Yokogawa Electric Corporation

FY18 Results and FY19 Forecast

Junichi Anabuki

Director, Executive Vice President
Corporate Administration Headquarters

May 8, 2019

Key Points

FY18 results: Orders were strong, sales declined, profits were up year on year

- Summary: Orders were strong (+7.9% year on year). Sales declined year on year due to the appreciation of the yen primarily against emerging country currencies and the transfer of a subsidiary's shares. Operating income was up.
- Segments: Control was strong. With measurement, sales remained strong, but operating income was down due to the effects of investments. Income and profits were both down for the aviation and other businesses segment.
- Regions: Orders were up in the Middle East, North America and India. Sales were up in China.
- Industries: Downstream orders were strong. The upstream business grew.

FY18 Year-end dividend

- In consideration of the FY18 consolidated financial results, the year-end dividend forecast has been revised upward, from 15 yen to 17 yen.
- The annual dividend will come to 32 yen, a record high.

FY19 forecast: A year-on-year increase in sales and profits

- Summary: A large order backlog points to an increase in sales and profits.
- Risks: A slowing economy and a decline in investment due to trade friction between the United States and China
- Dividend: The annual dividend will be 34 yen (a record high for the second consecutive year).

Contents

Summary of FY18 Results

◆ Orders were up overall thanks to firm results in the control segment, but sales were down due to the strength of the yen primarily against emerging currencies, the transfer of a subsidiary's shares, and other factors.
◆ Operating income was up due to factors such as a decrease in SG&A.
◆ Profit attributable to owners of parent was up; this can be attributed to the recognition of an impairment loss in the same period of the previous fiscal year.

(Billion ¥)

	FY17	FY18	Difference	Growth rate	Impact of exchange rate and transfer of subsidiary's share
Orders	400.3	**432.0**	+31.7	+7.9%	(12.8)
Sales	406.6	**403.7**	(2.9)	(0.7%)	(11.4)
Operating income	32.7	**34.6**	+1.9	+5.8%	(1.2)
ROS (%)	8.0	**8.6**	+0.6 pts	–	–
Ordinary income	33.3	**36.8**	+3.5	+10.3%	(0.9)
Profit attributable to owners of parent	21.4	**28.4**	+7.0	+32.4%	(1.1)
EPS (¥)	80.27	**106.54**	+26.27	+32.7%	–
ROE (%)	8.1	**10.1**	+2.0 pts	–	–
Exchange rate 1$=	¥110.70	**¥111.07**	+0.37	–	–

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○Summary of FY18 Results

- Cumulative results for the FY18 indicate an decrease in sales and increase profits compared with the same period of the previous year.

- Orders: 432.0 billion¥, up 7.9% year on year. The Control Segment is showing steady results.

- Sales: 403.7 billion¥, down 0.7% year on year, and is due to the strength of the yen primarily against emerging currencies, the transfer of a subsidiary's shares, and other factors.

- Operating income : 34.6 billion¥, up 5.8% year on year.
While expenses rose due to further strategic investments, as well as transitory costs such as payment of duties and recording of allowances overseas, profits increased due to a reduction of allowances for doubtful accounts from the previous year and other factors.

- Profit attributable to owners of parent was 28.4 billion¥ and up 7.0 billion¥ year on year, reflected the ¥9.1 billion impairment loss recorded last year.

Summary of FY18 Results
(Comparison with forecast)

-Orders were up. While sales and operating income were down, profit attributable to owners of parent was up.

(Billion ¥)

	FY18 11/6 forecast	FY18 results	Difference
Orders	420.0	**432.0**	+12.0
Sales	410.0	**403.7**	(6.3)
Operating income	36.0	**34.6**	(1.4)
Ordinary income	36.0	**36.8**	+0.8
Profit attributable to owners of parent	25.5	**28.4**	+2.9
EPS (¥)	95.50	**106.54**	+11.04
Exchange rate 1$=	¥110.00	**¥111.07**	+¥1.07

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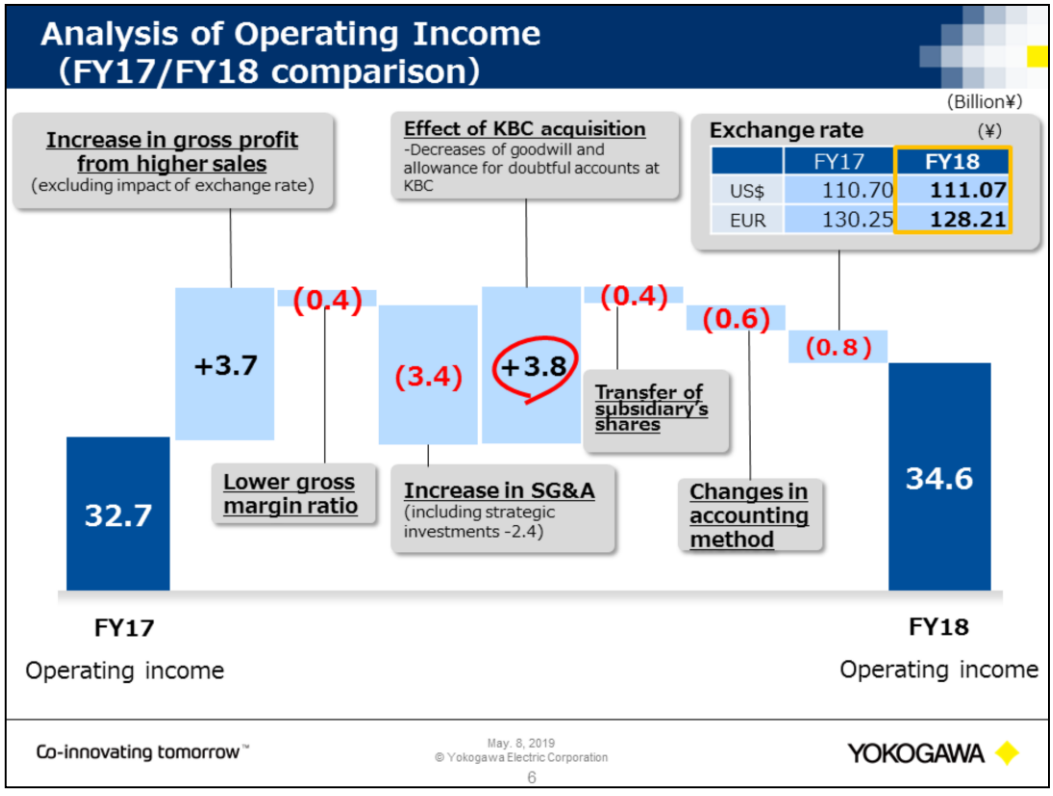
○Summary of FY18 Results (Comparison with forecast)

- Orders has been exceeded, but Sales and Operating income have not been achieved.

- Orders were up 12.0 billion¥ compared with the FY18 forecast. The Large project orders contributed to increase orders.

- Sales were down 6.3 billion¥ compared with the FY18 forecast, mainly because sales on multiple projects was shifted to the FY19.

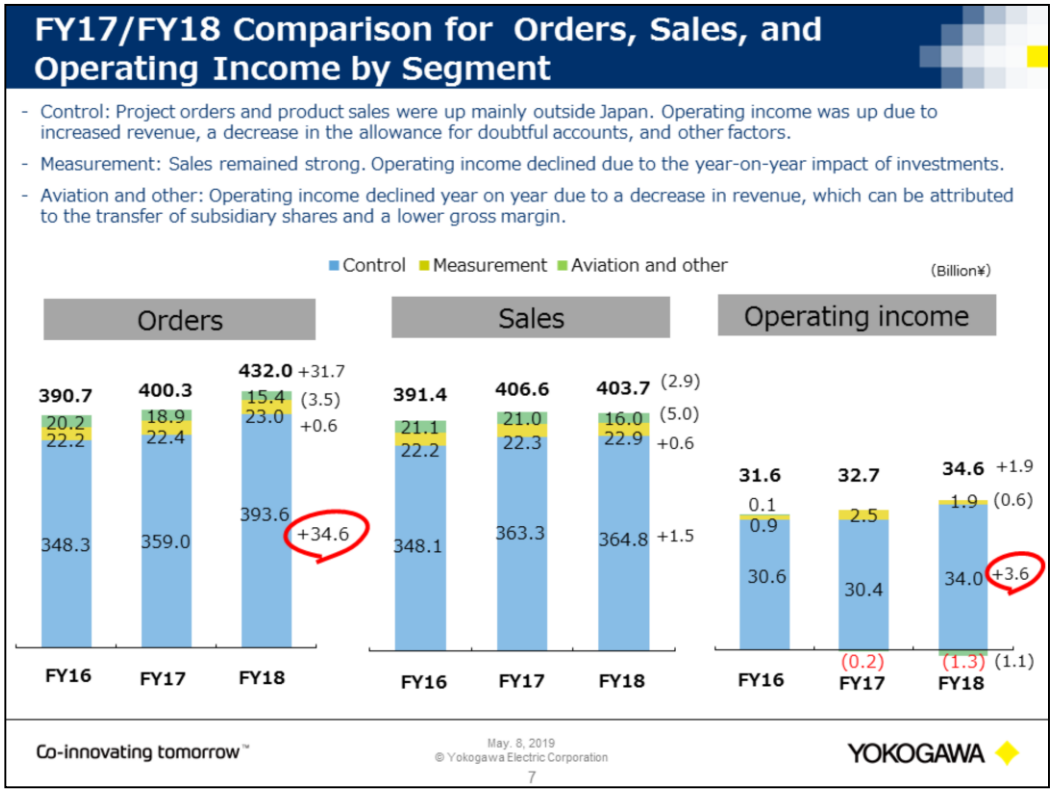
- Operating income was down 1.4 billion¥ compared with the FY18 forecast. It was not achieved due to the lower than expected sales, transitory costs that reduced the gross margin ratio, etc.



○Analysis of Operating Income（FY17/FY18 comparison）

- Operating income was 34.6 billion¥, a increase of 1.9 billion¥ over the year prior.

- Major factors were:
  1. Increased sales leading to 3.7 billion¥ year on year increase in gross margins;
  2. Gross margins improving year on year by 1.7 billion¥, Gross margin was down 400 million¥ due to transitory costs such as payment of past duties and recording of allowances overseas;
  3. SG&A decreased year on year, including 2.4 billion¥ expended on strategic investments, which led to a 3.4 billion¥ decline in profits;
  4. In relation to KBC, there was a ¥3.8 billion increase due to decrease of goodwill depreciation, reflection of the ¥2.7 billion in a reduction of allowances for doubtful accounts recorded in the previous year, etc.;
  5. The impact of transfer of subsidiary's shares was a 400 million¥ decrease year on year;
  6. The impact of accounting changes was a 600 million¥ decrease year on year;
  7. The impact of changes in the exchange rate, particularly the appreciation of the yen against the currencies of emerging countries, was a 800 million¥ decrease year on year.



○FY17/FY18 Comparison for Orders, Sales, and Operating Income by Segment

Control Business remained firm.

- Orders are strong, particularly outside Japan. Large projects ordered in the FY18 4Q contributed to a significant increase of 34.6 billion¥ from the same period of the previous year (42.1 billion¥ excluding the impact of exchange rates).

- The large projects ordered in the FY18 4Q have not yet contributed to sales, but the products sales in China and other regions remains strong, resulting in an increase of 1.5 billion¥ from the same period of the previous year (8.2 billion¥ excluding the impact of exchange rates).

- Operating income increased significantly, rising 3.6 billion¥ from the same period of the previous year (4.4 billion¥ excluding the impact of exchange rates). This was mainly due to an increase in sales and a decrease in the allowances for doubtful accounts in the previous year.

- The measurement business remained firm, with orders and sales each increasing by 600 million¥ from the same period of the previous year.

- Operating income decreased by 600 million¥ from the same period of the previous year due to upfront investments in our Life Innovation business.

- In the aviation and other businesses segment, orders decreased by 3.5 billion¥ from the same period of the previous year, while sales likewise decreased by 5.0 billion¥. This was largely due to transfer of subsidiary's shares.

- Operating profit decreased due to a decrease in sales and gross margin ratio

- One factor in the decline of operating income was jobs with greater development manpower for the aviation business.

Orders and Sales by Region in Control Segment

◆ Orders were up mainly in the Middle East, North America, and India.
◆ Sales were up mainly in China despite the effects of a stronger yen centering on emerging country currencies.

(Billion¥)

Orders	FY17 (A)	FY18 (B)	Difference (B-A)
Japan	**107.3**	**111.4**	**4.1**
Asia	118.0	124.5	6.5
(South-eastern Asia and Far East)	66.5	64.3	(2.2)
(China)	39.7	42.6	2.9
(India)	11.8	17.6	5.8
Europe and CIS	52.6	53.2	0.6
Middle East and Africa	43.7	56.7	13.0
North America	29.3	38.2	8.9
Central and South America	8.1	9.6	1.5
Outside Japan	**251.7**	**282.2**	**30.5**
Consolidated	**359.0**	**393.6**	**34.6**
Exchange rate1$=	¥110.70	¥111.07	¥0.37

Sales	FY17 (A)	FY18 (B)	Difference (B-A)
Japan	**107.0**	**109.4**	**2.4**
Asia	115.5	120.3	4.8
(South-eastern Asia and Far East)	67.4	67.3	(0.1)
(China)	35.5	40.5	5.0
(India)	12.6	12.5	(0.1)
Europe and CIS	52.2	49.5	(2.7)
Middle East and Africa	52.3	49.0	(3.3)
North America	28.5	28.5	0
Central and South America	7.8	8.1	0.3
Outside Japan	**256.3**	**255.4**	**(0.9)**
Consolidated	**363.3**	**364.8**	**1.5**
Exchange rate1$=	¥110.70	¥111.07	¥0.37

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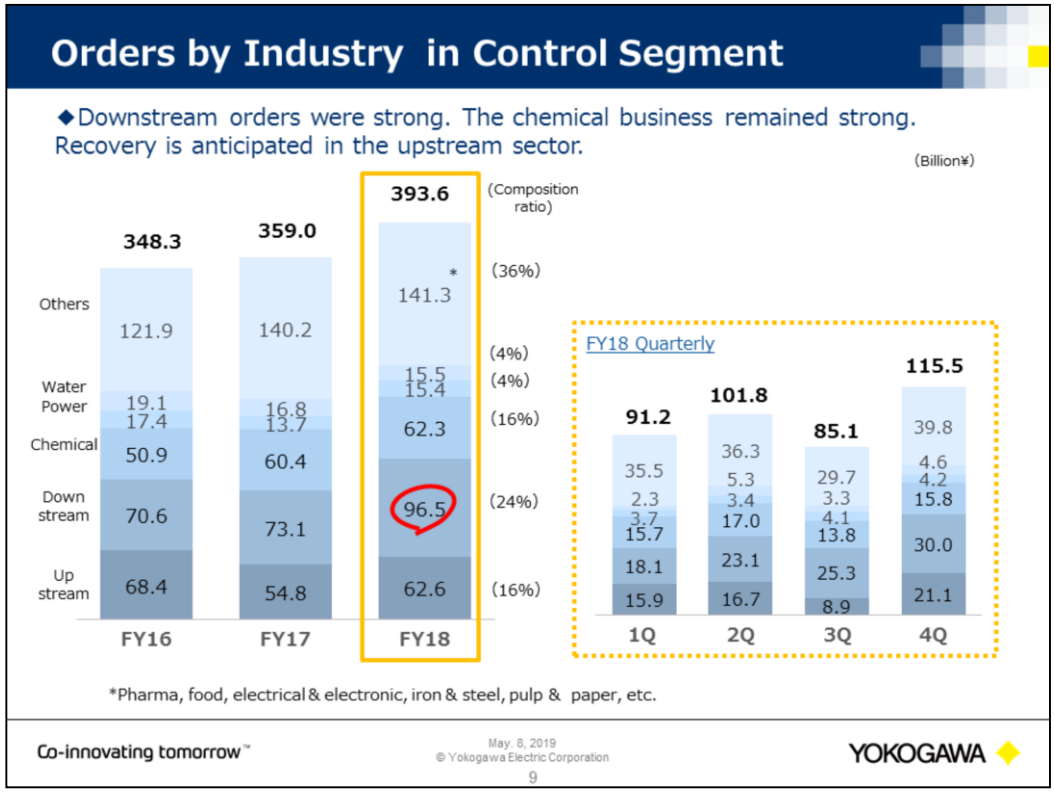
○Orders and Sales by Region in Control Segment

- Orders increased significantly, partly driven by orders for large projects in the Middle East, North America and India. Orders also increased in China, Europe/CIS, Central America and South America.

- Sales increased significantly in China, which had a backlog of orders from the previous fiscal year.

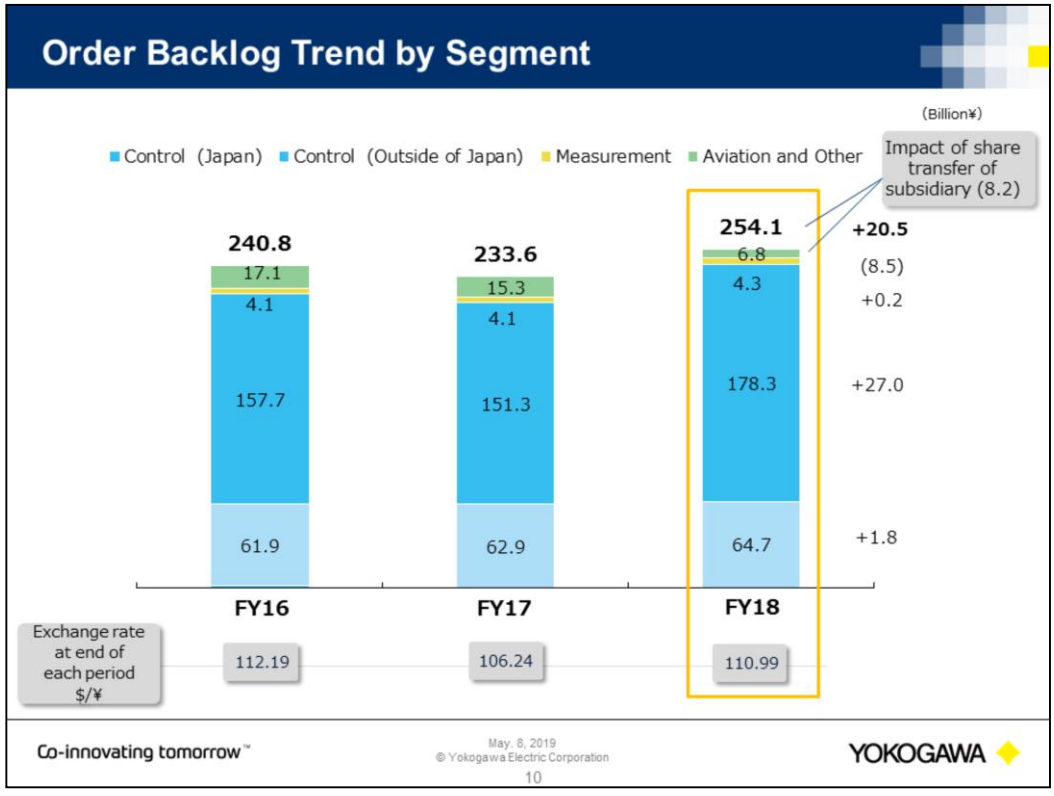
※Destination-based



○Orders by Industry in Control Segment

- Orders of downstream expanded significantly, increasing 23.4 billion¥ from the same period in the previous year. This growth was driven by orders for large projects, particularly in the Middle East.

- The upstream and chemical sector are also firm.



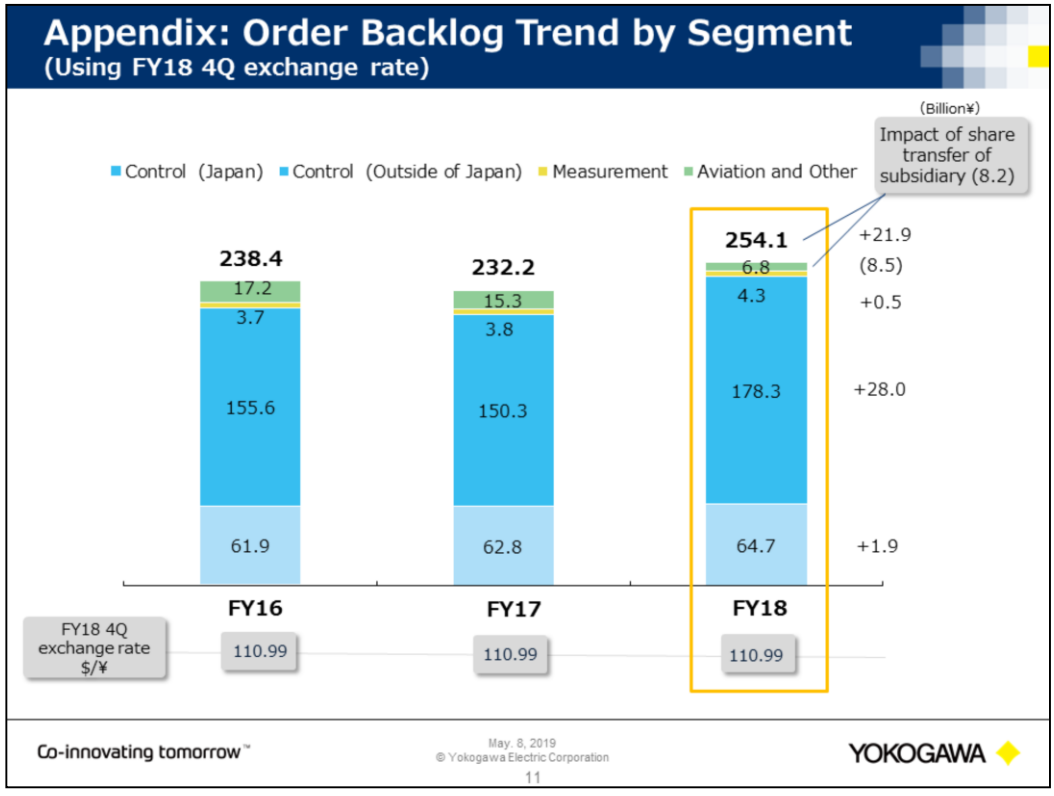
○Order Backlog Trend by Segment

- Order backlog expanded significantly, increasing 20.5 billion¥ from the same period in the previous year.

- The control business increased significantly, rising ¥28.8 billion from the same period in the previous year. Since we have accumulated a order backlog, particularly from the FY18 4Q, some orders are planned to be booked as sales in the FY19 or afterwards.

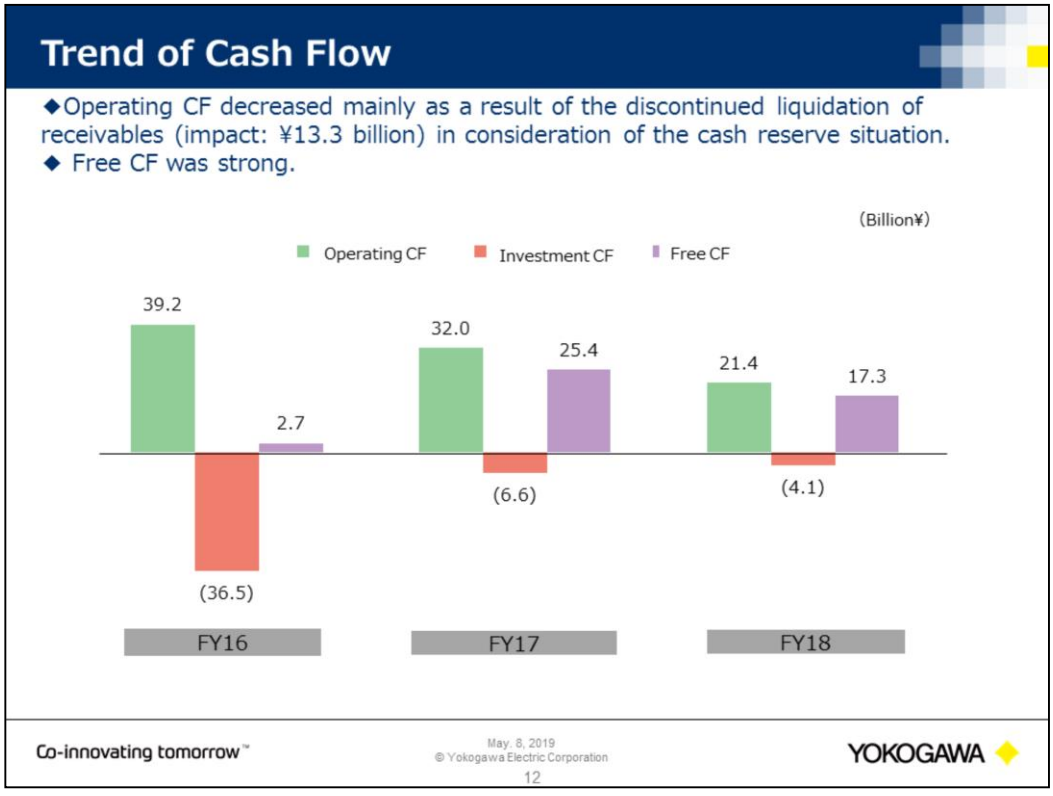
- The measurement business was on par with the previous year, rising ¥200 million from the same period in the previous year.

- The aviation and other businesses segment decreased 8.5 billion¥ from the same period in the previous year. This was due to the impact of transfer of subsidiary's shares.



○Appendix: Order Backlog Trend by Segment
(Using FY18 4Q exchange rate)

- Order backlog was up 21.9 billion¥, excluding exchange rate.



○Trend of Cash Flow

- Operating cash flow decreased to 21.4 billion¥ by 10.6 billion¥ from the same period of the previous year, mainly due to the discontinued liquidation of receivables (impact: 13.3 billion¥).

- Free cash flow decreased to 17.3 billion¥ by 8.1 billion¥ from the same period of the previous year. However, excluding the impact of the discontinued liquidation of receivables, it remained firm in real terms.

FY19 Forecast

- Orders are expected to remain nearly the same year on year due to the impact of the transfer of a subsidiary's shares and the decrease in the number of large-scale projects.
- Sales are expected to be up year on year due to the large order backlog.
- Operating income is also expected to rise due to increased revenues.

(Billion¥)

	FY17 (A)	FY18 (B)	FY19 forecast(C)	Difference (C-B)	Growth rate (C÷B-1)
Orders	400.3	432.0	**430.0**	(2.0)	(0.5%)
Sales	406.6	403.7	**420.0**	+16.3	+4.0%
Operating income	32.7	34.6	**40.0**	+5.4	+15.6%
ROS (%)	8.0	8.6	**9.5**	+0.9 pts	–
Ordinary income	33.3	36.8	**40.0**	+3.2	+8.8%
Profit before income taxes	29.4	38.4	**40.0**	+1.6	+4.2%
Tax, etc.	7.9	10.0	**11.0**	+1.0	+10.0%
Profit attributable to owners of parent	21.4	28.4	**29.0**	+0.6	+1.9%
EPS (¥)	80.27	106.54	**108.64**	+2.10	+2.0%
Exchange rate 1$=	¥110.70	¥111.07	**¥110**	(¥1.07)	–

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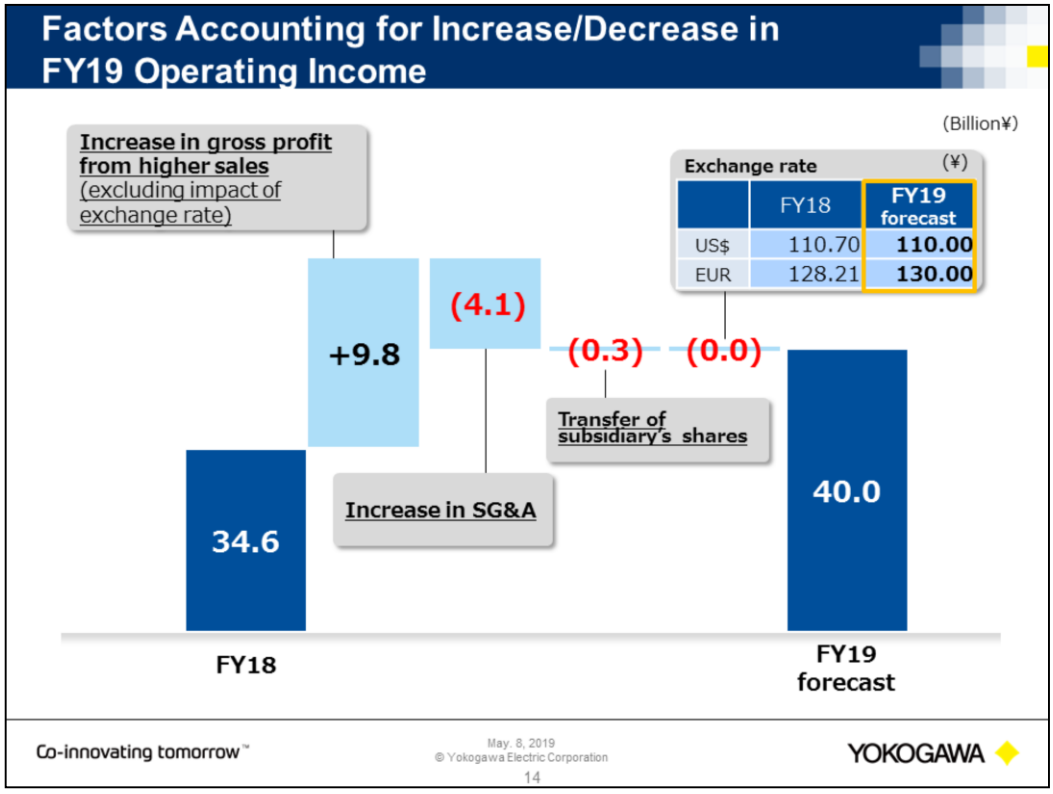
○FY19 Forecast

- An increase in sales and operating income is expected compared to the previous year.

- Orders: 430 billion¥, down 2 billion¥ from the previous year. Due to exchange rates (particularly with respect to emerging countries), transfers of subsidiaries and an expected decline in large projects, orders are expected to be on par with the previous year.

- Sales: 420 billion¥, up 16.3 billion¥ from the previous year. An increase in revenue is expected due to a high-level order backlog from the FY18.

- Operating income: 40 billion¥, up 5.4 billion¥ from the previous year. This is expected to be the highest profit in the company's history. The profit increase is largely due to an increase in gross profit from higher sales.

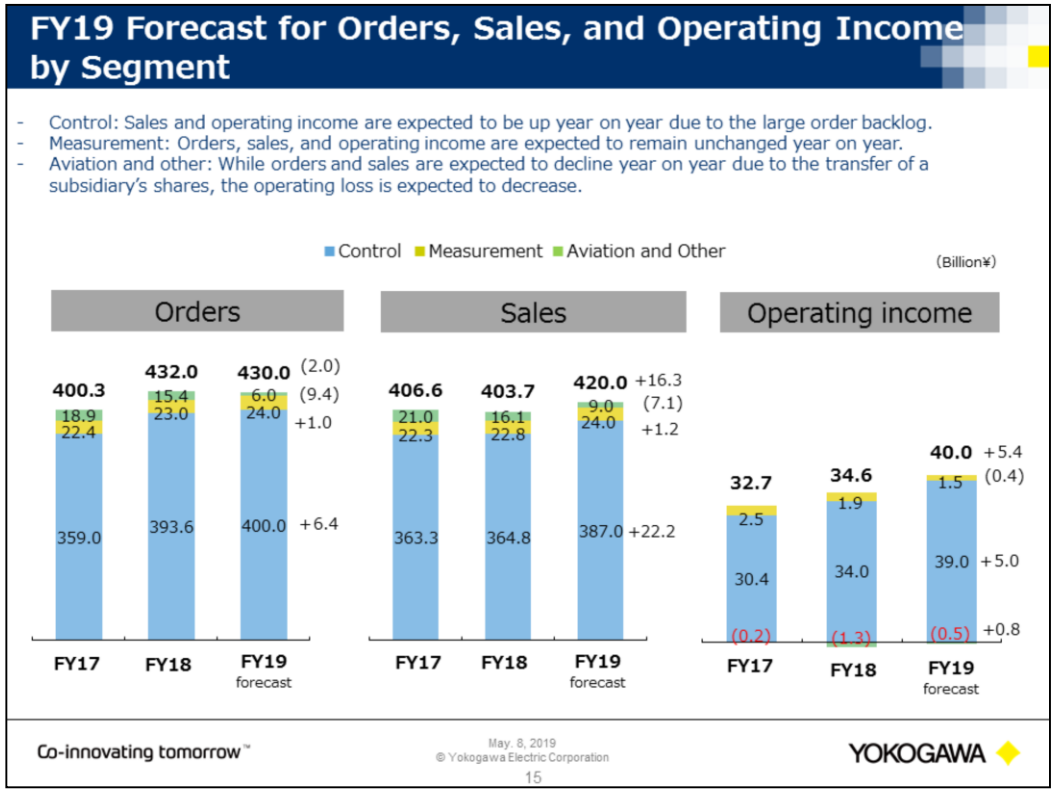


○Factors Accounting for Increase/Decrease in FY19 Operating Income

- Operating income: 40 billion¥, up 5.4 billion¥ from the previous year. This is expected to be the highest profit in the company's history.

- Major factors are:

1. Due to increased sales, gross margin is expected to increase by 9.8 billion¥ from the previous year;
2. SG&A are expected to increase from the previous year, including strategic investments in the Life Innovation business, IIoT business, digital transformation, etc., leading to a 4.1 billion¥ decrease in operating income;
3. The impact of transfer of subsidiary's shares is expected to result in a 300 million¥ decrease from the previous year;
4. Changes in exchange rates are expected to have no effect.



○FY19 Forecast for Orders, Sales, and Operating Income by Segment

- The control business is expected firm.
- Orders are expected to increase by 6.4 billion¥ from the previous year. This growth is only about 1% because some PJTs orders, which were expected to get in the FY19, were got in the FY18.
- Sales is expected to be significant up 22.2 billion¥ year on year due to the large order backlog.

- In the measurement businesses, Compared to the previous year, orders are expected to increase by 1 billion¥, while sales are expected to increase by 1.2 billion¥. Operating income is expected to decrease by ¥400 million due to upfront investments.

- In the aviation and other businesses, compared to the previous year, orders are expected to decrease by 9.4 billion¥, while sales are expected to decrease by 7.1 billion¥. This decline is primarily due to the impact of transfer of subsidiary's shares.
- Taking into account the jobs with greater development manpower for the aviation business, we expect a deficit of 500 million¥. However, we will work continuously to improve this loss.

FY19 Forecast for Orders and Sales by Region in Control Segment

◆ While orders are expected to decline in North America due to the number of large projects in the previous year, an increase in orders is anticipated in markets such as Asia.
◆ Sales are expected to increase outside Japan, mainly in the Middle East and India.

(Billion¥)

Orders	FY18 Results (A)	FY19 Forecast (B)	Difference (B-A)
Japan	**111.4**	**112.0**	**0.6**
Asia	124.5	129.0	4.5
(South-eastern Asia and Far East)	64.3	66.0	1.7
(China)	42.6	44.0	1.4
(India)	17.6	19.0	1.4
Europe and CIS	53.2	55.0	1.8
Middle East and Africa	56.7	59.0	2.3
North America	38.2	35.0	(3.2)
Central and South America	9.6	10.0	0.4
Outside Japan	**282.2**	**288.0**	**5.8**
Consolidated	**393.6**	**400.0**	**6.4**
Exchange rate 1$=	¥111.07	¥110.00	(¥1.07)

Sales	FY18 Results (A)	FY19 Forecast (B)	Difference (B-A)
Japan	**109.4**	**112.0**	**2.6**
Asia	120.3	126.0	5.7
(South-eastern Asia and Far East)	67.3	66.0	(1.3)
(China)	40.5	42.0	1.5
(India)	12.5	18.0	5.5
Europe and CIS	49.5	51.0	1.5
Middle East and Africa	49.0	57.0	8.0
North America	28.5	32.0	3.5
Central and South America	8.1	9.0	0.9
Outside Japan	**255.4**	**275.0**	**19.6**
Consolidated	**364.8**	**387.0**	**22.2**
Exchange rate 1$=	¥111.07	¥110.00	(¥1.07)

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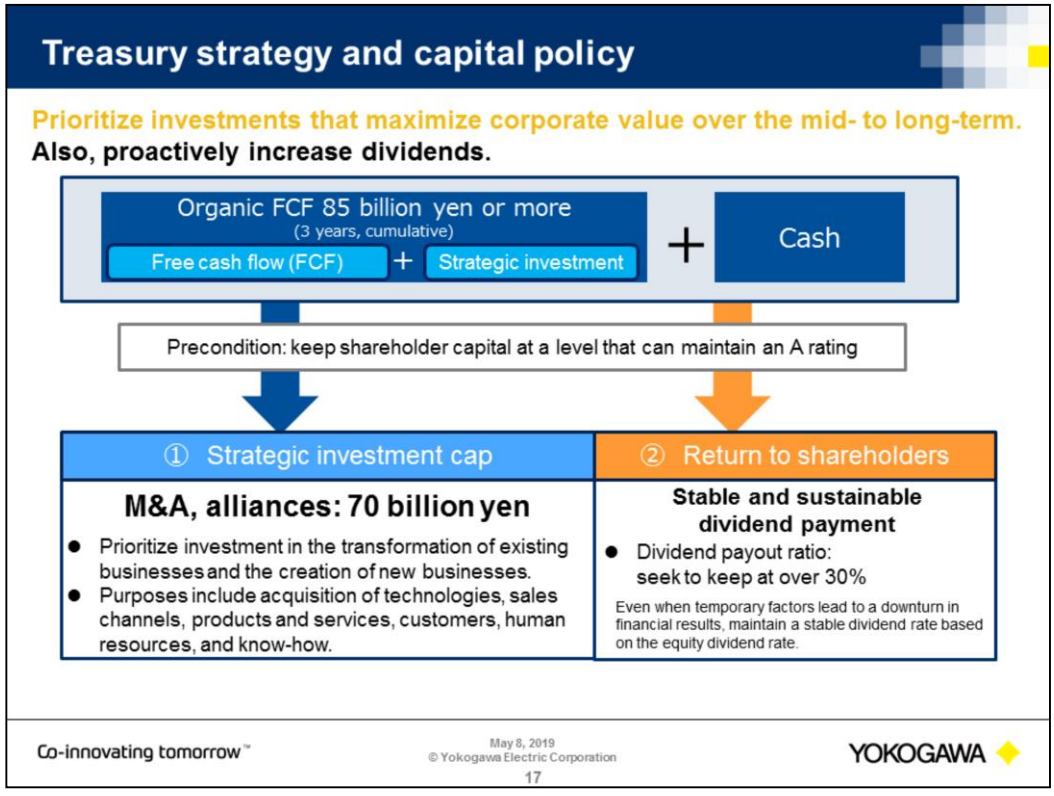
○FY19 Forecast for Orders and Sales by Region in Control Segment

- An increase in orders is anticipated in markets such as Asia.

- Sales are expected to increase mainly in India, the Middle East and North America, in the background of the high level of order backlog.

※Destination-based

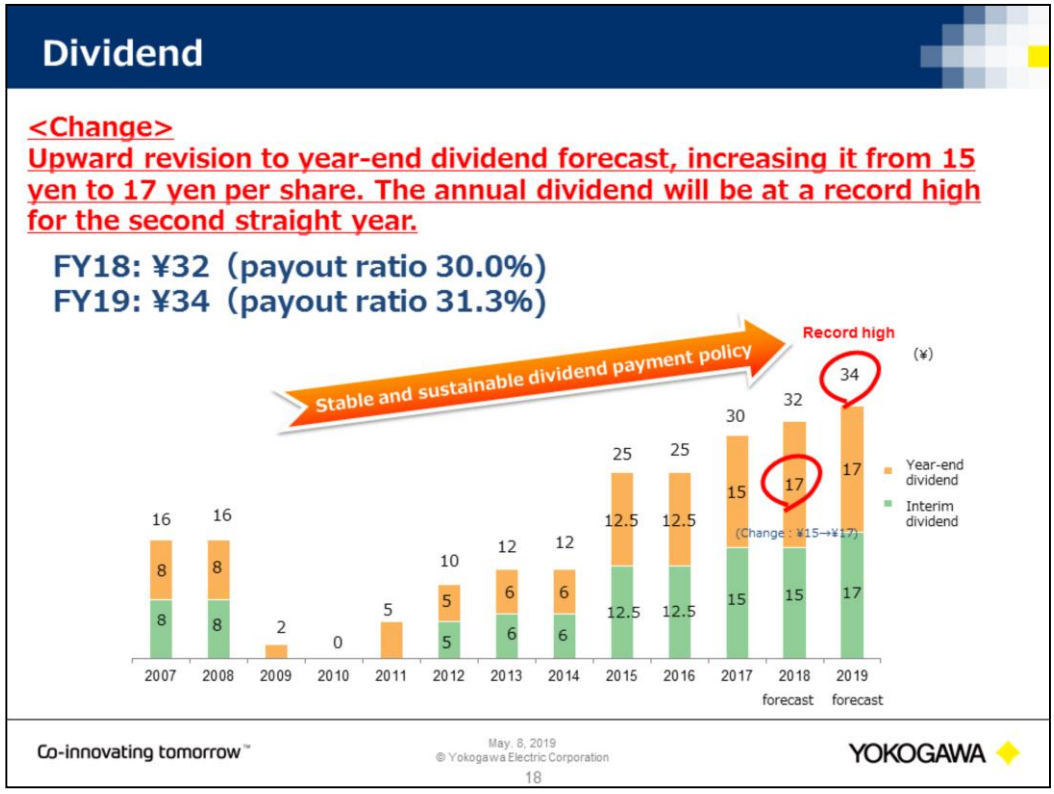


○Treasury strategy and capital policy

- No change to basic policy

- The first priority is to allocate the generated FCF to strategic investments such as M&A and alliances.

- The point of return to shareholders is to pay stable and sustainable dividend.



○Dividend

- Changed

- FY18: Increasing year-end dividend forecast from 15 yen to 17 yen per share
The annual dividend per share for fiscal year 2018 will be 32.00 yen such the best in the past

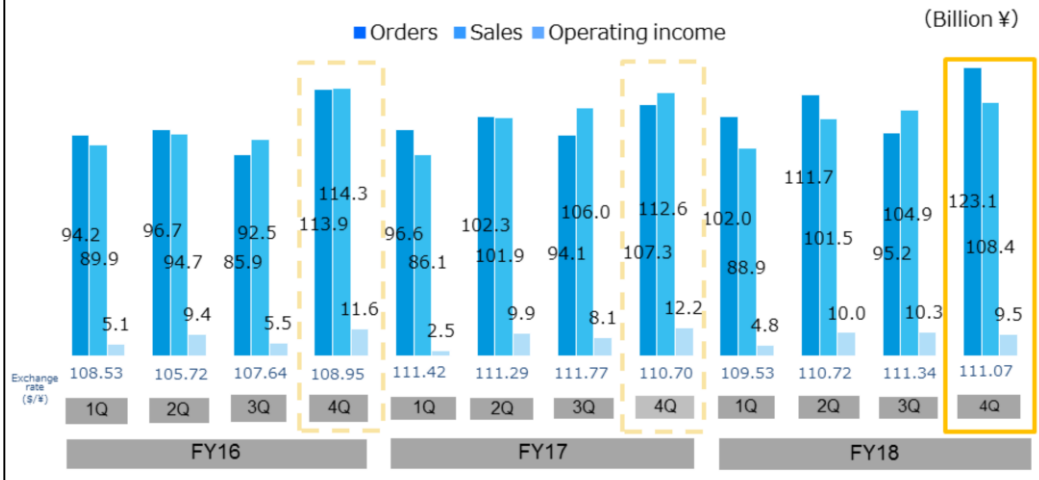
- FY19: Regarding dividends for the next fiscal year, we plan to pay the highest level of annual dividends ever by paying 34 yen per share (interim 17.00 yen, year-end 17.00 yen).

Appendix:

- Quarterly Financial Results
- Non-operating / Extraordinary Income and Expenses
- Trend of Balance Sheet
- Trend of R&D Expenses, Depreciation, and CAPEX

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: Non-operating /Extraordinary Income and Expenses

(Billion ¥)

	FY17	FY18
Operating income	**32.7**	**34.6**
Non-operating income	4.1	4.5
Non-operating expenses	3.5	2.4
Ordinary income	**33.3**	**36.8**
Extraordinary income	5.8	2.6
Extraordinary expenses	9.8	0.9
Income before tax	**29.4**	**38.4**
Tax, etc.	7.9	10.0
Profit attributable to owners of parent	**21.4**	**28.4**
(Effective tax rate)	22.6%	21.5%

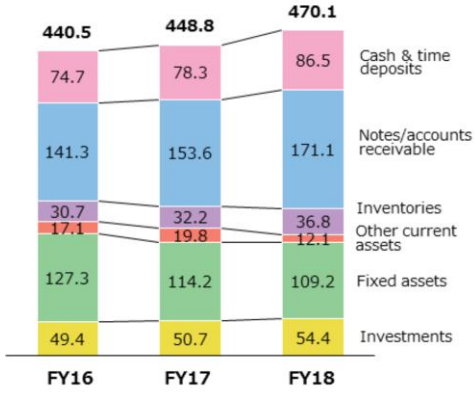
FY17:
Gain on sales of investment securities: ¥3.7 billion
Gain on sale of non-current assets: ¥2.1 billion

FY18:
Gain on sales of investment securities: ¥0.7 billion
Gain on sales of shares of subsidiaries and associates: ¥1.8 billion

FY17: Impairment loss: ¥9.2 billion

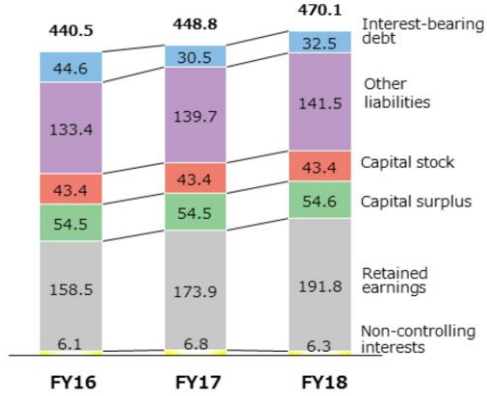
Appendix: Trend of Balance Sheet

Assets



	FY16	FY17	**FY18**
Total asset turnover (ROA)	6.0%	4.8%	**6.2%**
Return on equity (ROE)	10.4%	8.1%	**10.1%**
Total asset turnover	0.92	0.91	**0.88**

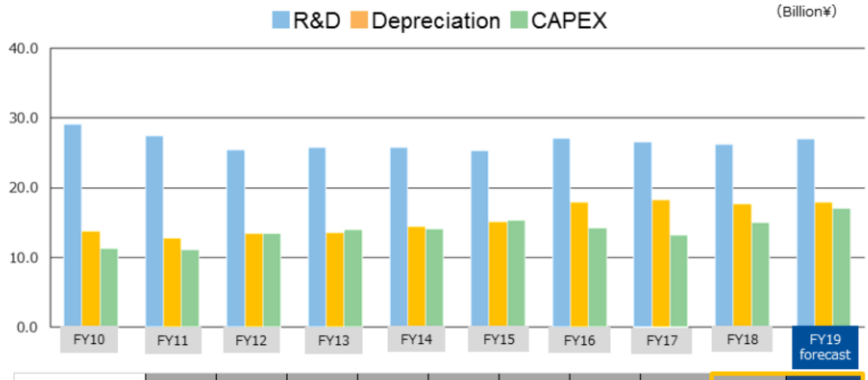
Liabilities and equity



	FY16	FY17	**FY18**
Debt/equity ratio	17.4%	11.2%	**11.2%**
Shareholders' equity ratio	58.2%	60.6%	**61.7%**
Net assets per share (yen)	960	1,017	**1,086**

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

- FY19 CAPEX is expected to increase slightly due to strategic investments in line with the mid-term business plan.



	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19 forecast
R&D expenses	29.2	27.5	25.5	25.8	25.8	25.3	27.1	26.6	26.2	27.0
(% of sales)	9.0%	8.2%	7.3%	6.6%	6.4%	6.1%	6.9%	6.5%	6.5%	6.4%
Depreciation	13.8	12.8	13.5	13.6	14.5	15.1	18.0	18.3	17.7	18.0
(% of sales)	4.2%	3.8%	3.9%	3.5%	3.6%	3.6%	4.6%	4.5%	4.4%	4.3%
CAPEX	11.3	11.1	13.5	14.0	14.1	15.4	14.2	13.2	15.0	17.0
(% of sales)	3.5%	3.3%	3.9%	3.6%	3.5%	3.7%	3.6%	3.3%	3.7%	4.0%

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Financial Results for Fiscal Year 2018

Current Situation and Yokogawa's Future

Transformation 2020

~ Accelerate and take our transformation to a new stage~

Hitoshi Nara

President and Chief Executive Officer

May 8, 2019

Career to date

- Apr. 1985 Joined the Company
- Oct. 2001 Deputy Managing Director of Yokogawa Engineering Asia Pte. Ltd.
- Oct. 2003 Managing Director of Yokogawa (Thailand) Ltd.
- Jan. 2007 Head of Sales Div. I, Industrial Solutions Business Headquarters
- Apr. 2010 Senior Vice President, Head of Industrial Solutions Business Headquarters
- Jun. 2011 Director and Senior Vice President, Head of Industrial Solutions Business Headquarters
- Apr. 2013 Director of the Company, President of Yokogawa Solution Service Corporation
- Apr. 2017 Director and Executive Vice President of the Company, Chief Executive for Japan and Korea, President of Yokogawa Solution Service Corporation
- Apr. 2018 Director and Executive Vice President of the Company, Head of Life Innovation Business Headquarters
- Apr. 2019 President and Chief Executive Officer of the Company (Present)

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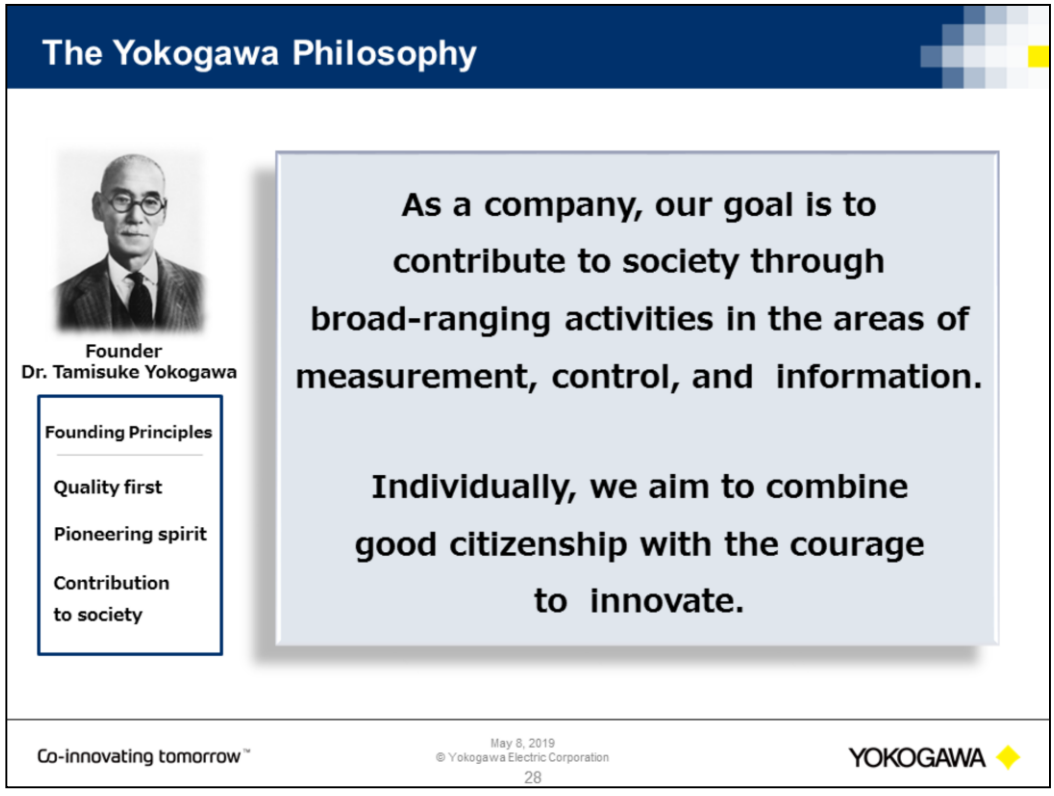
- After joining the company as a sales engineer, I was responsible for chemicals industry clients as part of the sales department.
- Thereafter, as my customers' overseas operations grew rapidly, I spent time working in Singapore and Thailand.
- From 2007, I was responsible for domestic oil, chemicals sectors, and customers plant-related. From 2010, I oversaw all domestic sales, engineering, general service operations.
- In 2013, I have launched a new subsidiary, Yokogawa Solution Service, which operates on a solutions business. I've been in charge for five years.
- Last year, I was in charge of the new Life Innovation business unit.
- This is my second appearance at the company's financial results briefing, with the previous occasion coming in November, 2016. At that time I made a presentation on the domestic "solutions business" and "value chain," with a particular focus on Yokogawa's solution service, and the company's domestic operations. Incidentally, at the time, the share value was ¥1,500, while it is now 1.5 times that at ¥2,300.

- I would like to extend my thanks to you all for your support in getting here.
- I would like to go on developing YOKOGAWA Group.

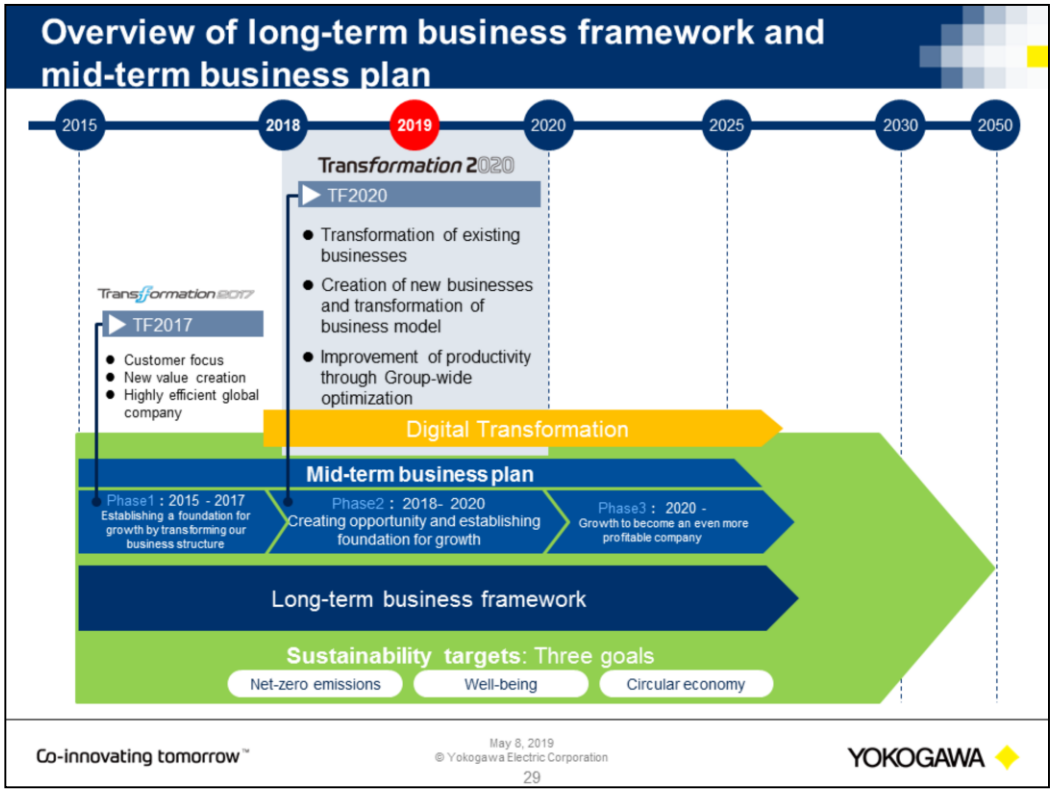
Contents



＜The Yokogawa Philosophy＞

- We explain “the founding principles” and “the Yokogawa Philosophy”.
- Our founder was an architect called Dr. Tamisuke Yokogawa (in terms of buildings that are still standing, he is most famous for the “Nihonbashi Mitsukoshi” building.)
- For over a hundred years since our founding in 1915, we have continued to adhere to the three founding principles of “quality first,” “pioneering spirit,” and “contribution to society.”
- The Yokogawa Philosophy are **“As a company, our goal is to contribute to society through broad-ranging activities in the areas of measurement, control, and information” and “Individually, we aim to combine good citizenship with the courage to innovate”.**
- Based on this philosophy, we aim to be first to adapt to changes in society, and grow even as we reform ourselves under challenging conditions.
- In order to continue to be the business our customers and society need, we intend to take on the challenge of finding new ways to create value, together with all of our stakeholders.

- Inheriting these founding principles and philosophy, our management is determined to “change what needs to be changed.”



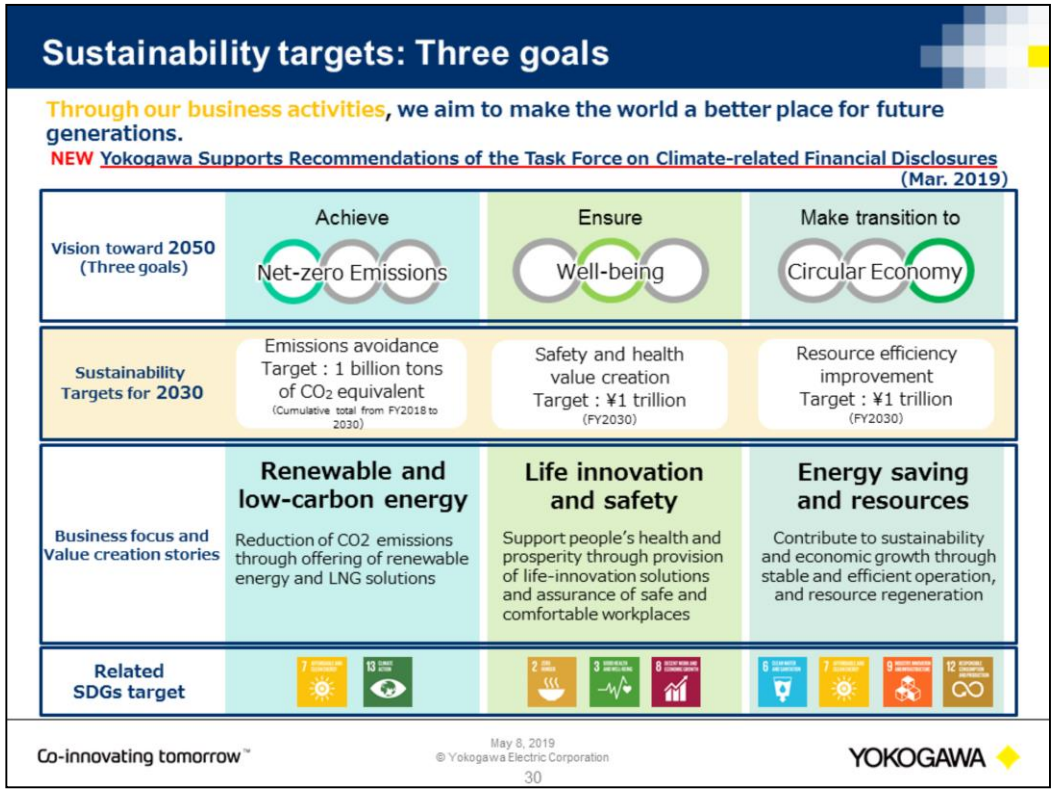
＜Overview of long-term business framework and mid-term business plan ＞

- Explanation of YOKOGAWA's current situation.

- Currently, the second year of Transformation 2020 "TF2020"
- We are currently right at the mid-point of the ten-year long-term business framework stretching from 2015 to 2025, as well as of "Phase 2" of our med-term business plan.

- Phase 1 : From 2015 year to 2018 year, Implement of Establishing a foundation for growth by transforming our business structure
- Phase 2 : For 3 years, As version 2 of the Revolution, "Creating opportunity and establishing foundation for growth" will be aimed.
- In addition, since 2020 year, "Growth to become an even more profitable company" will be aimed.

- We established sustainability goals (Three goals) for 2050 in order to help make the world a better place for future generations.



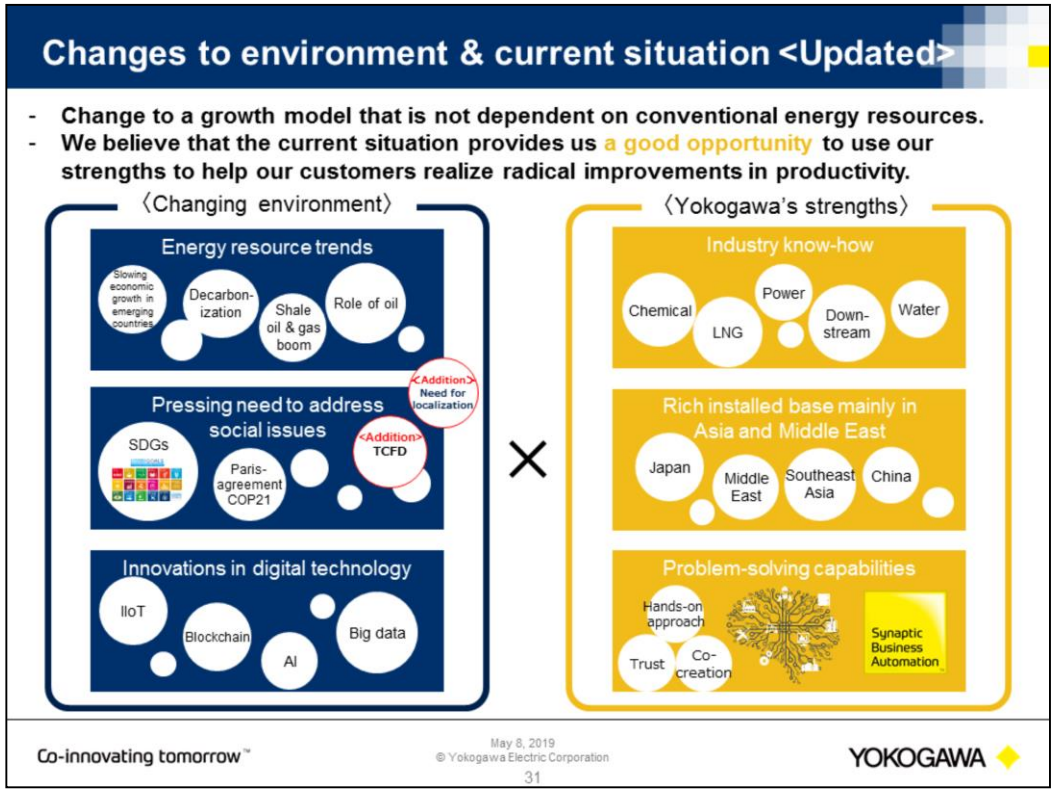
<Sustainability targets>

- Details of the sustainability targets "Three goals"

- We are aiming to set quantitative goals in the three areas of "net-zero emissions," "well-being," and "circular economy," and contribute to these areas through our business.

- **We supported recommendations of "the Task Force on Climate-related Financial Disclosures (TCFD)"** on March, 2019.

- The entire Yokogawa Group will address these targets, which are incorporated in our business plans, in order to solve issues that concern all in our society.



＜Changes to environment & current situation ＞

- This is a slide we showed last May when we announced our medium-term management plan. It has now been one year since that announcement, but, acknowledging the external environment, there have been **no major changes such as altering strategy.**

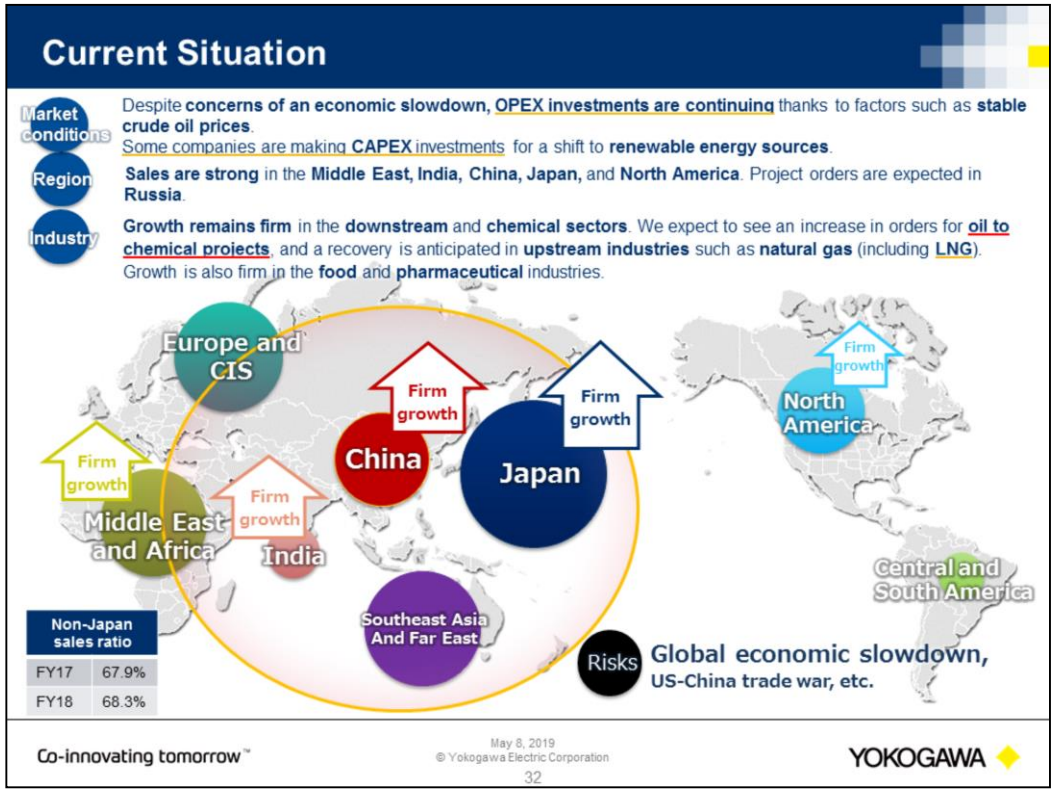
- Looking back on this year, however, there are a few points where we can sense some signs of change.

- The first is that there are **"increasingly localized needs in each country."** In concrete terms this means that developing countries and resource rich countries are moving to develop industry domestically. (For example, there is a need in those countries to develop and grow production and engineering functions domestically.)

- Another point is that with the "increased demand for solutions to social problems," there are moves towards **"TCFD"** and "SDGs" across the world.

- These changes are, if anything, going to act as a tail-wind for us. These are **business opportunities to act on our strengths as a company** that we can grasp.

- The reason for this is that YOKOGAWA has developed with customers and the societies through a plant life cycle spanning over 30 years on **the ground in each of these countries.** This are strengths we have built with our customers and the societies we operate in, based on our continually developing **"deep and secure relationship of trust**."



<Current Situation >

(Market conditions) In overall terms, with the IMF revising down its economic projections, and rising uncertainty abounding, there is **a sense that the economy could be slowing down**.

- On the other hand, the price of oil is maintaining relative stability at around 60 USD per barrel. OPEX investments are continuing, particularly with an eye to improving productivity.

- In an effort to solve social problems, the shift to clean energy is also accelerating. In concrete terms this has meant large investments in LNG projects.

(Region) In addition to so-called emerging countries such as China, India, and Middle East, where we are strong, things are going well in Japan, which holds the largest share of our business and is our largest scale market. The North American market is also going strongly at the present moment. We are also paying attention to the situation in Russia, where a lot of gas projects are making progress.

(Industry) There is a lot of activity going on downstream including petrochemicals. Demand in chemicals also appears to have stabilized, and is likely to begin broadening. There are also good signs in "oil to chemical" activities (i.e. the conversion of crude oil to chemicals). Investment in natural gas including LNG also looks to be tending to recover upstream, while outside of energy, the food products and pharmaceutical sectors are also going strong.

- At one year out from the beginning of the med-term business plan it is still too early to be making judgments, but it is likely the growth rate in the CAPEX market, which had been predicted to be low at this point, is likely to exceed those predictions from here on out.

- Due to the effects of the trade conflict between the USA and China, however, there is a risk of a global slowdown in investment. We are particularly concerned about how things are going in China, but fortunately, based on the results, our fears are yet to materialize.

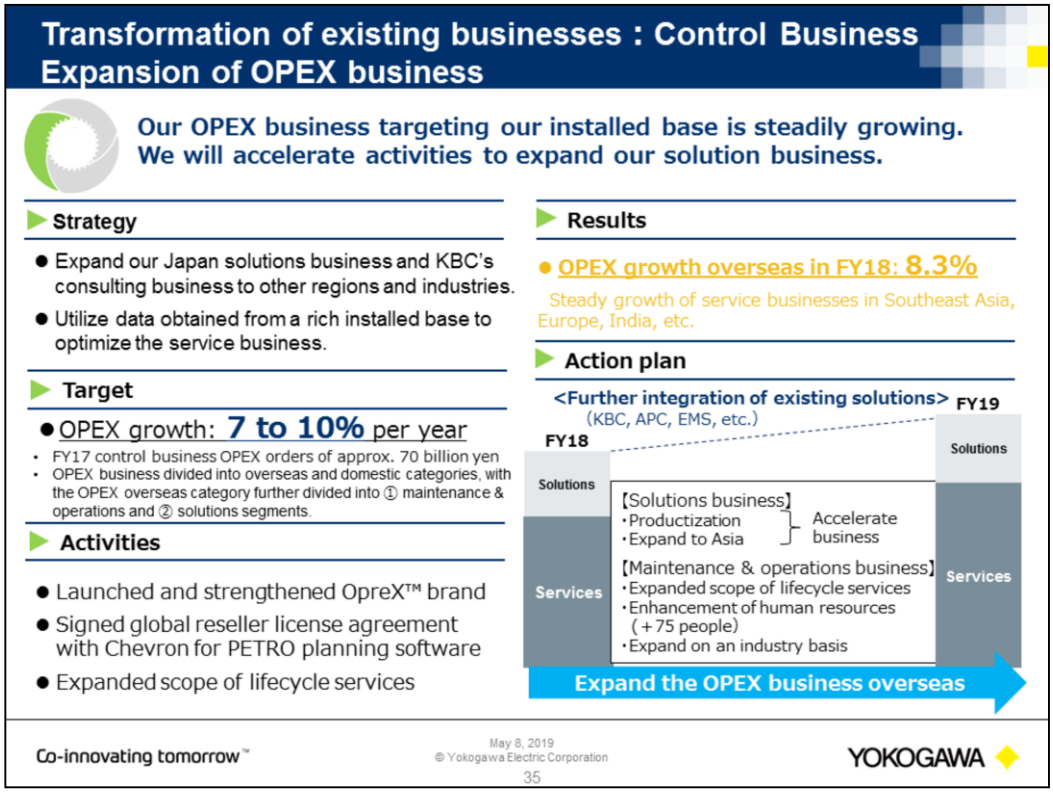
・Explanation of review & action of mid-term business plan "TF2020"

<TF2020 basic strategy>

- The image of basic strategy when they were announced in our mid-term business plan.

- Three strategies are as follows.
  1. Transformation of existing businesses
  2. Creation of new businesses and transformation of business model
  3. Improvement of productivity through Group-wide optimization

・The core foundation supporting these innovations will be digital transformation which will drive the value creation.



<Transformation of existing businesses : Control Business Expansion of OPEX business>

・Explaining expansion of OPEX business for transformation of existing businesses

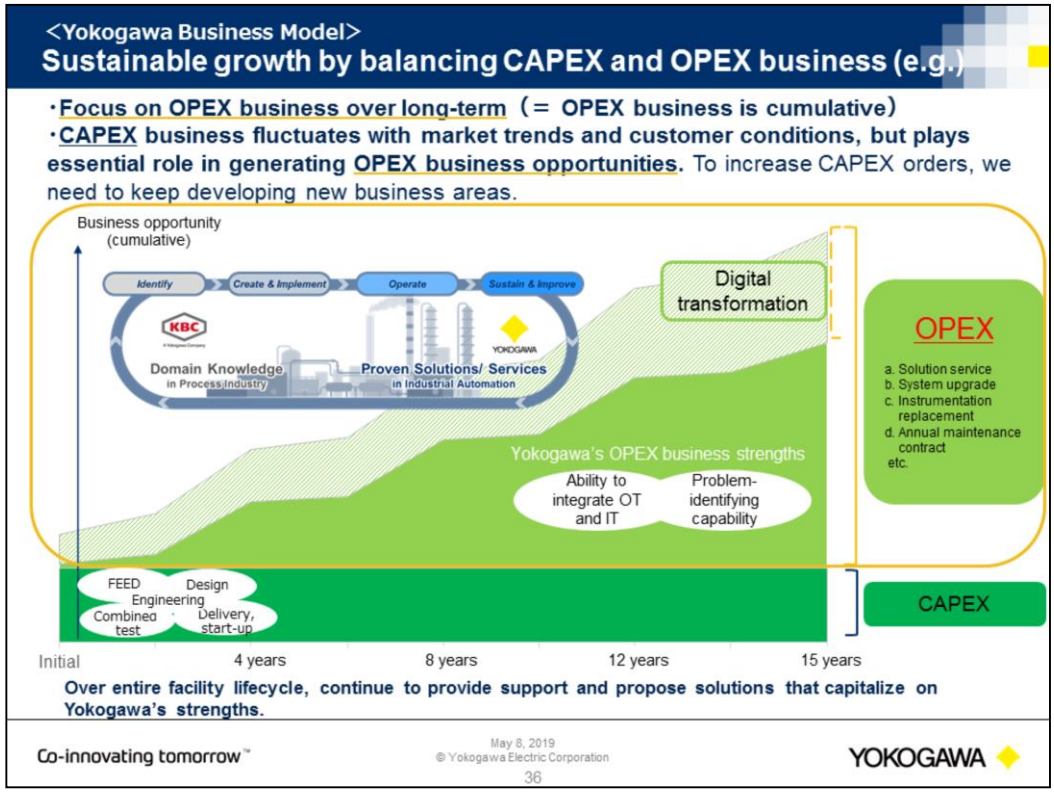
・Our business targeting our installed base is steadily growing

・We have been aiming for 7-10% OPEX orders growth in overseas. This financial year we achieved growth of 8.3% (from a position of 70 billion yen in orders in 2017).

・Steady growth of service businesses such as maintenance & operations in Southeast Asia, Europe, India, etc.

- Our policy is to expand our OPEX business by further integrating the solutions business that KBC holds with the Advanced Process Control (plant optimization), EMS (energy management system), and other solutions that we have already developed.

- Enhancement of human resources "+75 people" in maintenance & operations businesses

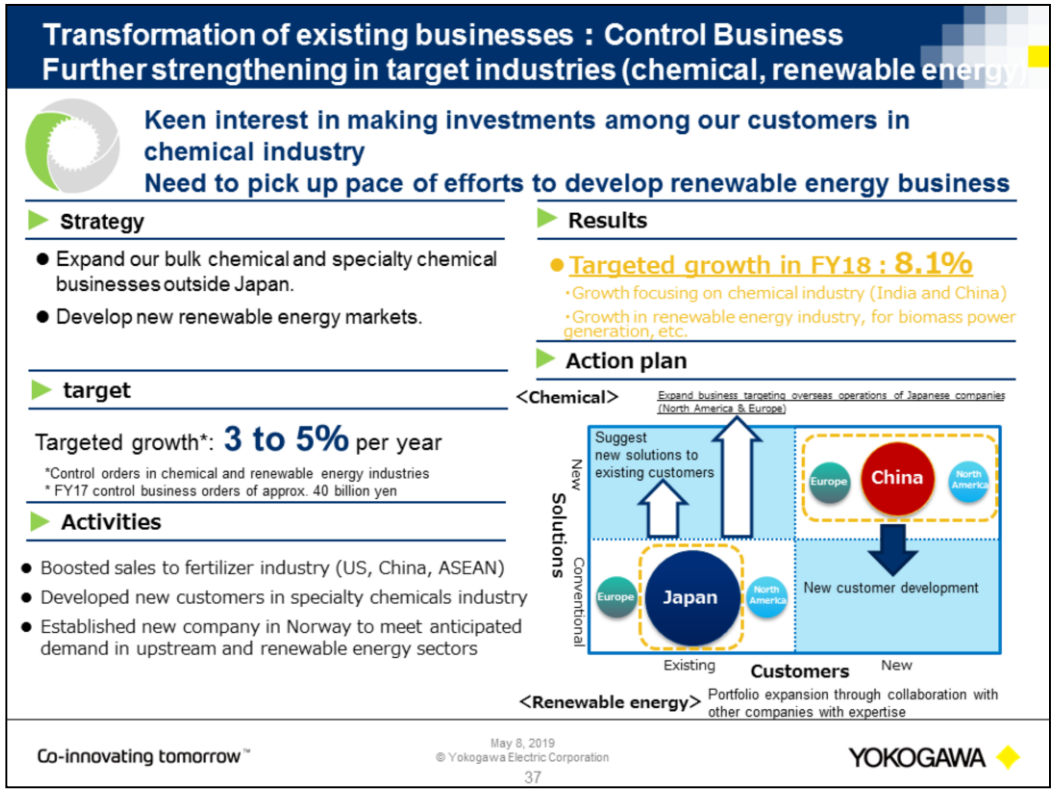


＜YOKOGAWA's Business Model（e.g.）＞

・This slide is the image of our business model. The figure shows sustainable growth by balancing CAPEX and OPEX business.

- YOKOGAWA's scope of operations is not limited just to its OPEX business.
- There is no change in the importance of the OPEX business being on the long-term axis, but it is also important to balance this with the CAPEX business.
- The reason is that while newly CAPEX investments is changed by market trends and customers financial situations, it will become the customers OPEX of the future.
- As a result, it is critical that we have the pioneering spirit to take on new work and challenges, even at the cost of some risk, so that we can ensure **our future sustainability and increased profitability**.

- It is also important to base our business on "trust" as plants are operated on the long-term assumption that they will work for 30-40 years.
- From here on out we will continue to have a business model where the OPEX business is a central axis, based on our relationship of trust with our customers, while we balance the need to grow the CAPEX business as well.



<Further strengthening in target industries "chemical, renewable energy">

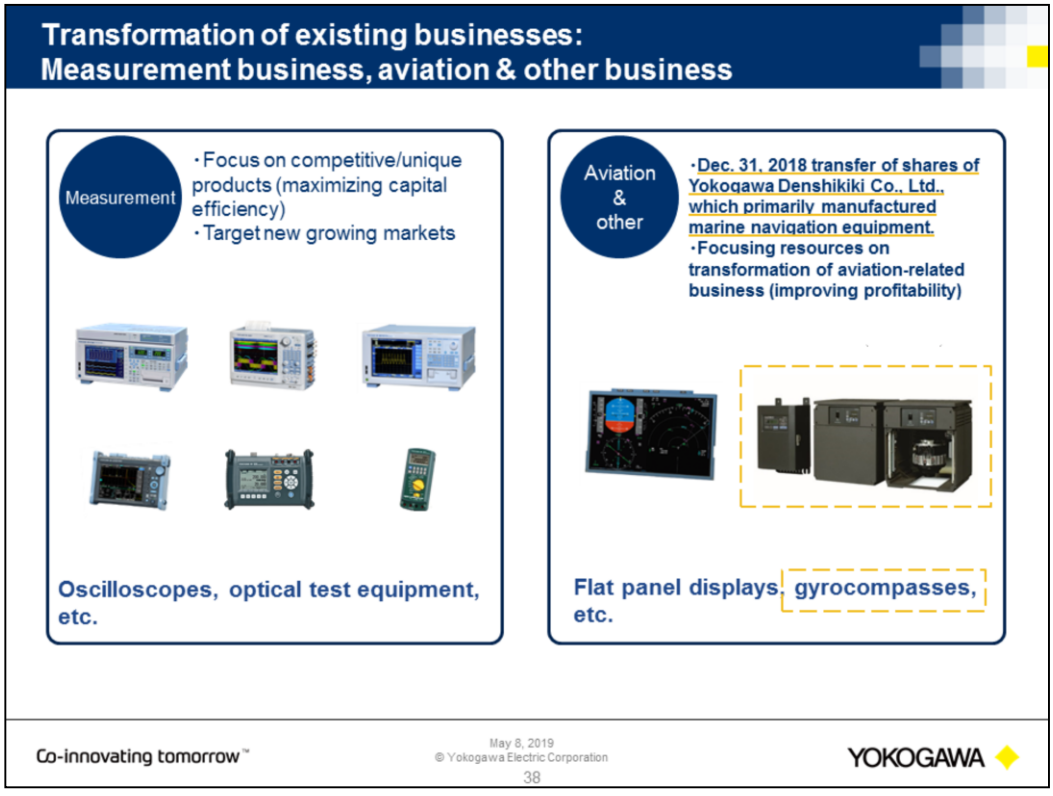
- We explain progress of further strengthening in target industries "chemical, renewable energy" to accelerate transform existing business.

- Speaking mainly in terms of chemicals numbers, in two industries in 2017 we had **overseas orders in approx. 40 billion¥.** With a goal of 3-5% growth year on year, we have made a very solid start this financial year with 8.1% growth.

- We made particular gains in our area of strength in chemicals in India and China.

- We will be putting our efforts going forward into developing new solutions for our existing Japanese customers, while developing new customers in countries like China (see the diagram to the right).

- On the other hand, in terms of our efforts in renewable energy, the scale of our operations remains very small. We are currently working to expand our portfolio of operations by collaborating with other companies that have greater know-how.



- The controls business currently makes up 90% of our overall business, so I will speak briefly about our two other existing areas of operations: measurement, and aviation & other businesses.

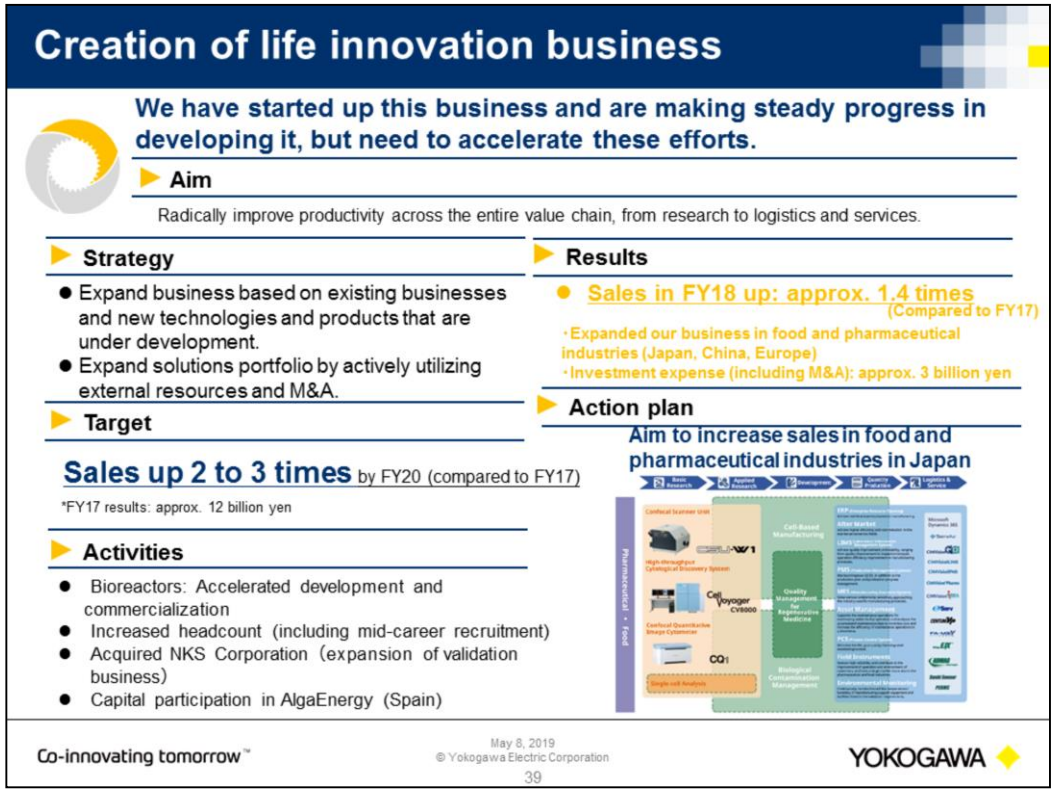
<Measurement>

- We are continuing to focus on developing unique and competitive products, centered on our measurement business.

<Aviation & other>

- Last December we transferred away 100% of our shares of Yokogawa Denshikiki Co., Ltd. which primarily manufactured marine navigation equipment".

- As a result, this segment will halve in scale. From here on, we will be focusing on improving profitability in the aviation business.



<Creation of life innovation business>

・We explain "creation of life innovation business" for "creation of new businesses and transformation of business model"

- I have been in charge of taking this business on for a year now.

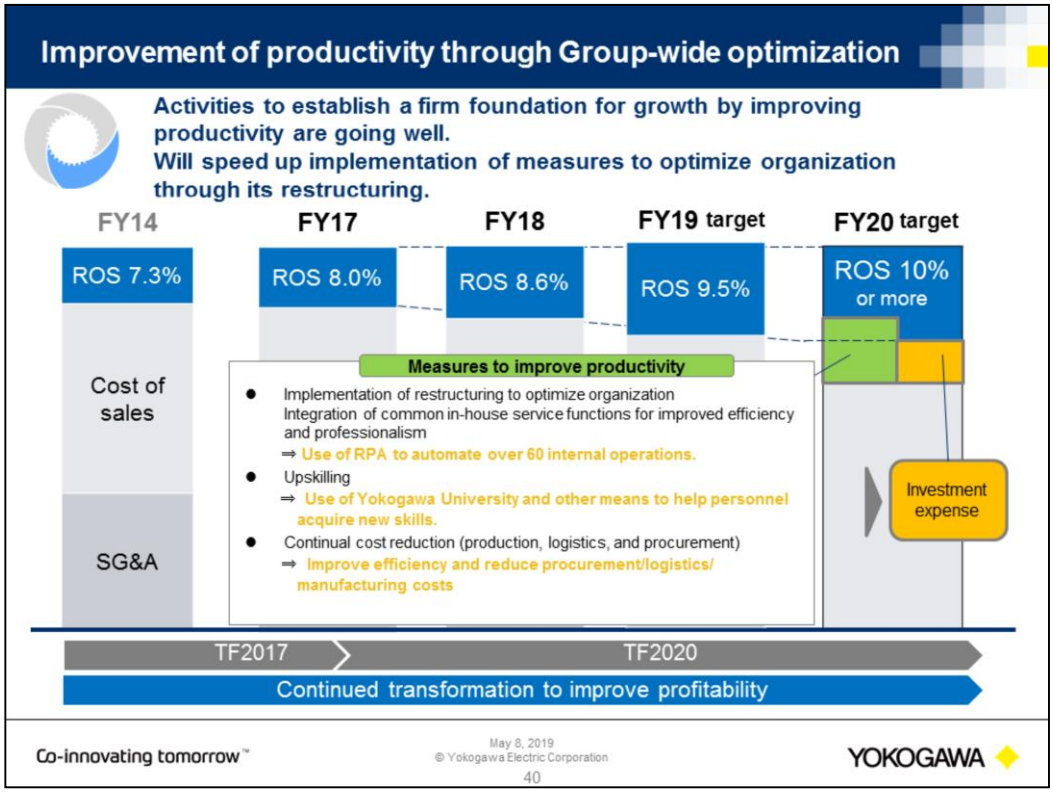
- It has been a hard struggle, but we have now made a strong start towards getting that business established.

- One goal of the mid-term business plan has been to increase the FY17 sales in the food and pharmaceutical sectors from 12 billion¥, to 2-3 times that figure, including through M&A and alliances.

- In the previous year we expanded our resources by making mid-career hires from some of our customers, and by acquiring NKS, which has strengths in the area (this brought the company from a headcount of around 100 to 260).

- The result of this financial year has been that we increased our sales to 1.4 times their previous level. We saw particular growth in Japan, China, and Europe. For example, while this is not the biggest deal in terms of yen amount, we received an order from a Kanazawa-based business focusing on the manufacture of confocal scanners (providing bio-solutions for live cell observation devices and drug discovery), resulting in our highest ever sales revenues.

- Demand for greater "safety" and "efficiency" continues to increase in both the food products and pharmaceuticals industries. Responding to this, we are accelerating our business by continuing to invest in new product development, such as bio-reactors, while making use of our Japanese industrial experience and strong track record.



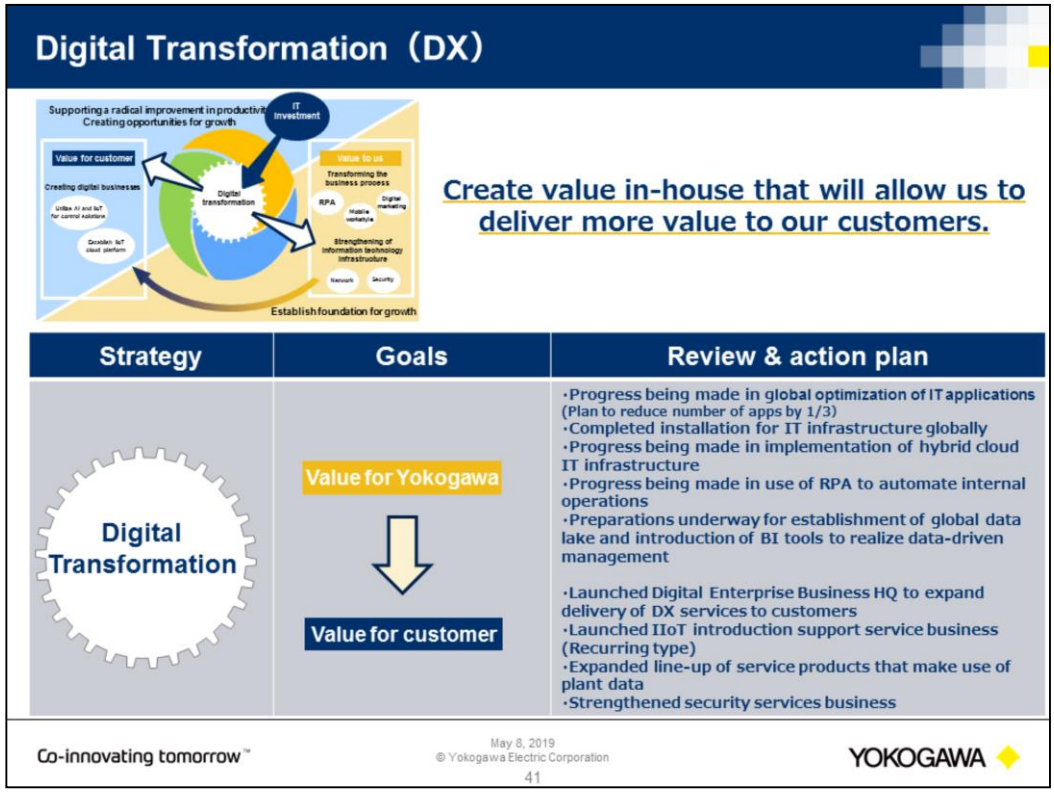
<Improvement of productivity through Group-wide optimization>

- Our policy here is to use the resources we manage to extract by cost-cutting to invest in further growth, so we are proceeding apace both on the “finding savings” and “investing in growth” sides.

- In concrete terms, we are working to increase productivity by automating around 60 processes through proactive use of RPA, in order to optimize our group structure.

- On top of that, we are expanding the use of our Bangalore, India Central Engineering Center (CEC), which has already produced significant results, as well as constantly strengthening our use of digital technologies to further our cost-down endeavors, in order to optimize our cost structure.

- At the same time, we are executing measures to achieve high added value and high efficiency dividends through measures such as investment in new bio and life innovation operations, as well as strengthening our human resources through the provision of internal university programs.



<Digital Transformation (DX)>

- DX is the driving force behind our efforts to achieve three reforms.

- The goal is a fusion of OT & IT, and we established a new organizational structure in April, 2018 and drew blueprint for reform.

- Create value in-house that will allow us to deliver more value to our customers.

- In terms of providing value for Yokogawa, we plan to made in global optimization of "IT" and to reduce number of apps by 2/3.
- In addition, we are optimizing global IT infrastructure and making it uniform across over 100 global firms. Furthermore, we are driving a switch to the cloud.

- In terms of providing value for customer, we will make use of IIoT architecture. Another key initiative is shoring up security services.
The creation of systems that guarantee security in the control domain and provide services around that, as well as increase in projects involving appraisal of clients' current conditions, are on the rise.

- By maintaining a constant level of investment in DX, we will drive changes in our business.

<Yokogawa's future>

- We explain Yokogawa's future including mid to long-term perspective.

TF2020 2nd year targets ～ FY19 forecast ～

◆ **FY19: Achieve record high profits to achieve mid-term business plan. Accelerate and take our transformation to a new stage.**

(Billion¥)

	FY17 (A)	FY18 (B)	FY19 forecast(C)	Difference (C-A)	Growth rate (C÷A-1)
Orders	400.3	432.0	**430.0**	29.7	7.4%
Sales	406.6	403.7	**420.0**	13.4	3.3%
Operating income	32.7	34.6	Record high **40.0**	7.3	22.3%
ROS(%)	8.0	8.6	9.5	+1.5pts	-
Profit attributable to owners of parent	21.4	28.4	**29.0**	7.6	35.6%
EPS(円)	80.27	106.54	**108.64**	28.37	35.3%
ROE(%)	8.1	10.1	**9.7**	+1.6pts	-
Exchange rate (1 U.S. dollar＝)	110.70円	111.07円	**110円**	▲0.7	▲0.6%

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＜TF2020 2nd year targets - FY19 forecast＞

- First of all, I would like to go over our management goals for this period in numerical terms.
- From FY17, we are expecting consecutive increases in profit. In particular we are forecasting record operating profits of 40 billion¥.
- In 2015 we logged operating profits of 39.6 billion¥, when the dollar was worth 120 ¥.
- In other words, YOKOGAWA is moving in the right direction in substantial terms.
- In fact, even on a yen basis, sales in control business are at a record high.
- Our results were realized for approx. ten years in the YOKOGAWA Group due to exiting past unprofitable businesses, optimizing our cost structures, and shifting resources to the control business. To us, this means that this financial year represents an opportunity to shift on a new stage of challenges.

- There are unclear points in the business environment, which means that it is not a simple task to make numerical forecasts for this period. At any rate, in terms of our med to long-term goals, 40 billion yen is a hurdle that as a company we have to clear.

- We aim to achieve our goals for the period with clearing the challenges that lie ahead of us and carrying out the three transformations I have explained so far.

TF2020 management indicators

We are making better than anticipated progress in attaining our mid- to long-term management targets (especially orders). By accelerating our transformation efforts in FY19, we will be sure to achieve the TF2020 targets.

▶ 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

	TF2020 Targets
Orders & sales growth	3 to 5%/year
EPS growth	7 to 9%/year*1
ROS	10% or more
ROE	10% or more
Organic FCF*2	85 billion yen or more (3 years, cumulative)

Exchange rate (1$): 110 yen

*1 Excluding the FY17 impairment of goodwill, credit to allowance for doubtful accounts, and asset sales

*2 Free cash flow (FCF) + strategic investment (3 year cumulative total of 70 billion yen)

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<TF2020 management indicators>

- The management indicators are aimed to achieve in 3 years.
- It would be premature to make judgments about our progress towards these goals on the basis of a single year, but looking at our level of orders and the positive feedback we are getting from our clients, I think it is fair to take this as an overall solid start.

Enhancement of corporate governance
(After the Annual Shareholders Meeting on June 2019)

Year	Action	Directors			Auditors		Officers	
		Inside	Outside	Outside %	Inside	Outside	Japanese	Foreigner
2003	Introduced outside directors	7	1	13%	2	2	24	0
2004	Abolished retirement bonuses for directors	7	1	13%	2	3	24	0
2005		7	1	13%	2	3	26	0
2006	Introduced one year tenure system for directors and revised articles of incorporation to reduce number of directors (25⇒15)	9	1	10%	2	3	27	0
2007	Increased number of outside directors Introduced takeover defense measures	8	2	20%	2	3	29	0
2008		7	2	22%	2	3	30	0
2009	Increased number of outside directors Renewed takeover defense measures	7	3	30%	2	3	15	0
2010		5	3	38%	2	3	13	1
2011	Renewed takeover defense measures Sold shares of a listed affiliate	4	3	43%	2	3	14	1
2012		4	3	43%	2	3	11	1
2013		4	3	43%	2	3	13	0
2014	Established Nomination and Compensation Committee (voluntary advisory body) Discontinuation (non-renewal) of takeover defense measures Introduced standards to ensure independence of outside directors	6	3	33%	2	3	13	0
2015	Established Nomination Advisory Committee and Compensation Advisory Committee (voluntary advisory bodies) Conducted outside evaluation of Board of Directors Established Yokogawa Corporate Governance Guidelines	6	3	33%	2	3	11	0
2016	Increased number of outside directors Introduced a Restricted Stock Compensation Plan	6	4	40%	2	2	12	0
2017	Appointed a woman as an outside member of the Audit & Supervisory Board Appointed 2 foreign nationals as officers	6	4	40%	2	3	15	2
2018	Abolished the Senior Advisor, Advisor, and Honorary Corporate Associate Positions Appointed an outside director as chairman of the Board Introduced new performance-linked stock compensation plan (PSU plan)	5	4	44%	2	3	14	3
2019	**Selected foreign national as director for the first time Outside director to be nominated for position of chairman of Board of Directors**	**4**	**4**	**50%**	**2**	**3**	**15**	**3**

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<Enhancement of corporate governance>

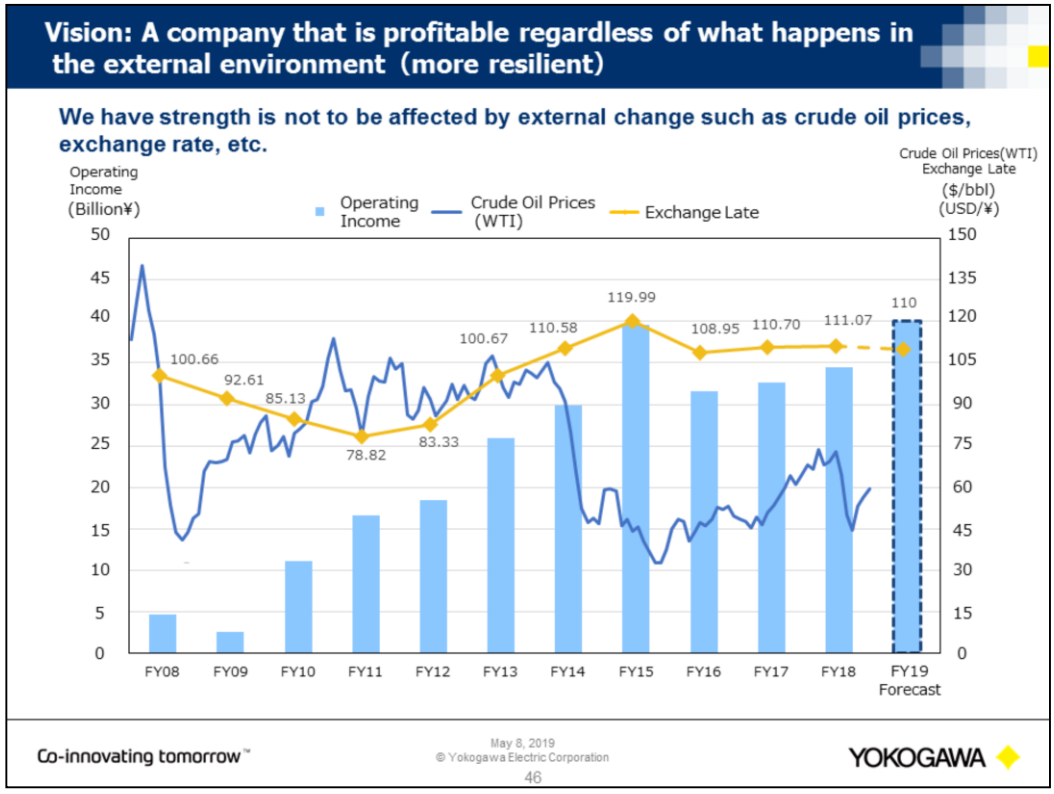
- Corporate governance is crucial to our efforts to achieve sustainable growth, and increase our company's value. We have continued to work to strengthen ourselves in this area.

The red line of the slide indicates the contents which assume the agreement at the annual shareholders meeting of this year.

- The points are:

1. Selected foreign nationality as director for the first time;
2. Outside director to be nominated for position of chairman of Board of Directors.

- We intend to continue our efforts to strengthen our corporate governance and diversity, with three foreign executives being part of our executive structure, as in the previous year.



＜Vision＞ Resilience Management

- This is the mid to long-term vision that we are aiming for.

- This slide shows the trends over the last ten years in the price of oil, the USD-JPY exchange rate, and our company's operating profits.

- As outlined in our mid-term business plan, the stance we are aiming for is one of developing a profit structure that is resilient to the external business environment.

- This is what is sometimes called "resilience management." In other words, we aim to be a strong company that can continue to overcome challenges regardless of the changes occurring around us, that ensures we have a resilient profit structure, and achieves record high results.

<Direction>

- The first vantage point concerns a medium- to long-term approach to management.

  The key here is committing to our stakeholders, among them customers, over the course of what is a comparatively longer business cycle.

- The second is making new and better attempts in terms of growth and efficiency. Growth would imply, for instance, not just organic growth, but considering actively employing M&A operations, etc.. In terms of efficiency, the big key is digital transformation. As a result, we are aiming to maximize our corporate value.

- To that end, for the three-year TF2020 period, we are creating growth opportunities and building a basis for future growth, while contributing to the realization of a sustainable society.

- We ask for the continued support of our investors and shareholders.

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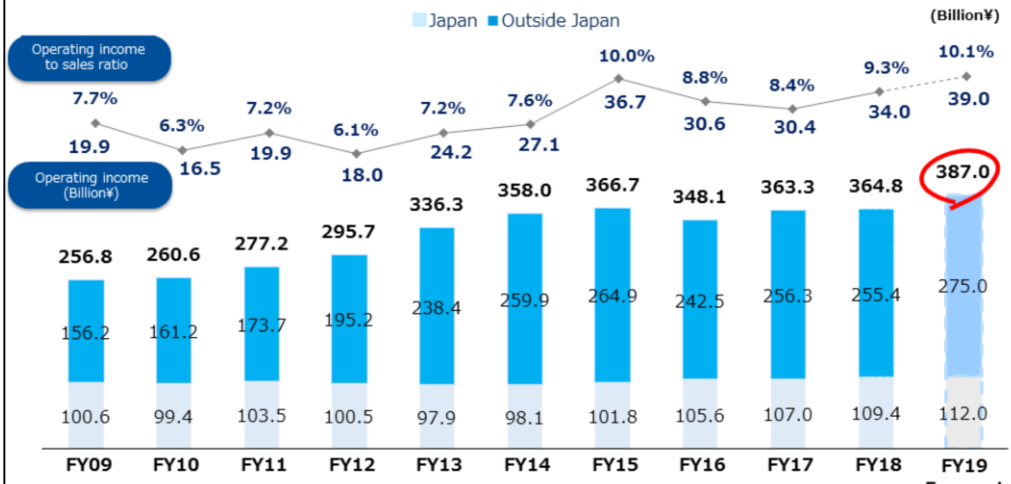
Appendix: Trend of Global Sales in Control Segment

Record high sales are expected in the control segment



<Exchange rate>

US$ (¥)	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19 Forecast
	92.61	85.13	78.82	83.33	100.67	110.58	119.99	108.95	110.70	111.07	110.00

Appendix: News（from February 6 to May 8)

Feb.

Yokogawa recognized for excellent health and productivity management

Yokogawa Test & Measurement releases AQ1210 optical time domain reflectometer

2019 健康経営優良法人 Health and productivity ホワイト500

Mar.

Yokogawa supports recommendations of the Task Force on Climate-related Financial Disclosures

Yokogawa establishes Yokogawa Norge, a subsidiary in Norway, to engage in the sale of control products and provision of related services

Nomination of candidates for director
- Dai Yu (first-ever non-Japanese nominee)

Apr.

Acceleration of development of iFactory, a compact device that can be used together with other modular manufacturing equipment in continuous manufacturing operations
- The realization of flexible, on-demand manufacturing of pharmaceutical products

Yokogawa releases FAST/TOOLS R10.04 real-time operations management and visualization software

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

Appendix: Yokogawa's Main ESG Indexes

As of March 2019

DJSI-Asia Pacific
FTSE4Good Index Series
MSCI ESG Leaders Indexes
FTSE Blossom Japan Index
MSCI Japan ESG Select Leaders Index
MSCI Japan Empowering Women Index
SNAM Sustainability Index
CDP
S&P/JPX Carbon Efficient Index
Global 100 Most Sustainable Corporations in the World Index

MEMBER OF
Dow Jones Sustainability Indices
In Collaboration with RobecoSAM

FTSE4Good

FTSE Blossom Japan

MSCI — 2018 Constituent MSCI ESG Leaders Indexes

MSCI — 2018 Constituent MSCI Japan Empowering Women Index (WIN)

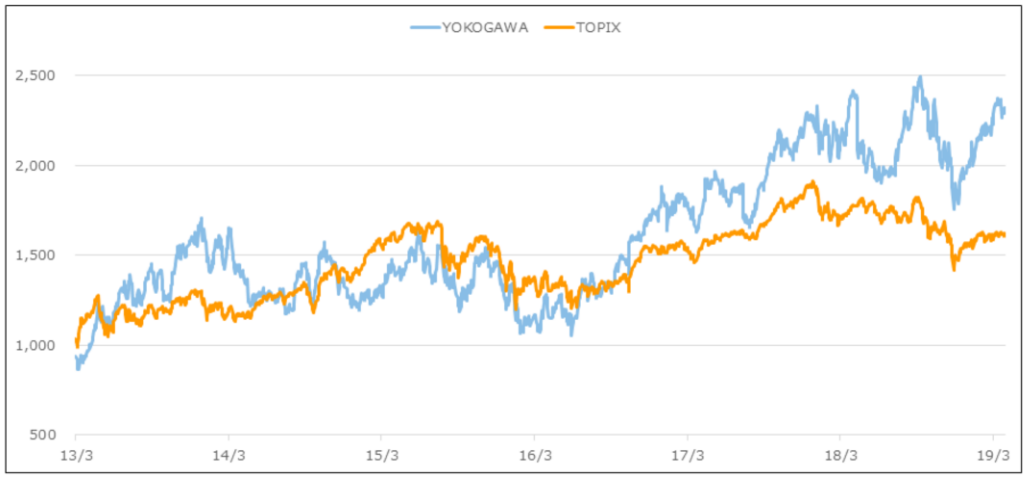
MSCI — 2018 Constituent MSCI Japan ESG Select Leaders Index

Member of SNAM Sustainability Index 2018

CDP DISCLOSURE INSIGHT ACTION

S&P/JPX Carbon Efficient Index

Appendix: Trend of Stock Price



(¥)

	13/3	14/3	15/3	16/3	17/3	18/3	19/3	19/4/26
Yokogawa	946	1,667	1,295	1,163	1,752	2,198	2,291	2,318
TOPIX	1,035	1,203	1,543	1,347	1,512	1,716	1,592	1,618

Disclaimer

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.

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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