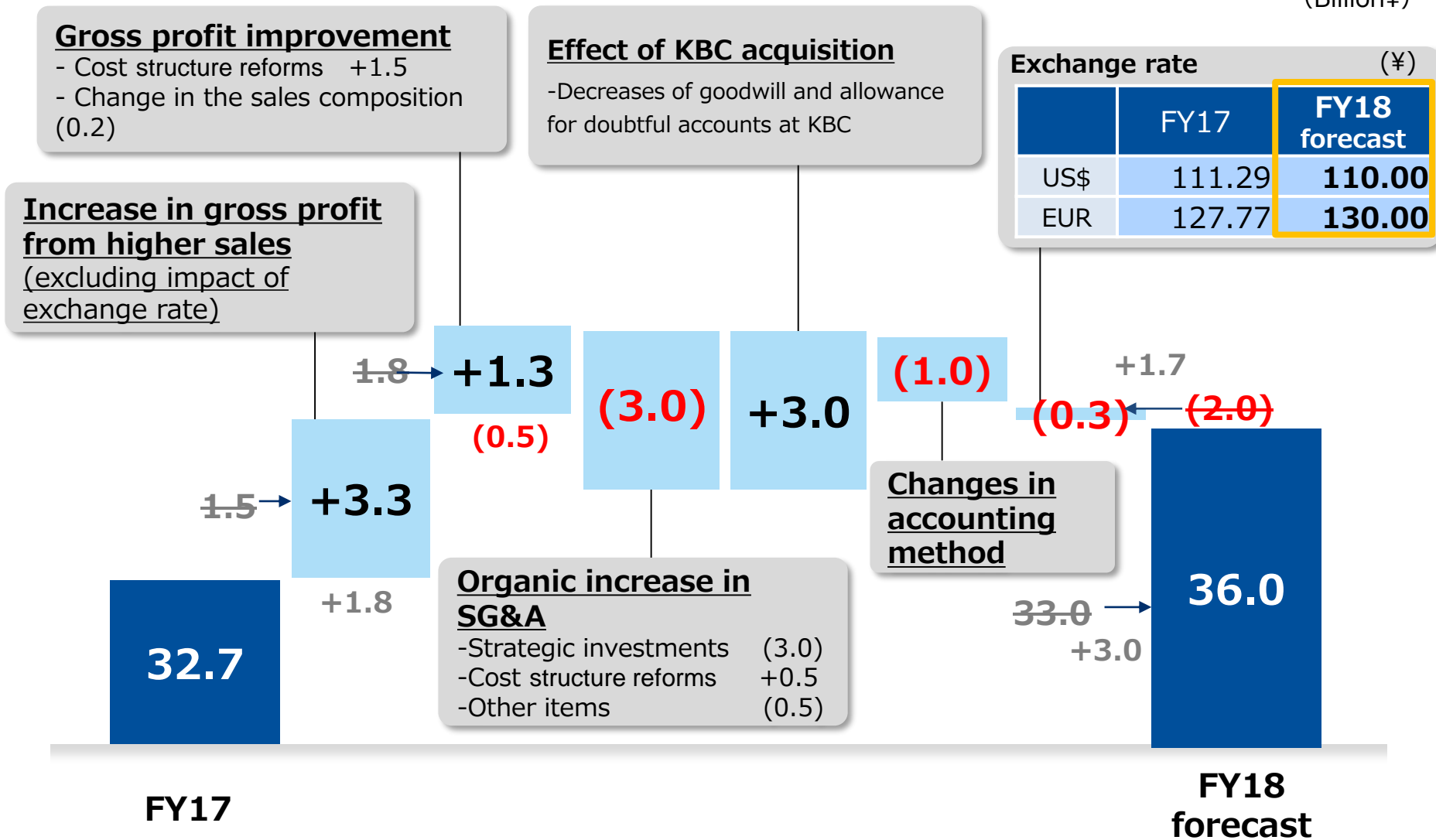
◆FY18 sales and profits are expected to increase due to the strength of the control segment, the transfer of a subsidiary's shares, and a revision in the exchange rate.

Impact of the expected revision →Orders +¥0.7billion, sales +¥0.7billion, operating income +1.7billion

(Billion¥)		FY17 (A)	FY18 forecast (5/8 B)	FY18 forecast (11/6 C)	Difference (C-B)	Difference (C-A)	Growth rate (C÷A-1)
Orders		400.3	410.0	<b>420.0</b>	+10.0	+19.7	+4.9%
Sales		406.6	405.0	<b>410.0</b>	+5.0	+3.4	+0.8%
Operating income		32.7	33.0	<b>36.0</b>	+3.0	+3.3	+10.1%
ROS (%)		8.0	8.1	<b>8.8</b>	+0.7 pts	+0.8 pts	—
Ordinary income		33.3	32.0	<b>36.0</b>	+4.0	+2.7	+8.1%
Profit before income taxes		29.4	32.0	<b>38.0</b>	+6.0	+8.6	+29.3%
Tax, etc.		7.9	10.5	<b>12.5</b>	+2.0	+4.6	+58.2%
Profit attributable to owners of parent		21.4	21.5	<b>25.5</b>	+4.0	+4.1	+19.2%
EPS (¥)		80.27	80.46	<b>95.50</b>	+15.04	+15.23	+19.0%
Exchange rate	1\$ =	¥110.70	¥105.00	<b>¥110.00</b>	+¥5.0	(¥0.70)	—

# Factors Accounting for Increase/Decrease in FY18 Operating Income → Change from May 8, 2018

(Billion¥)

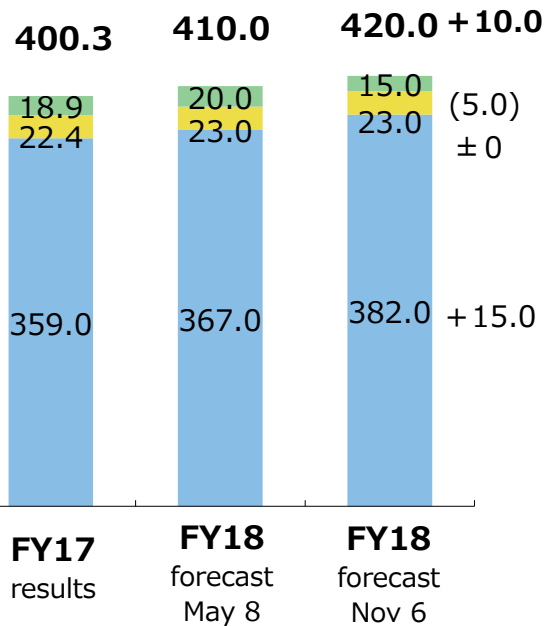


# FY18 Forecast for Orders, Sales, and Operating Income by Segment → Change from May 8, 2018

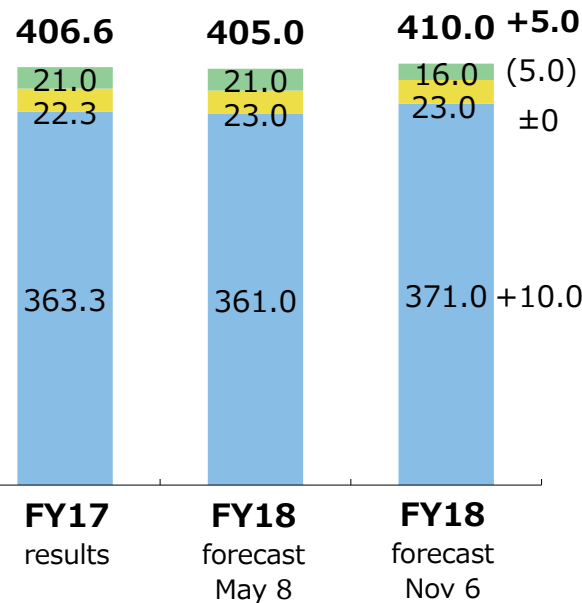
- ◆ Control: Orders, sales and operating income are expected to increase mainly due to the strength of this business outside Japan.
- ◆ Measurement: No change. Orders, sales, and operating income are expected to remain unchanged year on year.
- ◆ Aviation and other: Orders, sales, and operating income are expected to decrease due to the transfer of a subsidiary's shares.

■ Control ■ Measurement ■ Aviation and Other (Billion¥)

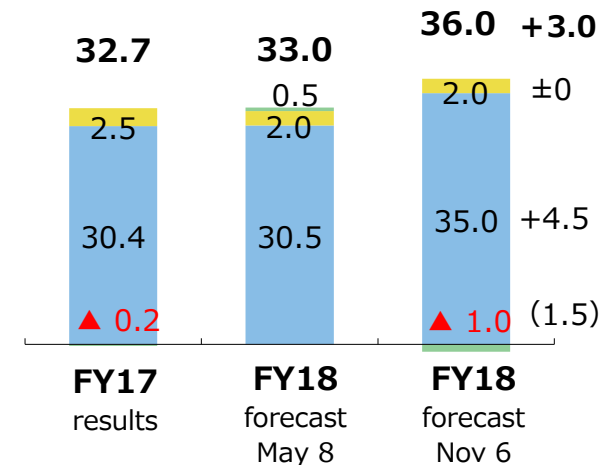
## Orders



## Sales



## Operating income



# FY18 Forecast for Orders and Sales by Region in Control Segment → Change from May 8, 2018

- ◆ Forecast revised due to better than expected business results and the revision of the exchange rate
- ◆ Orders and sales are expected to increase outside Japan, particularly in Asia (China, India) and the Middle East.

(Billion¥)

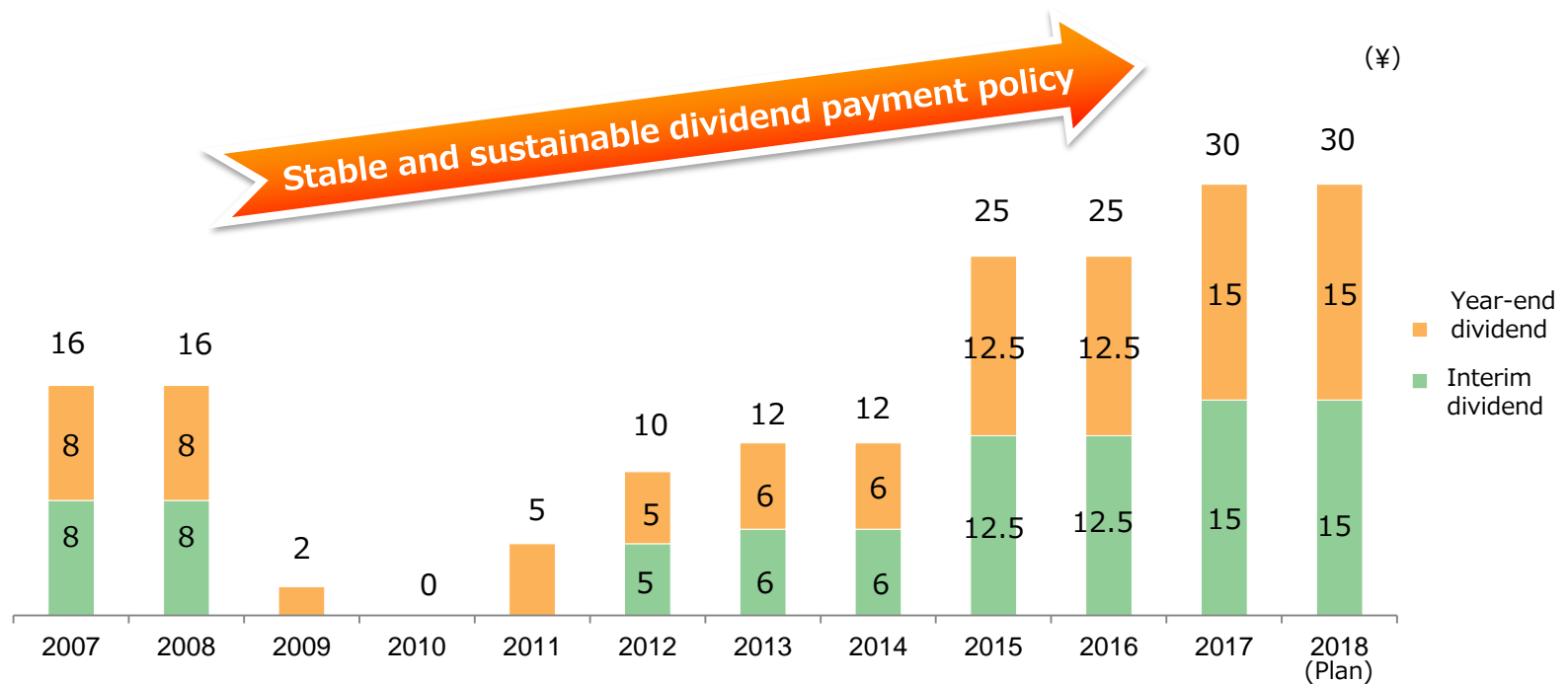
Orders	FY18 Original plan	FY18 1H	FY18 2H	FY18 Revised Plan	Sales	FY18 Original plan	FY18 1H	FY18 2H	FY18 Revised Plan
	(5/8)			Forecast		(11/6)			(5/8)
<b>Japan</b>	<b>110.0</b>	<b>54.0</b>	<b>56.0</b>	<b>110.0</b>	<b>Japan</b>	<b>110.0</b>	<b>48.5</b>	<b>61.5</b>	<b>110.0</b>
Asia	119.0	65.4	58.6	124.0	Asia	117.0	58.1	65.4	123.5
(South-eastern Asia and Far East)	67.0	33.8	34.7	68.5	(South-eastern Asia and Far East)	68.0	32.1	37.9	70.0
(China)	40.0	23.5	18.0	41.5	(China)	37.0	20.8	19.7	40.5
(India)	12.0	8.1	5.9	14.0	(India)	12.0	5.2	7.8	13.0
Europe and CIS	63.0	28.0	35.0	63.0	Europe and CIS	61.0	24.2	36.8	61.0
Middle East and Africa	40.0	26.7	21.3	48.0	Middle East and Africa	39.0	23.5	17.5	41.0
North America	28.0	14.8	15.2	30.0	North America	27.0	14.6	14.9	29.5
Central and South America	7.0	4.1	2.9	7.0	Central and South America	7.0	3.4	2.6	6.0
<b>Outside Japan</b>	<b>257.0</b>	<b>139.0</b>	<b>133.0</b>	<b>272.0</b>	<b>Outside Japan</b>	<b>251.0</b>	<b>123.7</b>	<b>137.3</b>	<b>261.0</b>
<b>Consolidated</b>	<b>367.0</b>	<b>193.0</b>	<b>189.0</b>	<b>382.0</b>	<b>Consolidated</b>	<b>361.0</b>	<b>172.2</b>	<b>198.8</b>	<b>371.0</b>

# Dividend

- It has been decided to pay a ¥15.0 interim dividend.
- The end-of-year dividend will remain at ¥15.0 (no change).

FY17: ¥30 (payout ratio 37.4%)

**FY18: ¥30 (payout ratio 31.4%)**

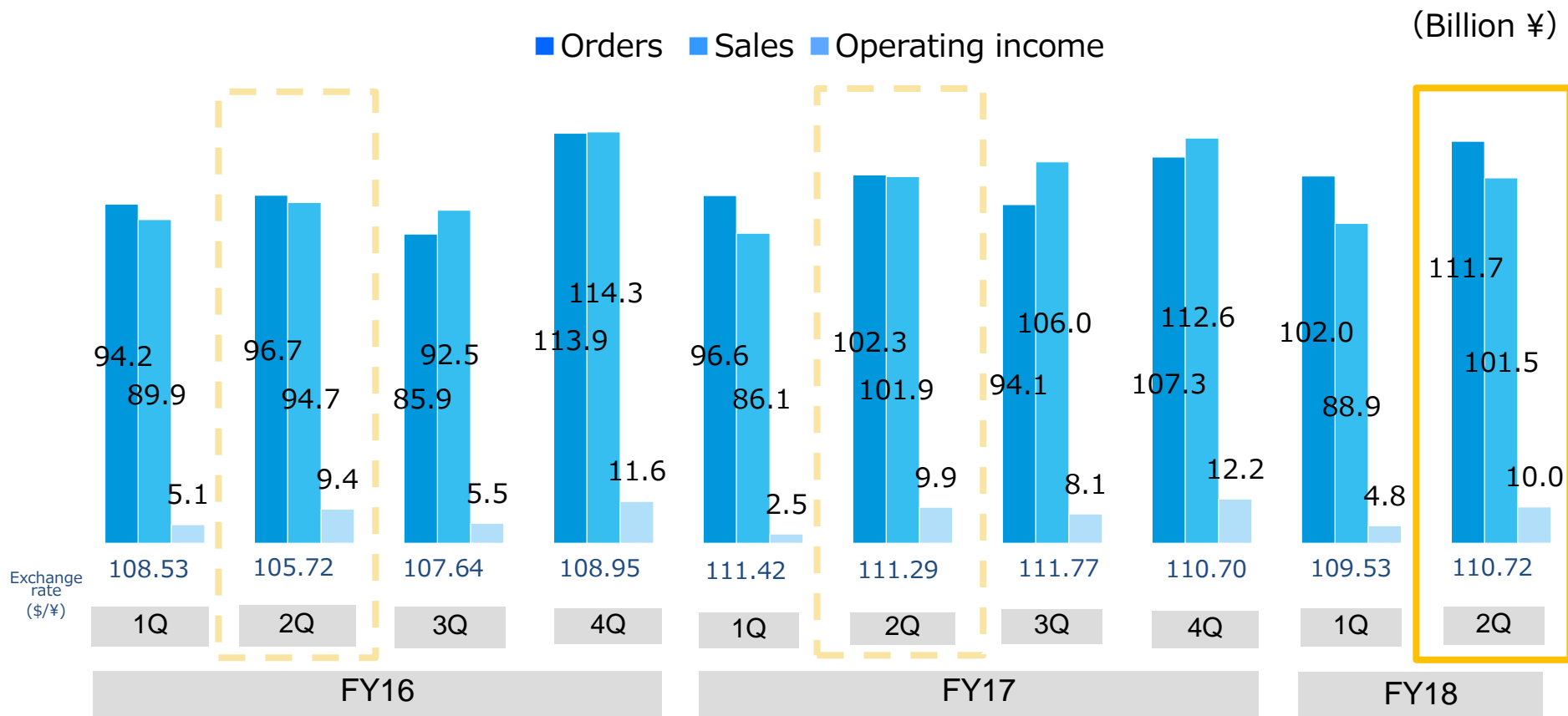


# Appendix:

- Quarterly Financial Results
- Orders and Sales by Region in Control Segment
- Non-operating /Extraordinary Income and Expenses
- Order Backlog Trend by Segment
- Trend of R&D Expenses, Depreciation, and CAPEX
- Trend of Balance Sheet
- Trend of Cash Flow
- News
- Trend of Stock Price

# Appendix: Quarterly Financial Results

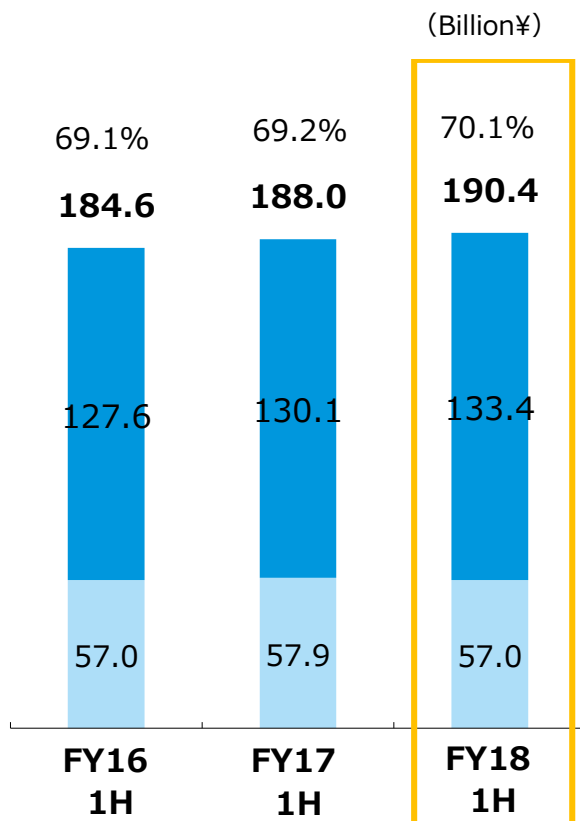
◆ Sales and operating income tend to be higher in 2Q and 4Q, and this trend is particularly strong in the Japanese control segment.



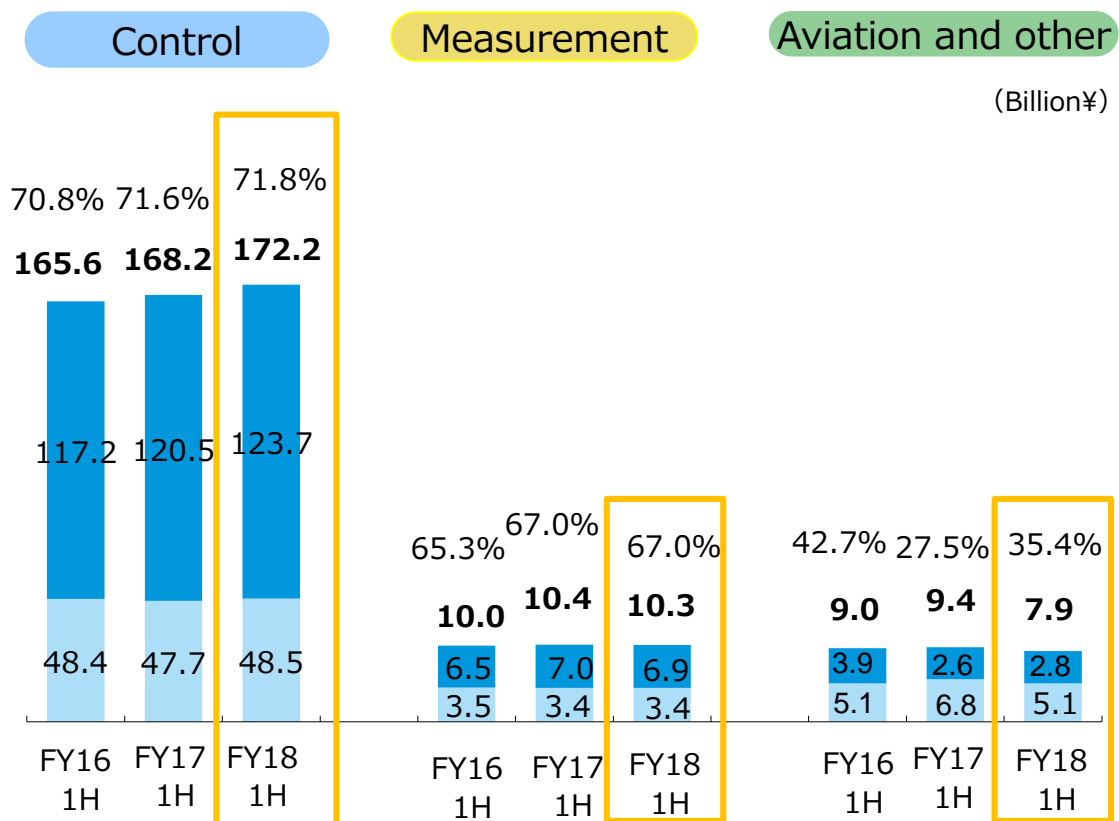


# Appendix: Trend of Global Sales

## Total



## By segment



# Appendix: Non-operating / Extraordinary Income and Expenses

(Billion ¥)

	FY17 1H	FY18 1H
Operating income	12.4	14.8
Non-operating income	1.6	2.0
Non-operating expenses	1.7	0.5
Ordinary income	12.3	16.2
Extraordinary income	2.5	0.5
Extraordinary expenses	0.1	0.1
Income before tax	14.7	16.5
Tax, etc.	5.1	6.4
Profit attributable to owners of parent	9.6	10.1
(Effective tax rate)	30.0%	33.0%

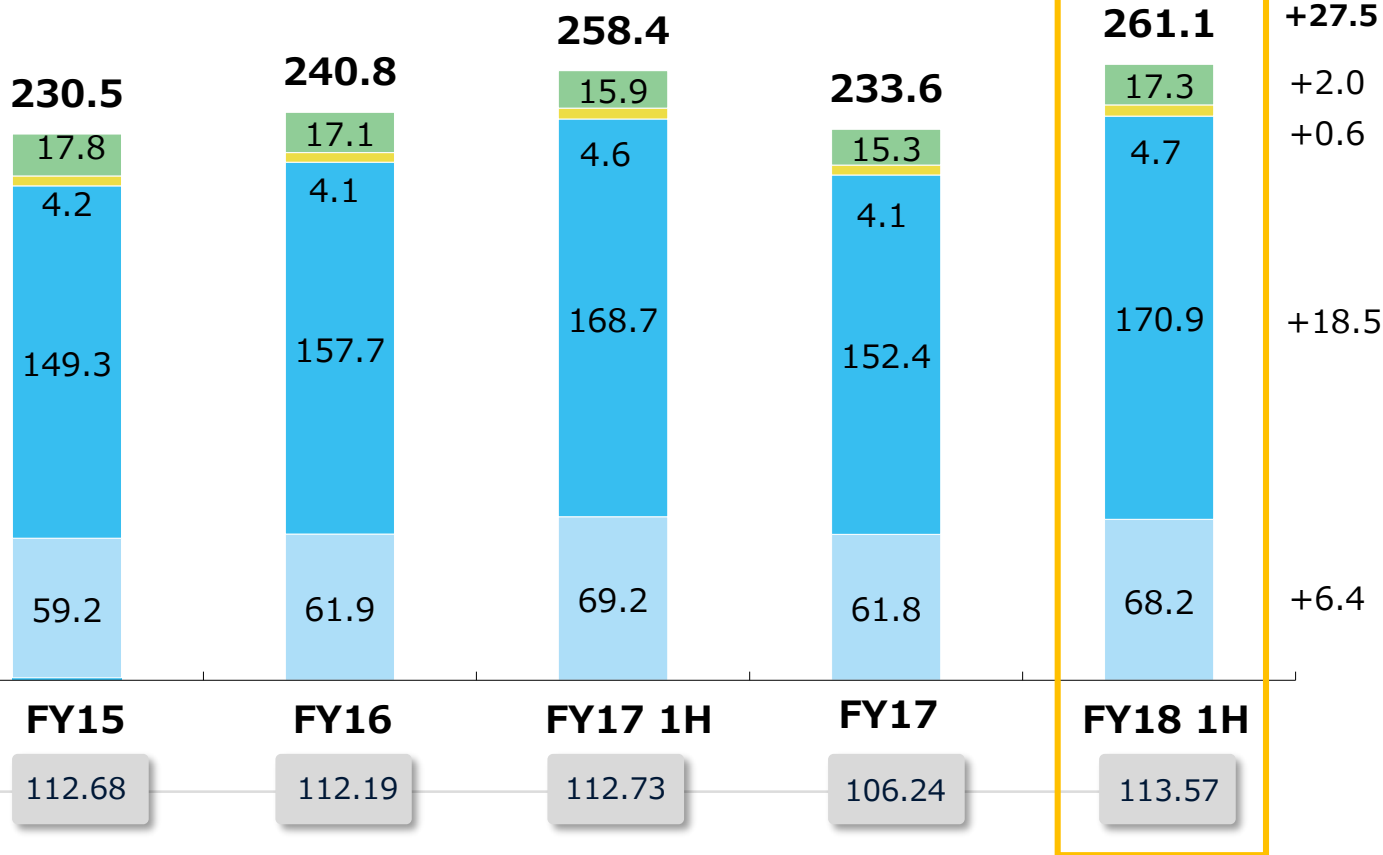
FY17:  
Gain on sales of non-current assets: ¥1.8 billion  
Gain on sales of investment securities: ¥0.7 billion

FY18:  
Gain on sales of investment securities: ¥0.5 billion

# Appendix: Order Backlog Trend by Segment

(Billion¥)

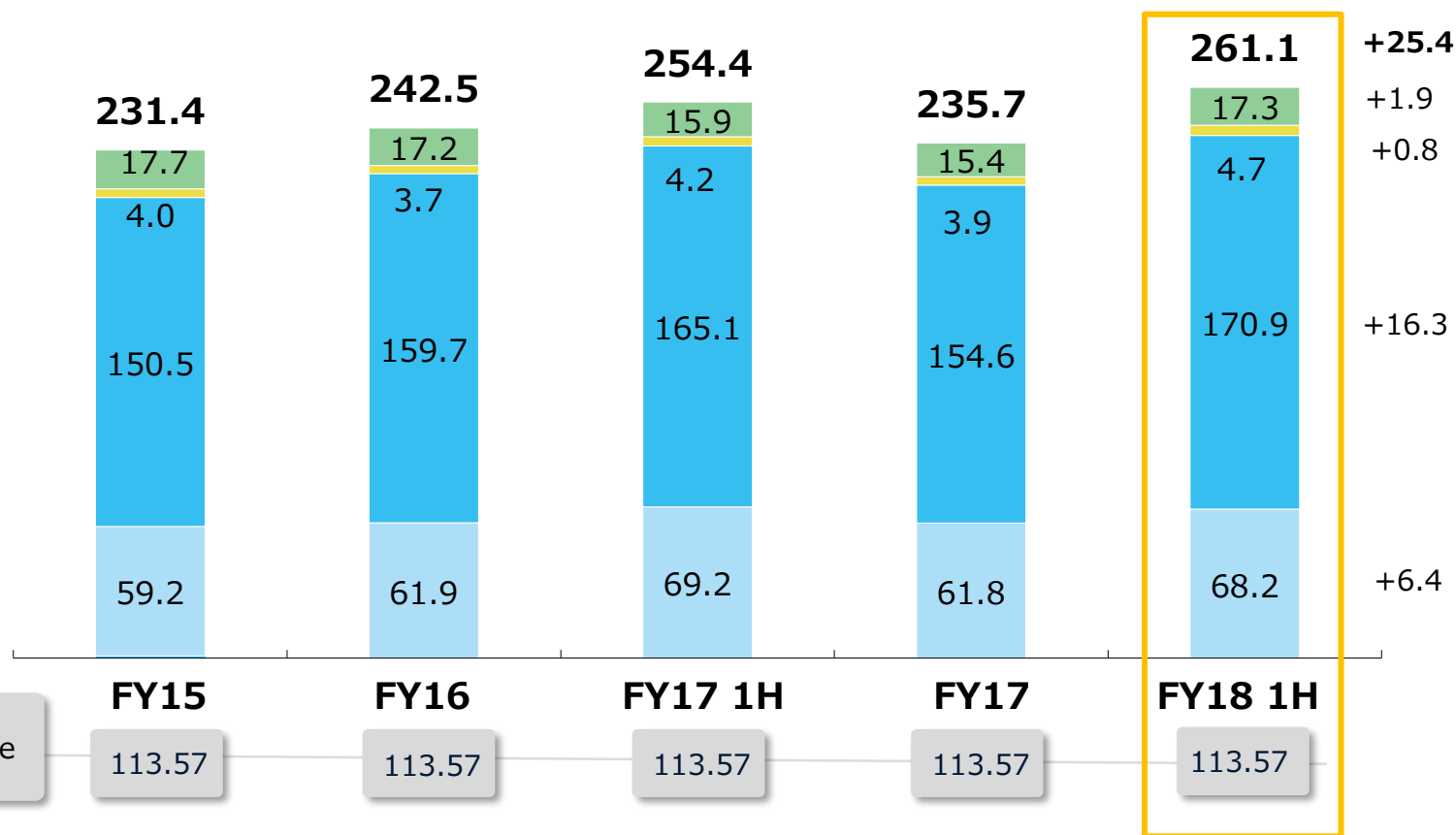
Control (Japan) Control (Outside of Japan) Measurement Aviation and Other



# Appendix: Order Backlog Trend by Segment (Using FY18 2Q exchange rate)

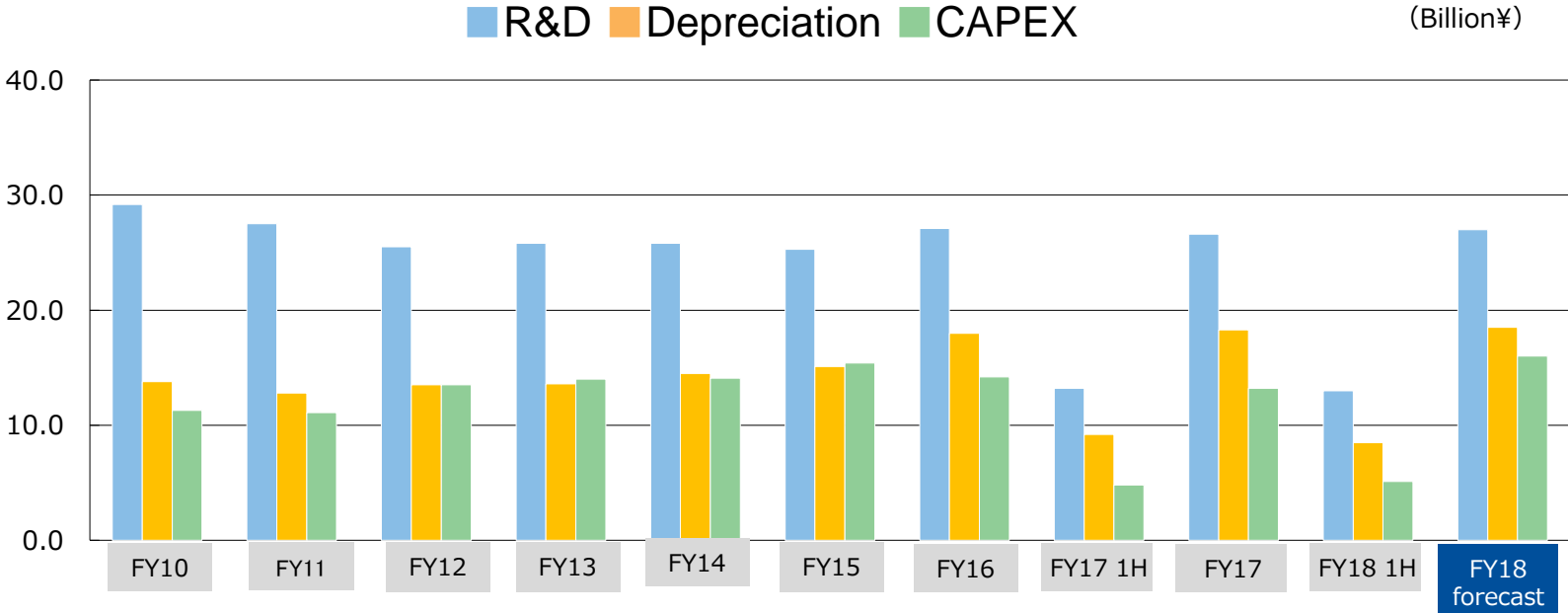
(Billion¥)

■ Control (Japan) ■ Control (Outside of Japan) ■ Measurement ■ Aviation and Other



# Appendix: Trend of R&D Expenses, Depreciation, and CAPEX

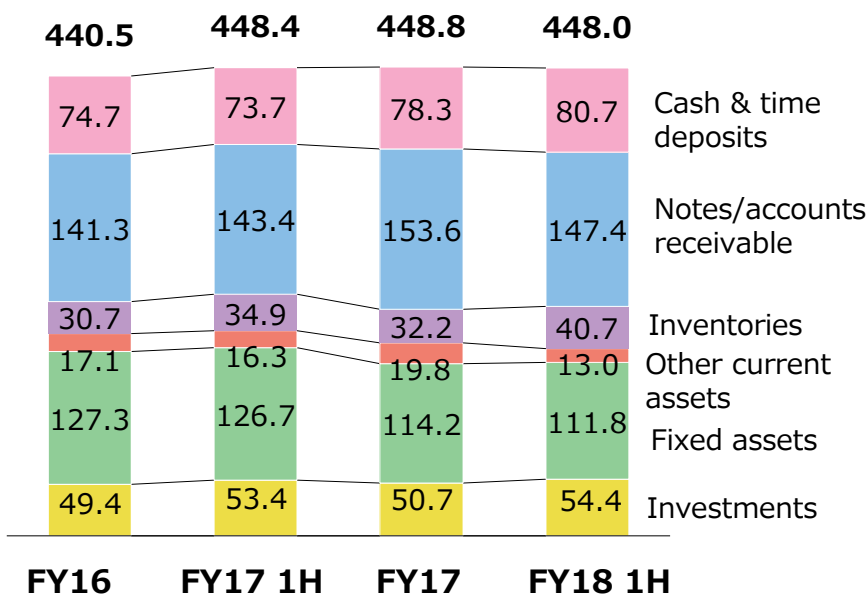
◆ CAPEX is expected to increase slightly due to strategic investments in line with the new mid-term business plan.



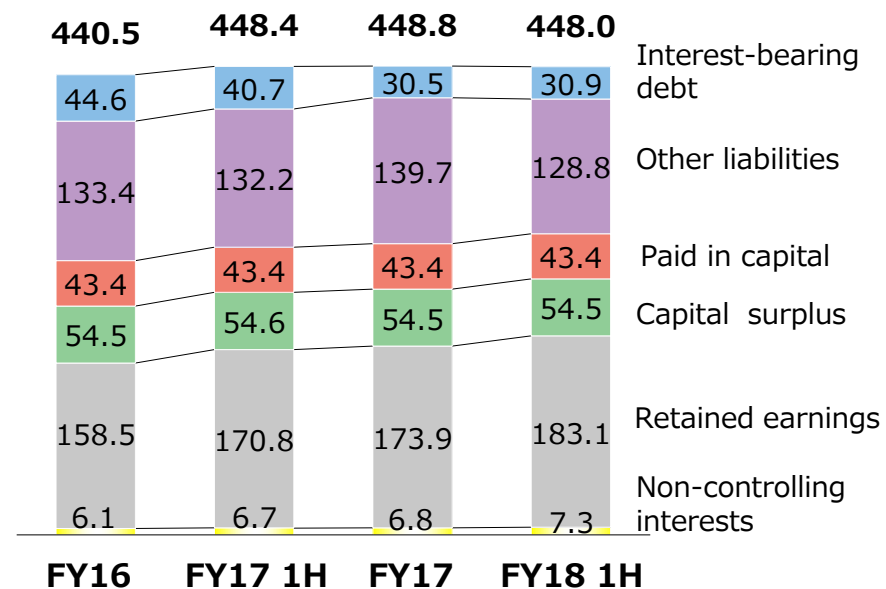
	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17 1H	FY17	FY18 1H	FY18 forecast
R&D expenses (Billion¥)	29.2	27.5	25.5	25.8	25.8	25.3	27.1	13.2	26.6	<b>13.0</b>	27.0
R&D expenses (% of sales)	9.0%	8.2%	7.3%	6.6%	6.4%	6.1%	6.9%	7.0%	6.5%	<b>6.8%</b>	6.6%
Depreciation (Billion¥)	13.8	12.8	13.5	13.6	14.5	15.1	18.0	9.2	18.3	<b>8.5</b>	18.5
Depreciation (% of sales)	4.2%	3.8%	3.9%	3.5%	3.6%	3.6%	4.6%	4.9%	4.5%	<b>4.5%</b>	4.5%
CAPEX (Billion¥)	11.3	11.1	13.5	14.0	14.1	15.4	14.2	4.8	13.2	<b>5.1</b>	16.0
CAPEX (% of sales)	3.5%	3.3%	3.9%	3.6%	3.5%	3.7%	3.6%	2.6%	3.3%	<b>2.7%</b>	3.9%

# Appendix: Trend of Balance Sheet

## Assets

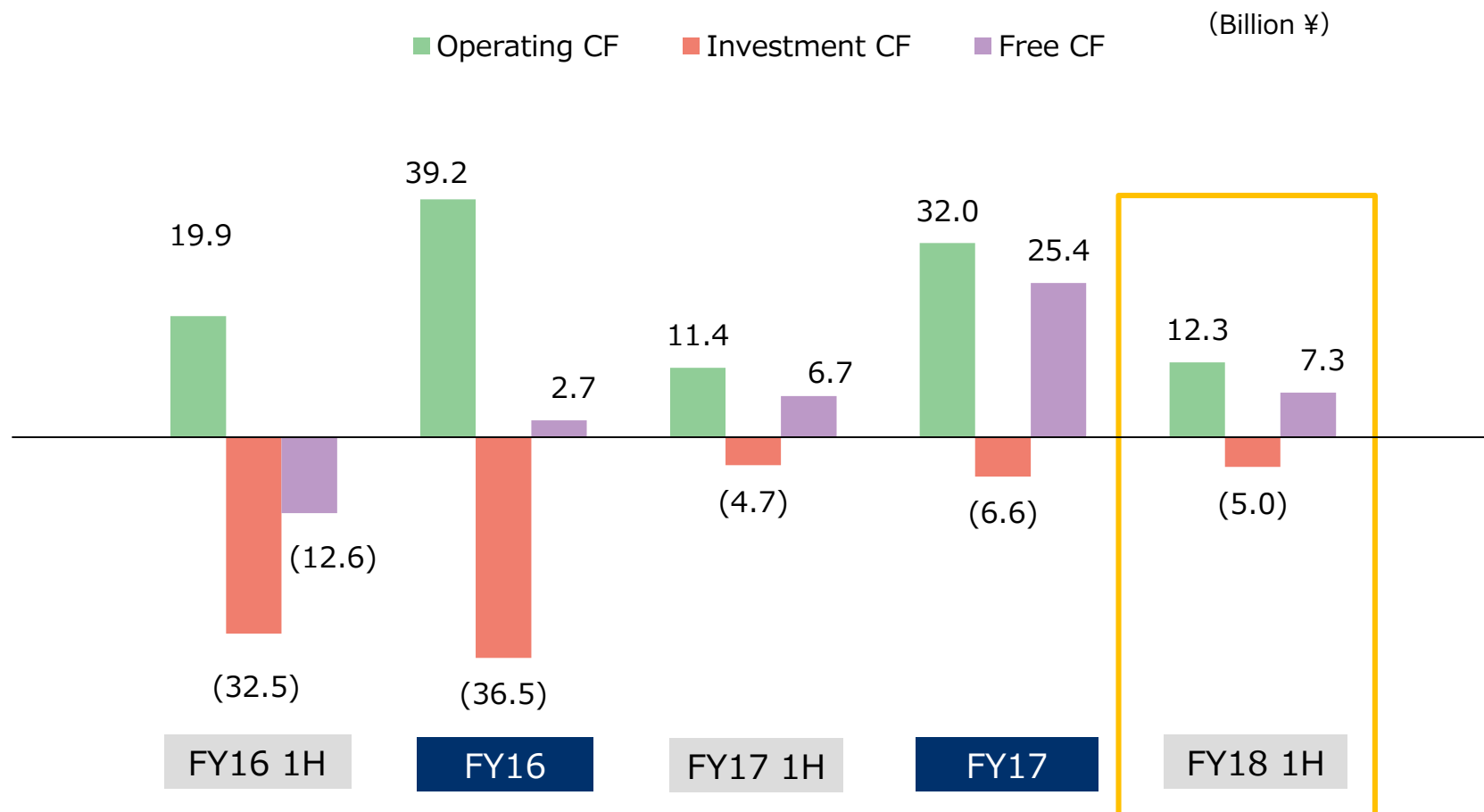


## Liabilities and equity



# Appendix: Trend of Cash Flow

- The investment cash flow for FY16 1H was impacted by the KBC acquisition (26.6 billion yen).



# Appendix: News (from August 8 to November 6)

Yokogawa publishes *2018 Yokogawa Report*

**Aug.** Yokogawa receives orders to provide 59 high-performance FluidCom chemical injection metering valves for two offshore oil fields that are being developed by Equinor ASA, a Norwegian energy company



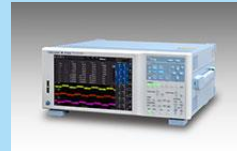
FluidCom

Yokogawa and Nara Institute of Science and Technology (NAIST) Jointly develop a reinforcement learning algorithm applicable to the automatic optimization of plant operations

Yokogawa signs global reseller license agreement with Chevron for PETRO planning technology

Yokogawa releases Process Data Analytics R1.02 software to enhance data analysis and shorten trial and error cycle

**Sep.** Yokogawa Test & Measurement releases the WT5000 precision power analyzer -A high-precision power analyzer with seven input elements and  $\pm 0.03\%$  measurement accuracy for the development of highly efficient electric vehicles and renewable energy systems



WT5000

For the seventh time and the second year in a row, Yokogawa selected for inclusion in the Dow Jones Sustainability Asia Pacific Index (DJSI Asia Pacific)

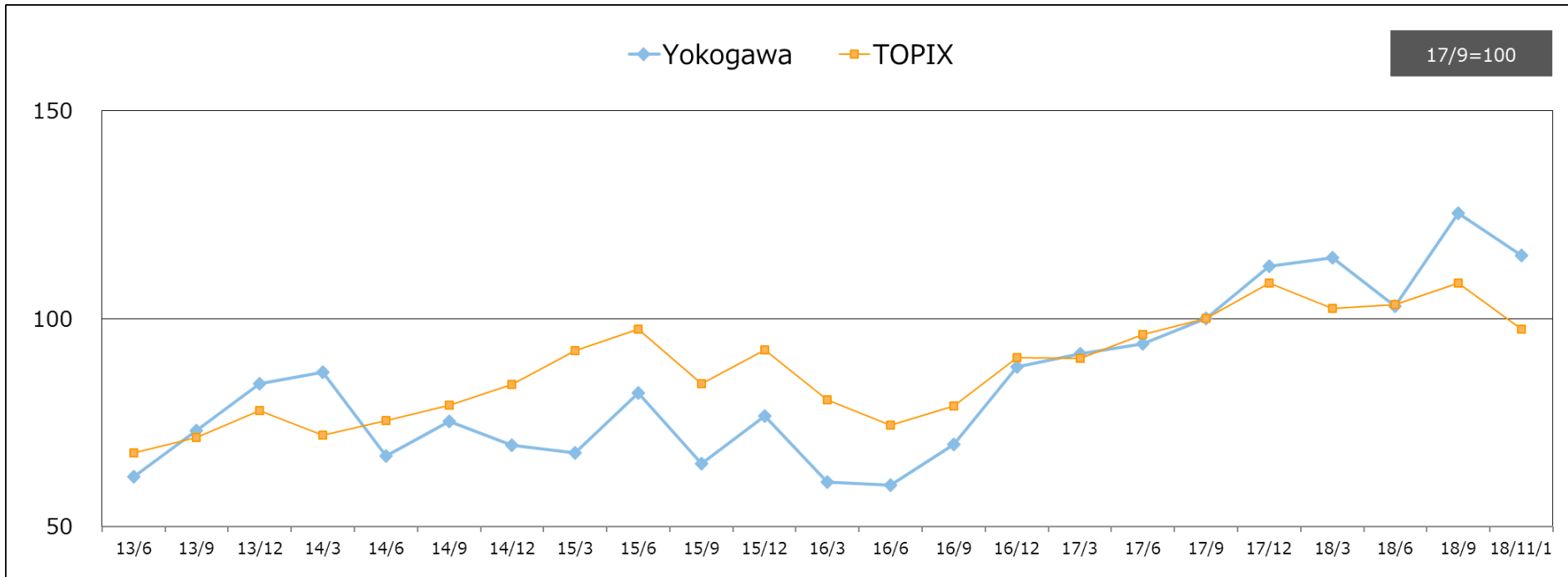
**Oct.** Yokogawa concludes agreement to transfer all the shares of Yokogawa Denshikiki Co., Ltd., a wholly-owned subsidiary

Yokogawa releases the FLXA402 4-wire liquid analyzer and SA11 SENCOM™ smart adapter with data conversion, transmission, calibration, and diagnosis functions

Note: The month for each news item indicates when it was published.



# Appendix: Trend of Stock Price



(¥)

	13/6	13/9	13/12	14/3	14/6	14/9	14/12	15/3	15/6	15/9	15/12	16/3	16/6	16/9	16/12	17/3	17/6	17/9	17/12	18/3	18/6	18/9	18/11/1
Yokogawa	1,187	1,398	1,615	1,667	1,281	1,442	1,333	1,295	1,574	1,247	1,465	1,163	1,146	1,335	1,693	1,752	1,801	1,916	2,158	2,198	1,972	2,403	2,208
TOPIX	1,134	1,194	1,302	1,203	1,263	1,326	1,407	1,543	1,630	1,411	1,547	1,347	1,245	1,322	1,518	1,512	1,611	1,674	1,817	1,716	1,731	1,817	1,632



**Yokogawa Electric Corporation**

# **Current Situation and Future Forecast**

## ***Transformation 2020***

**Takashi Nishijima**

**President and Chief Executive Officer**

November 6, 2018

- 1. Current Situation**  
**(External environment, situation of competitors, Expansion of the control OPEX business: energy supply chain, LNG value chain, lifecycle)**
- 2. Initiatives for New Mid-term Business Plan Transformation 2020 (TF2020)**
- 3. Future Forecast**
- 4. Appendix**

# Changing Environment & Yokogawa's Strengths

- Change to a growth model that is not dependent on conventional energy resources
- We believe that the current situation provides us **a good opportunity to use our strengths to help our customers realize radical improvements in productivity.**

## 〈Changing environment〉

### Energy resource trends

Slowing economic growth in emerging countries

Decarbonization

Shale oil & gas boom

Role of oil

### Innovations in digital technology

IIoT

Blockchain

AI

Big data

### Pressing need to address social issues

SDGs



Paris-agreement COP21

## 〈Yokogawa's strengths〉

### Industry know-how

Chemical

LNG

Power

Downstream

Water

### Rich installed base mainly in Asia and Middle East

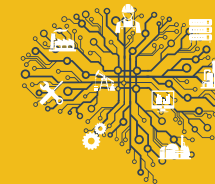
Japan

Middle East

Southeast Asia

China

### Problem-solving capabilities



Synaptic Business Automation



# Current Situation

Market conditions

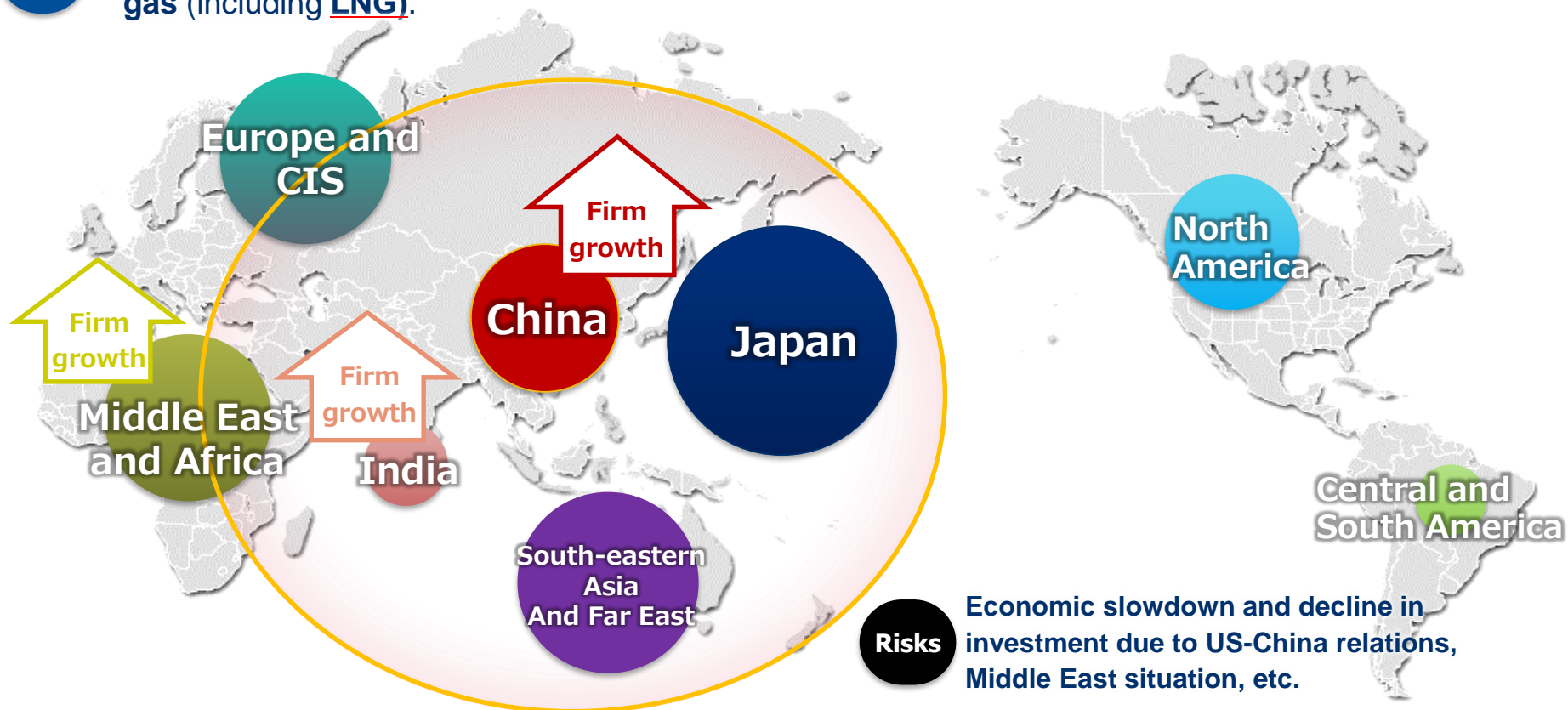
**OPEX-related investment** for productivity improvement is continuing. We are also seeing more inquiries from customers who have resumed CAPEX investment.

Region

**Growth is firm** for **system** sales in the **Middle East** and **India**, and **product sales** in **China**. Opportunities to receive project orders are expected in **North America** and **Russia**.

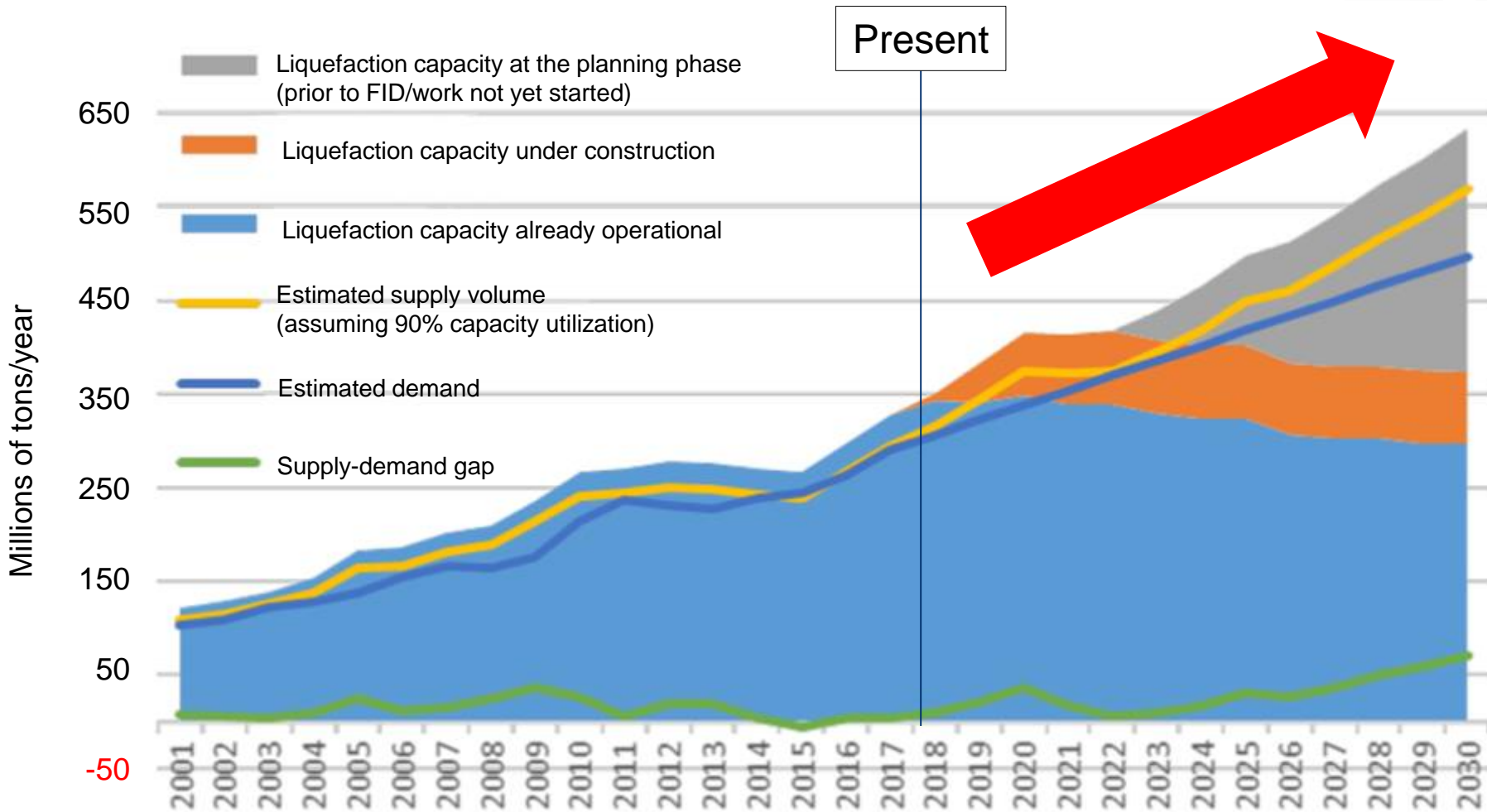
Industry

**Growth is firm** in **chemicals**, and increases are anticipated in **upstream** sales, such as for **gas** (including **LNG**).



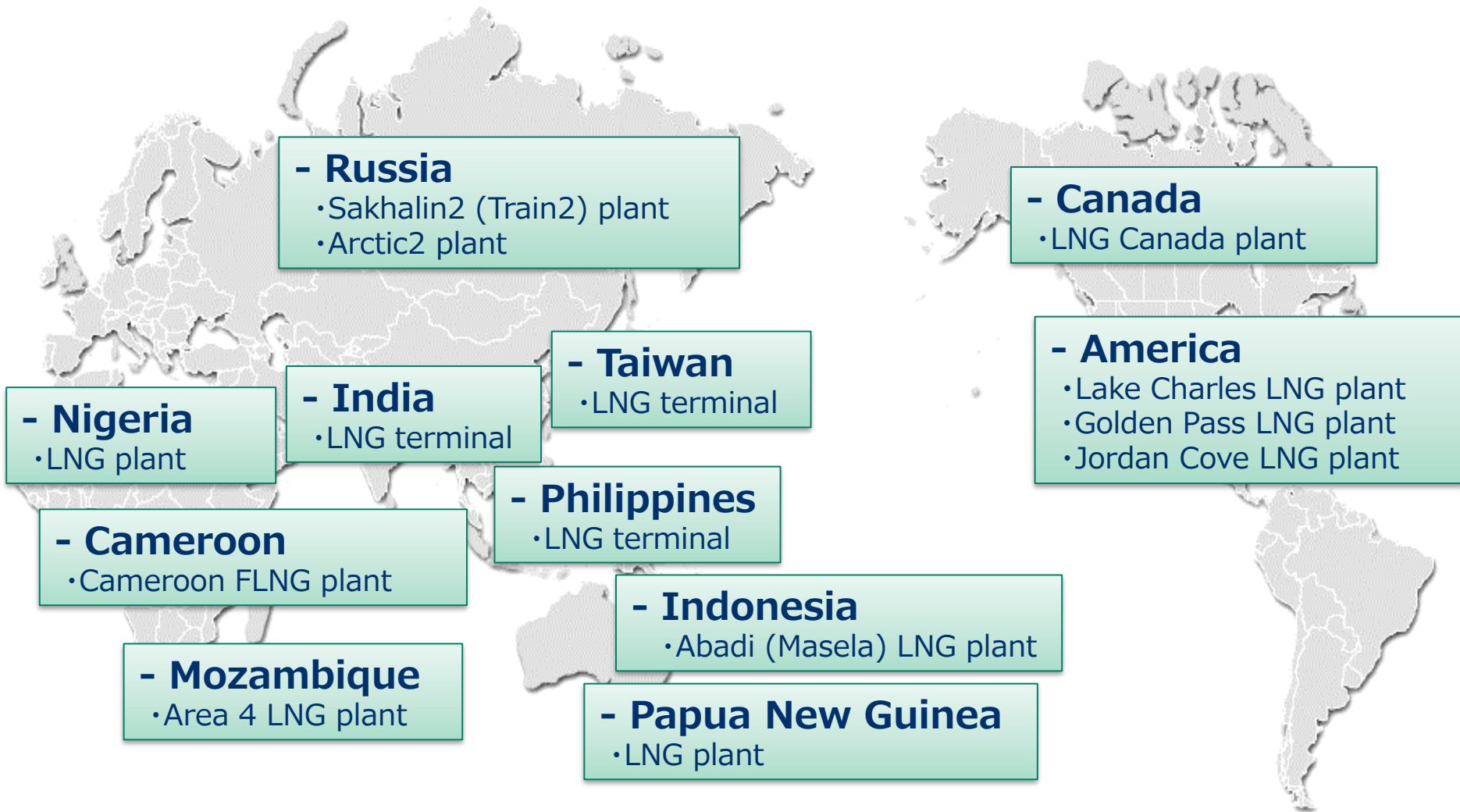
# Global LNG Supply-Demand Outlook

## ~ Demand Continuing to Increase ~



Source: JOGMEC "Latest Trends in Natural Gas and LNG (LNG contractual agreements beginning in January 2018 and status of FIDs for new projects)"  
 Data: Prepared by JOGMEC based on data from the IEA's Natural Gas Information, International Group of Liquefied Natural Gas Importers (GIIGNL), IEEJ Outlook 2018 (The Institute of Energy Economics, Japan), etc. \*Based on the assumption that facilities successively commence operation subsequent to having made investment decisions amounting to 240 million tons capacity per year at the planning phase, over the years 2024 to 2030

# Promising LNG Projects / Already Announced

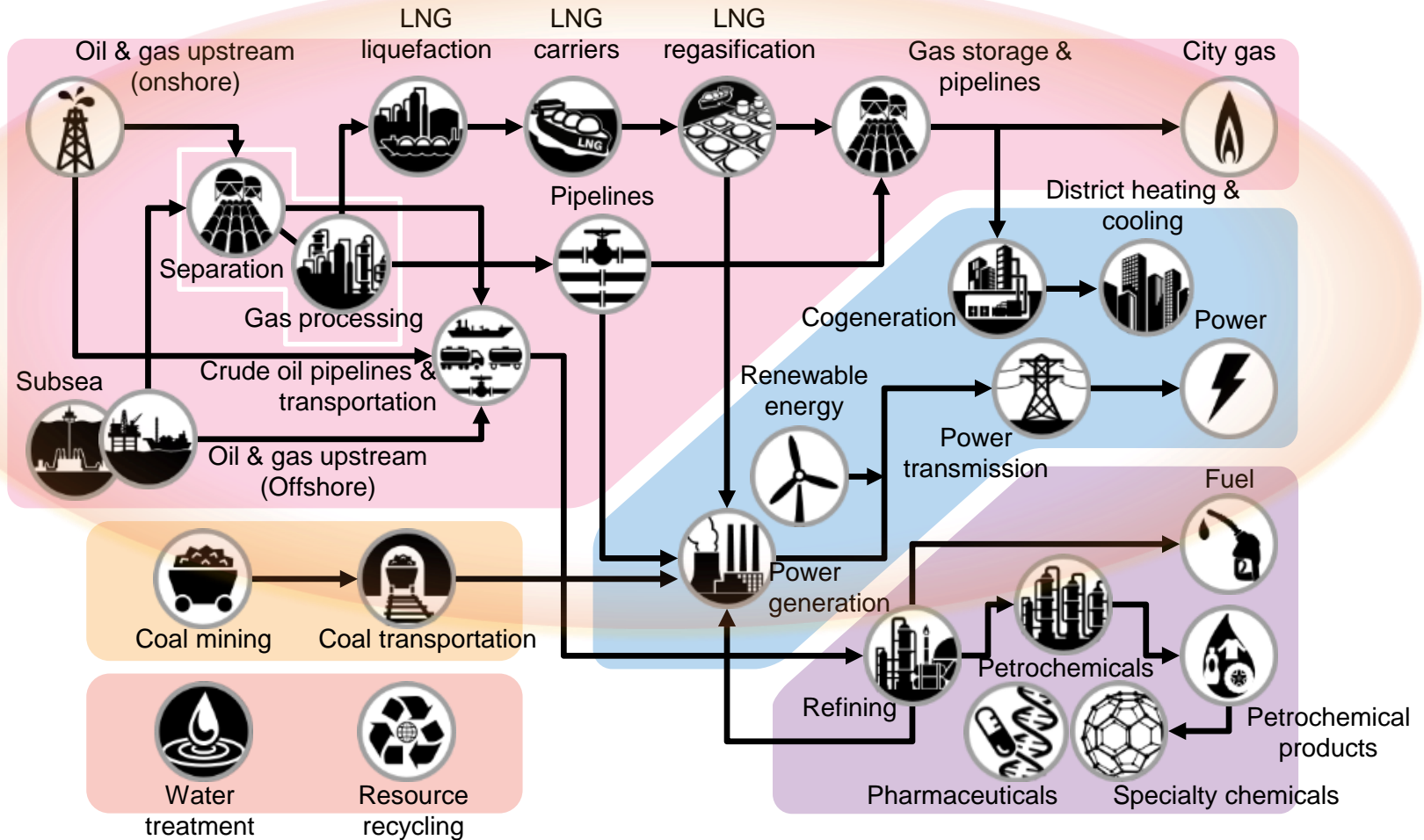


Researched by YOKOGAWA



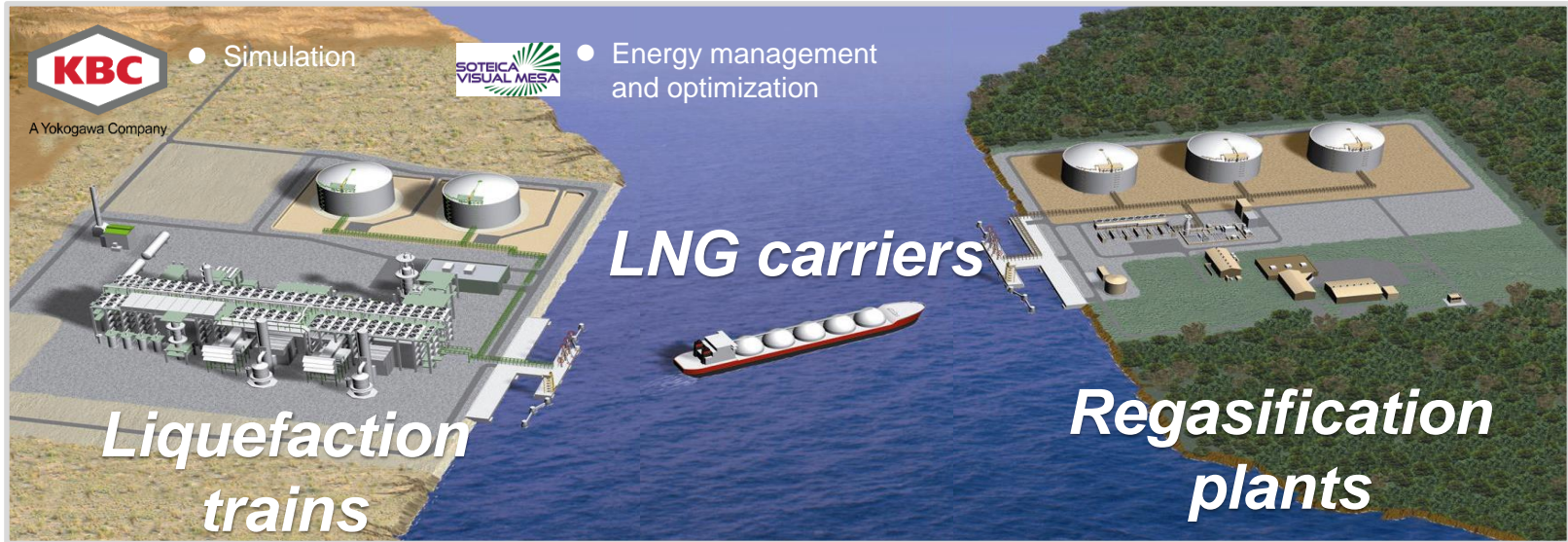
# Expanding the OPEX Business in the Energy Supply Chain

We are expanding our business over the **entire supply chain**, from oil and gas extraction to delivery of city gas. We also are exercising our strengths in handling **critical work**, such as maintaining temperatures at 160 degrees below zero and controlling temperature and pressure.

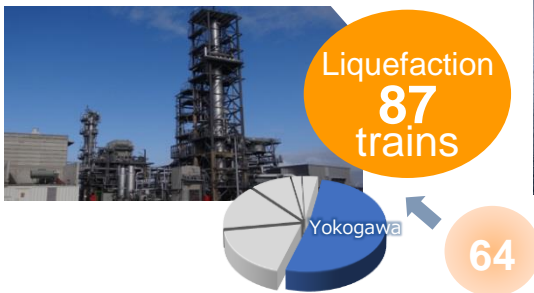


# Expanding the OPEX Business across the Value Chain

We are expanding our OPEX business with customers who are engaged in the natural gas liquefaction, LNG transport, gasification, storage, and delivery processes by providing manufacturing execution system (MES), simulation, energy management, and other solutions that cover the entire value chain.



▶ LNG liquefaction



▶ LNG transportation



▶ LNG regasification

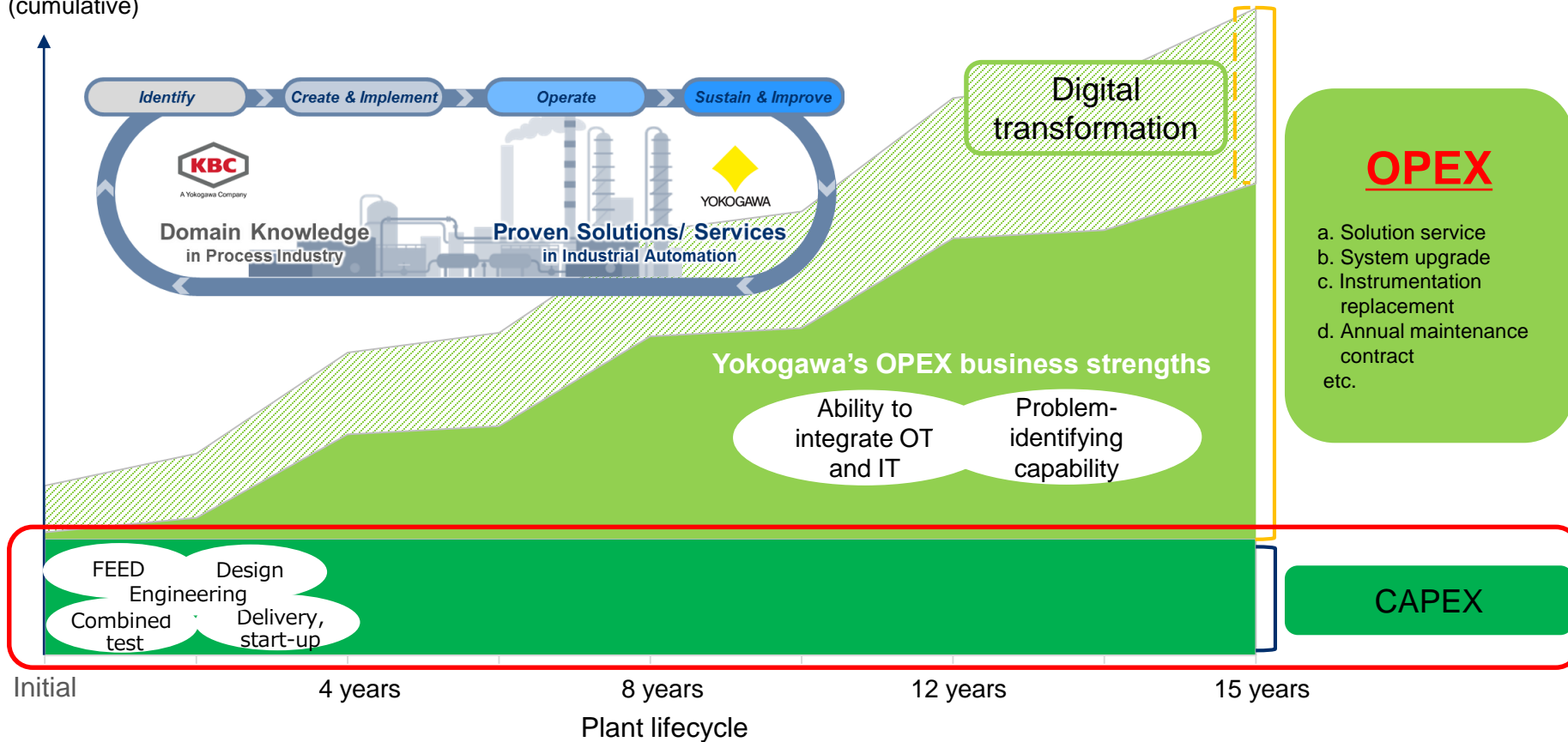


# Expansion of OPEX Business over Entire Plant Lifecycle

During plant construction: Yokogawa's CAPEX-related orders amount to only about 1% to 2% of the overall construction costs.

An **OPEX** business is cumulative, providing solutions over the entire lifecycle.

Business opportunity  
(cumulative)



# Initiatives for *Transformation 2020*

- TF2020 basic strategy

- ① Transformation of existing businesses

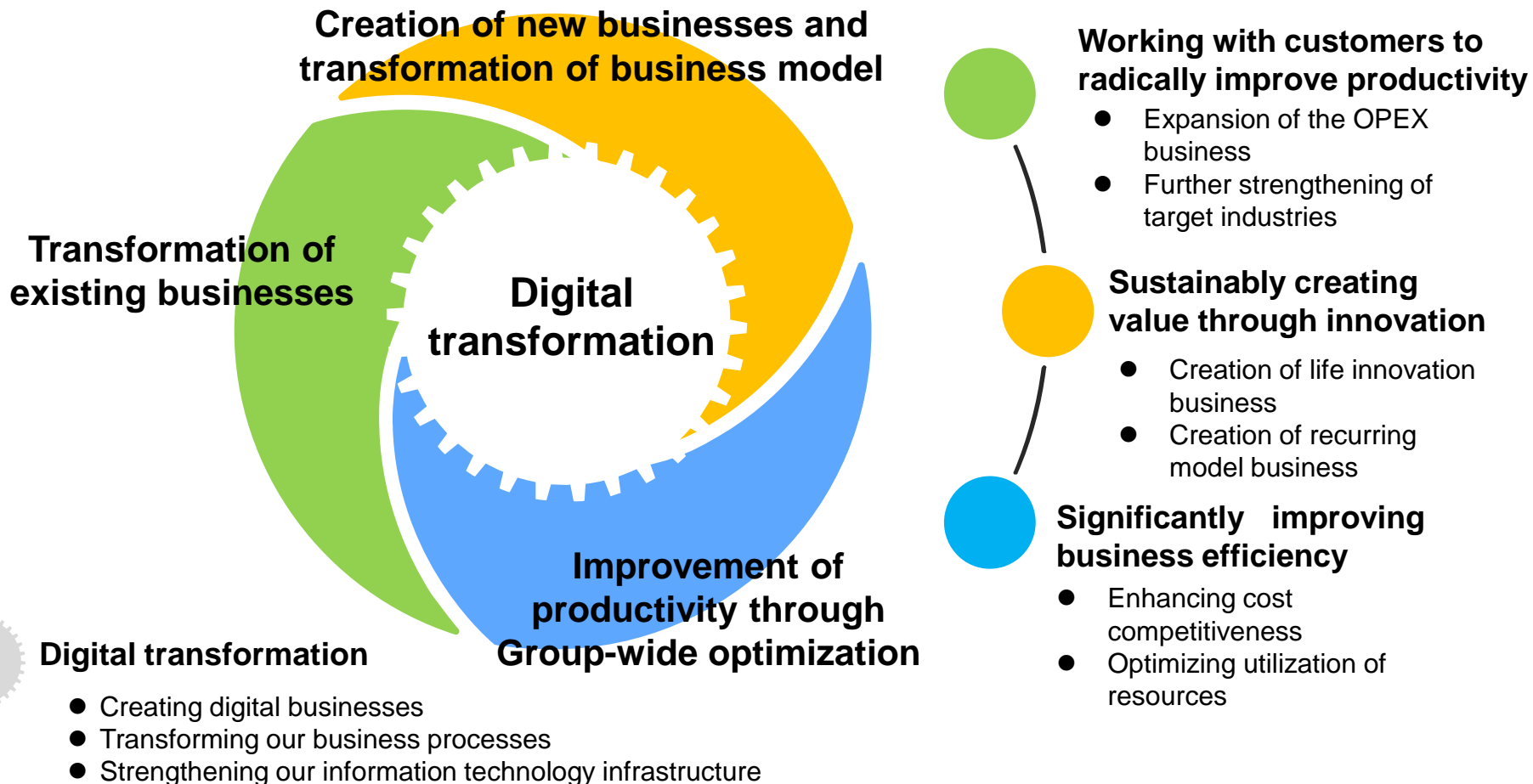
- ② Creation of new businesses and transformation of business model

- ③ Improvement of productivity through Group-wide optimization

- Digital transformation




**Creating opportunities and  
establishing a foundation for growth**

## Transform our businesses to achieve a sustainable society.

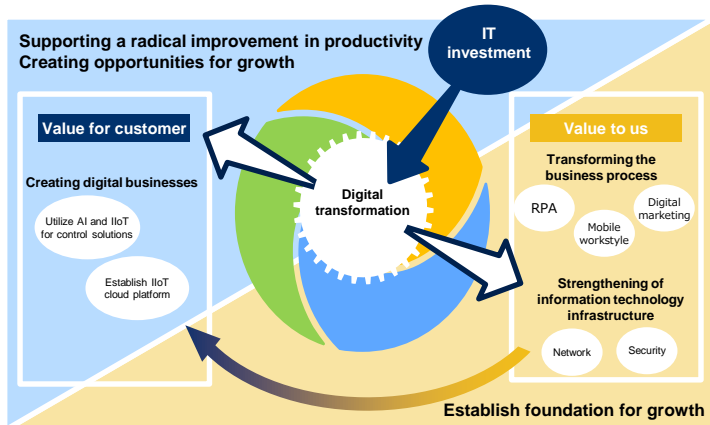


# Strategic Initiatives: Three Basic Strategies




Strategies	Goals	Status of Activities
 <p><b>Transformation of existing businesses</b></p>	<ul style="list-style-type: none"> <li>• <b>Focusing on our installed base to expand the OPEX business</b> OPEX growth overseas: 7 to 10% per year</li> <li>• <b>Further strengthening in target industries (chemical, renewable energy)</b> Targeted growth: 3 to 5% per year</li> </ul>	<ul style="list-style-type: none"> <li>• Launched OpreX™ brand</li> <li>• Signed global reseller license agreement for PETRO planning software with Chevron</li> <li>• Expanded scope of lifecycle services</li> <li>• Boosted sales to specialty chemicals industry segment (China, North America)</li> <li>• Boosted sales to fertilizer industry (India)</li> </ul>
 <p><b>Creation of new businesses and transformation of business model</b></p>	<ul style="list-style-type: none"> <li>• <b>Creation of life innovation business</b> Through new businesses, increase orders* 2 to 3 times by FY20 (compared to FY17 result of approx. 10 billion yen) *Orders for pharmaceutical and food industries</li> <li>• <b>Moving to a recurring business model</b></li> </ul>	<ul style="list-style-type: none"> <li>• Focused on launch of cell-based manufacturing solution business</li> <li>• Increased headcount (by 14).</li> <li>• Established amnimo Inc. and focused on utilizing IIoT architecture</li> </ul>
 <p><b>Improvement of productivity through Group-wide optimization</b></p>	<ul style="list-style-type: none"> <li>• <b>Continuous cost reduction (production, logistics, and procurement)</b></li> <li>• <b>Optimization of organizational structure</b></li> <li>• <b>Highly skilled personnel</b></li> </ul>	<ul style="list-style-type: none"> <li>• Optimized procurement and logistics costs</li> <li>• Expanded scope of CEC* (India)</li> <li>• Introduced RPA to boost business efficiency</li> <li>• Opened Yokogawa University</li> </ul> <p style="text-align: right;">*Central Engineering Center</p>

# Strategic Initiatives: Digital Transformation (DX)



**We plan to invest 2 billion yen in the current fiscal year, primarily in the second half.**

(Strategic investments, IT capital expenditures, etc.)

Strategies	Goals	Status of Activities
	<p><b>Value for customer</b></p> <p><b>Value to us</b></p>	<ul style="list-style-type: none"> <li>• Launched IIoT introduction support service business (amnimo)</li> <li>• Expanded line-up of service products that make use of plant data</li> <li>• Strengthened security services business</li> <li>• Started global optimization of IT applications</li> <li>• Moved forward with implementation of cloud technology for IT infrastructure (Established specialized organization)</li> <li>• Automated internal operations through the application of RPA</li> </ul>

# Future Forecast

- FY18 Forecast
- TF2020 Management Indicators



# FY18 Forecast (Revised)

- ◆ YoY increases in sales and profits for FY18:  
1<sup>st</sup> year of mid-term business plan off to a good start

(Billion¥)

	FY16 (A)	FY17 (B)	FY18 forecast(C)	Difference (C-B)	Growth rate (C÷B-1)	
Orders	390.7	400.3	<b>420.0</b>	+ 19.7	+ 4.9%	
Sales	391.4	406.6	<b>410.0</b>	+ 3.4	+ 0.8%	
Operating income	31.6	32.7	<b>36.0</b>	+ 3.3	+ 10.1%	
ROS(%)	8.1	8.0	8.8	+0.8pts	—	
Ordinary income	33.0	33.3	<b>36.0</b>	+2.7	+8.1%	
Profit before income taxes	35.5	29.4	<b>38.0</b>	+ 8.6	+ 29.3%	
Tax, etc.	9.7	7.9	12.5	+4.6	+ 58.2%	
Profit attributable to owners of parent	25.8	21.4	<b>25.5</b>	+ 4.1	+ 19.2%	
EPS(¥)	96.44	80.27	<b>95.50</b>	+ 15.23	+ 19.0%	
Exchange rate	1 U.S. dollar =	¥108.95	¥110.70	<b>¥110</b>	(¥0.7)	—

# TF2020 Management Indicators

Although our projections for growth in orders & sales assumed that there would be no strong rebound in the market environment, **we are getting off to a smoother than anticipated start in implementing our mid- to long-term management plans.**

## ► Points

- Expanding business in focus areas and exceeding the market growth rate
- Increasing profitability regardless of what happens in external environment
- Reallocating management resources to focus areas
- Maximizing cash generation by increasing income and improving capital efficiency

## ► Targets

Order & sales growth	<b>3</b> to <b>5</b> %/year
EPS growth	<b>7</b> to <b>9</b> %/year* <sup>1</sup>
ROS	<b>10</b> % or more (FY20)
ROE	<b>10</b> % or more (FY20)
Organic FCF* <sup>2</sup>	<b>85</b> billion yen or more (3 years, cumulative)

Exchange rate (1\$): 110 yen

\*<sup>1</sup> Excluding the FY17 impairment of goodwill, credit to allowance for doubtful accounts, and asset sales

\*<sup>2</sup> **Free cash flow (FCF) + strategic investment**  
**(3 year cumulative total of 70 billion yen)**

# Future Direction

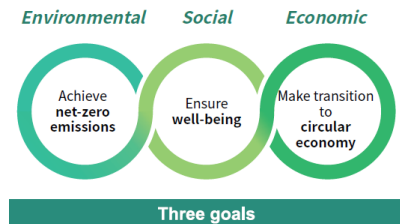
- Management with a **mid- to long-term perspective**
- Striving for **transformation** with a focus on **growth** and **efficiency**
- Aiming to **maximize corporate value** by placing the top priority on **growing our business**

*Transformation 2020*

**New mid-term business plan**

**Creating opportunities and  
establishing a foundation for growth**

**Contribute in building a sustainable society**

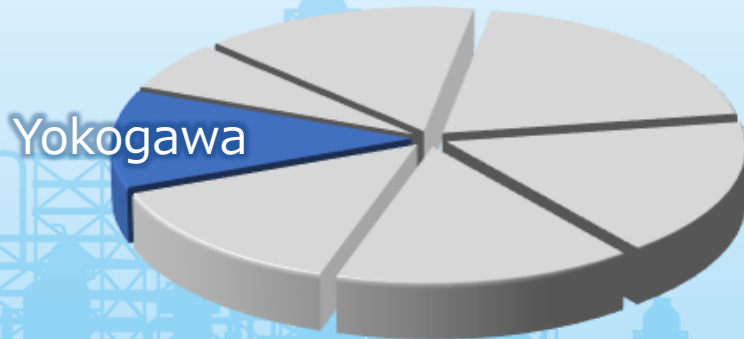


Yokogawa will work to achieve net-zero emissions, make a transition to a circular economy, and ensure the well-being of all by 2050, thus making the world a better place for future generations.

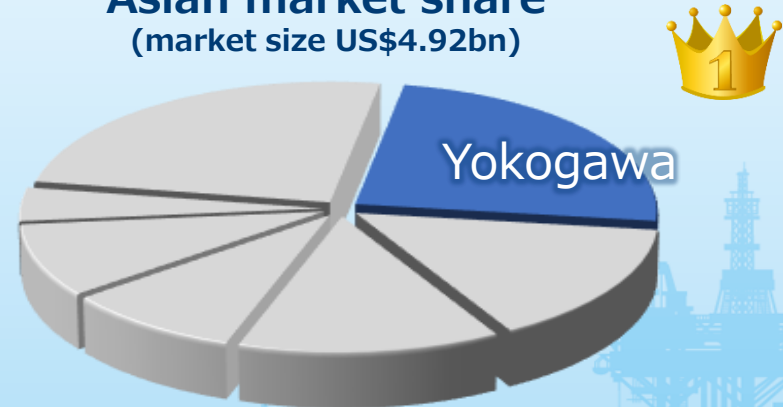
Co-innovating tomorrow™

## 2017 DCS Market Share/Industry Breakdown

Global market share  
(market size US\$14.36bn)



Asian market share  
(market size US\$4.92bn)



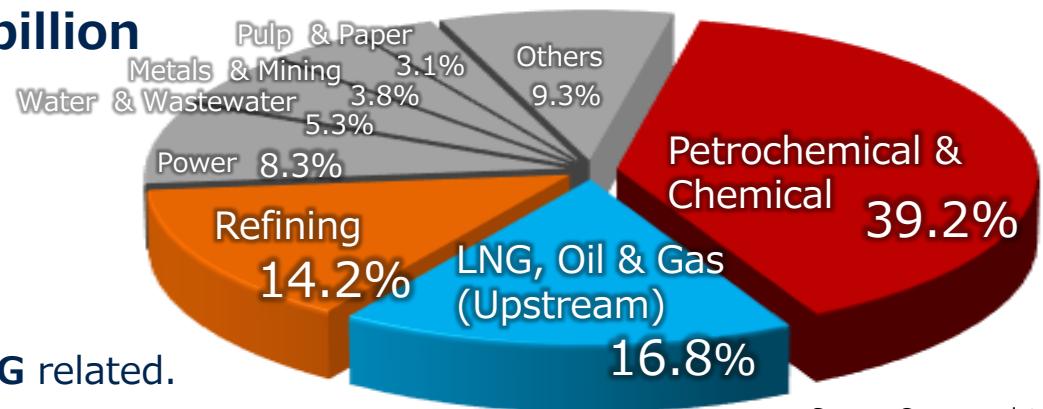
Source: ARC Distributed Control Systems Global Market 2017-2022

### Yokogawa DCS sales: ¥193.9 billion

- +¥5.8 billion, +3.0% year on year
- 53% of total control business

#### <Feature>

- We are strongest in **downstream** (petrochemical & chemical, refining).
- Half of upstream sales (16.8%) are **LNG** related.



Source: Company data

# <Appendix>

## Yokogawa's main ESG indexes

As of September 2018

DJSI-Asia Pacific  
FTSE4Good Index Series  
MSCI ESG Leaders Indexes  
CDP  
MS-SRI  
FTSE Blossom Japan Index  
MSCI Japan ESG Select Leaders Index  
MSCI Japan Empowering Women Index

MEMBER OF

**Dow Jones  
Sustainability Indices**

In Collaboration with RobecoSAM



FTSE4Good



2018 Constituent  
MSCI ESG  
Leaders Indexes



FTSE Blossom  
Japan



モーニングスター社会的責任投資株価指数  
Morningstar Socially Responsible Investment Index



2018 Constituent  
MSCI Japan Empowering  
Women Index (WIN)



2018 Constituent  
MSCI Japan ESG  
Select Leaders Index

The information pertaining to our business plans and forecasts that has been provided in this presentation and at analyst meetings contains forward-looking statements that are based on our management's current knowledge and require the making of assumptions about future events.

As such, it cannot be guaranteed that these statements will not differ materially from actual results.

Yokogawa undertakes no obligation to publicly update or revise any forward-looking statements after the issue of this document except as provided for in laws and ordinances.

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The information has not been restated to reflect the revision of the initially allocated acquired costs that was decided upon finalization of the tentative accounting treatment and application of the "Partial Amendments to Accounting Standard for Tax Effect Accounting".

IR Sec. Treasury & IR Department  
**Yokogawa Electric Corporation**

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