

Presentation of Results  
Half Year, FYE June 30, 2018

February 22, 2018

Nippon Koei Co., Ltd.  
Representative Director and President  
Ryuichi Arimoto

I: Accounting Report  
(July 2017 - Dec 2017, FYE18/6 1H)

# Management Policy and the Market Environment

## Management policy for FYE18/6

Entering into the final phase of the Medium-Term Management Plan (“NK-AIM”), we aim to achieve record net sales and operating income under our fundamental principles of “Sustainable growth of three core businesses,” “Generation and expansion of new businesses,” and “Autonomy and collaboration,” thus paving the way for the next medium-term management plan.

## Market environment

- Public works expenditures in Japan remain steady at approximately 7 trillion yen (6 trillion yen original plus 1 trillion yen supplementary). They are allocated on a prioritized basis to infrastructure development aimed to raise productivity and to disaster prevention/mitigation measures.
- Regarding the International Consulting segment, Japan’s official development aid (ODA) project budget was expanded to 2 trillion yen under the government slogan of “Export of high-quality infrastructure.” There is a strong need in the transportation sector for roads and railroads, making it the largest recipient category of official development assistance loans from Japan.
- The Power Engineering segment is faced with continuously stronger price competition and cost reduction requests, as evidenced by the growth of competitive ordering. However, this segment will likely enjoy steady demand for renovations and renewals for the next two to three years, for activities aimed at the stable supply of electric power. Power system reform and other efforts will diversify electric power, bringing about more market participation opportunities.
- Urban & Spatial Development segment is seeing rising demand for urban development in emerging countries mainly those in Asia.

# 2Q Results for FYE June 30, 2018

## Net sales grew and losses narrowed, driven by International Consulting despite segment gaps.

- Orders received decreased year on year due to orders for large projects received in the previous fiscal year, and would have been flat year on year without these orders.
- Net sales grew and operating loss narrowed as the International and Domestic Consulting sectors performed solidly.
- Losses would have widened the FYE18/6 1H results had been calculated using the former method, although net sales would have been flat year on year.

(Millions of yen)	FYE17/6 2Q Results	FYE18/6 2Q Results	YoY Change		Reference Values FYE18/6 2Q *	YoY Change	
			Amount	%		Amount	%
Orders	58,451	47,832	△10,618	81.8%	-	-	-
Net Sales	26,304	31,233	4,928	118.7%	25,708	△596	97.7%
Gross profit	8,368	9,523	1,155	113.8%	8,024	△344	95.9%
Operating Income	△2,747	△2,597	149	-	△4,097	△1,349	-
Ordinary income	△2,286	△2,344	△57	-	△3,843	△1,556	-
Profit attributable to owners of parent	△1,800	△1,312	488	-	△2,811	△1,010	-

\* Starting FYE June 30, 2018, the Group has changed the primary method of revenue recognition from the completed-contract method to the percentage of completion method. For this reason, the results for the 2nd quarter of FYE June 2018, which were calculated using the former method (method used until FYE June 2017), are presented for reference purposes.

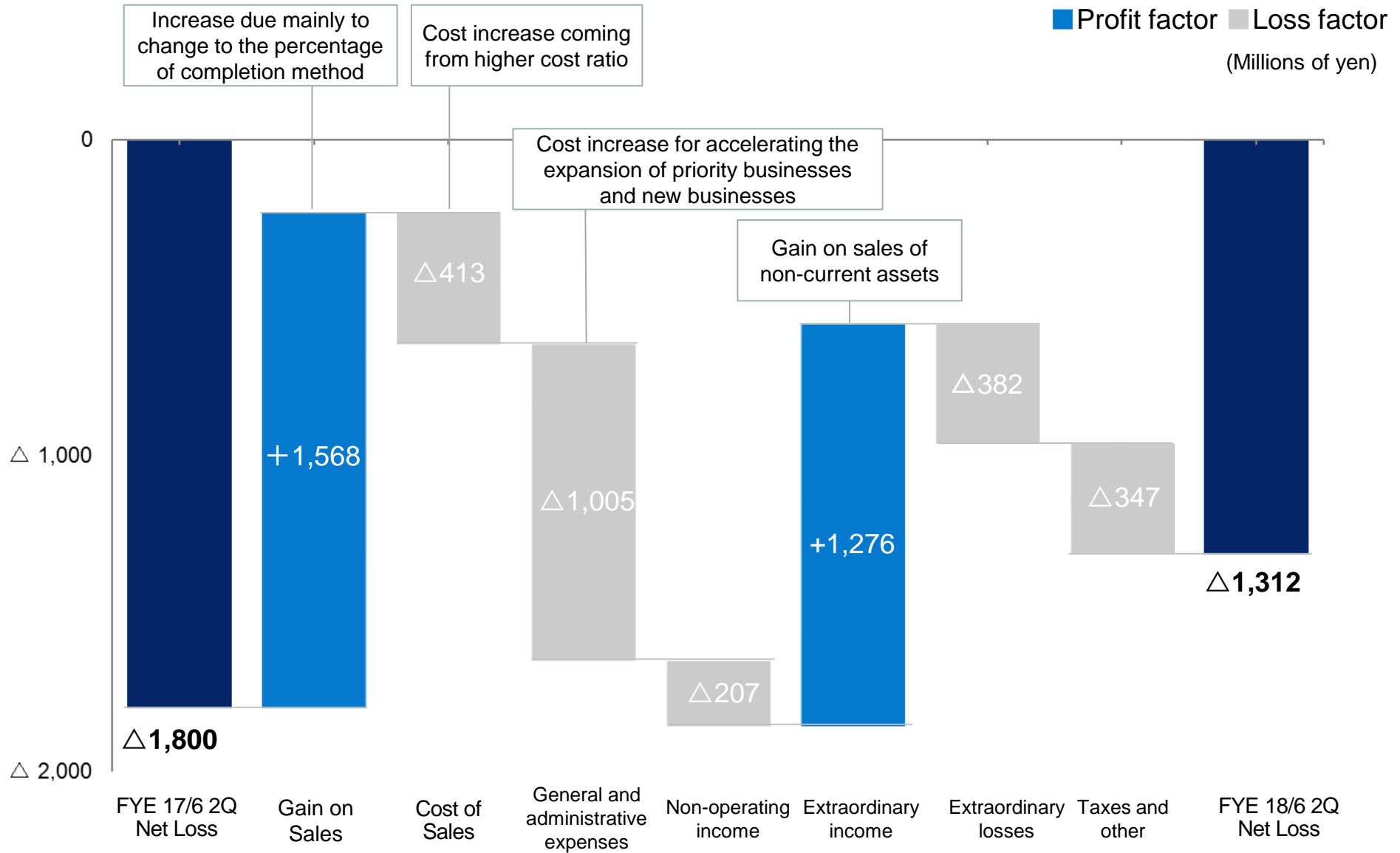
# Consolidated Profit and Loss Summary (FYE 18/6 1H)

Selling, general and administrative expenses increased due to growth investments. SG&A ratio improved.

(Millions of yen)	FYE17/6 2Q Results		FYE18/6 2Q Results		YoY Change		Reference Values FYE18/6 2Q *	YoY Change	
	Amount	Ratio	Amount	Ratio	Amount	%		Amount	%
Orders	58,451	Ratio (vs. sales)	47,832	Ratio (vs. sales)	△10,618	81.8%	-	-	-
Net sales	26,304	100.0%	31,233	100.0%	4,928	118.7%	25,708	△596	97.7%
Cost of sales	17,936	68.2%	21,709	69.5%	3,773	121.0%	17,683	△252	98.6%
Gross profit	8,368	31.8%	9,523	30.5%	1,155	113.8%	8,024	△344	95.9%
SG&A	11,116	42.3%	12,121	38.8%	1,005	109.0%	12,121	1,005	109.0%
Operating income	△2,747	△10.4%	△2,597	△8.3%	149	-	△4,097	△1,349	-
Non-operating income / expenses	460	1.8%	253	0.8%	△207	55.1%	253	△207	55.1%
Ordinary income	△2,286	△8.7%	△2,344	△7.5%	△57	-	△3,843	△1,556	-
Extraordinary income/loss	△105	△0.4%	787	2.5%	893	-	787	893	-
Profit attributable to owners of parent	△1,800	△6.8%	△1,312	△4.2%	488	-	△2,811	△1,010	-

\* Starting FYE June 30, 2018, the Group has changed the primary method of revenue recognition from the completed-contract method to the percentage of completion method. For this reason, the results for the 2<sup>nd</sup> quarter of FYE June 2018, which were calculated using the former method (method used until FYE June 2017), are presented for reference purposes.

# Profit/Loss Analysis



# Balance sheet

- Current assets increased due to the percentage of completion method, and property, plant and equipment decreased due to sales of non-current assets.
- Investments and other assets increased due to investment securities and retirement benefit plan-related assets.
- Current liabilities decreased due to lower notes and accounts payable – trade and advances received, although short-term loans payable increased.
- Net assets increased due to higher retained earnings and foreign currency translation adjustments.

(Millions of yen)	FYE17/6 2Q Results	FYE18/6 2Q Results	YoY
Assets	113,878	120,264	6,385
Current assets	58,400	60,871	2,470
Property, plant and equipment	24,609	23,238	△1,371
Intangible assets	13,205	14,006	800
Investments and other assets	17,663	22,148	4,485
Liabilities	67,091	66,459	△632
Current liabilities	38,986	38,490	△496
Non-current liabilities	28,105	27,969	△136
Net assets	46,786	53,804	7,018

# Cash Flows

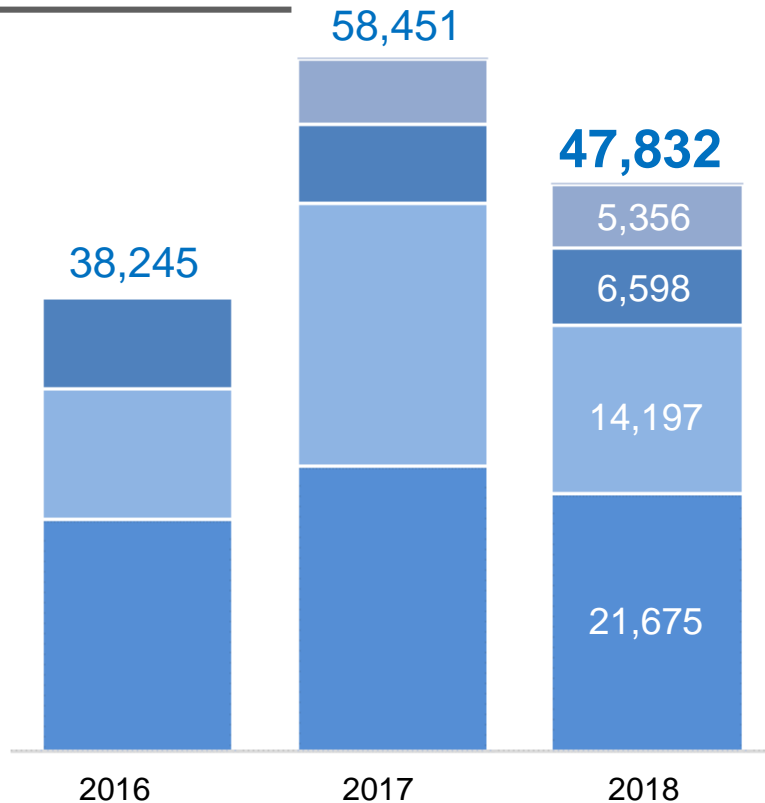
- For net cash provided by (used in) operating activities, advances received decreased.
- For net cash provided by (used in) investing activities, mainly sales of property, plant and equipment.
- For net cash provided by (used in) financing activities, loans payable decreased.

(Millions of yen)	FYE 17/6 2Q Results	FYE 18/6 2Q Results	YoY
Net cash provided by (used in) operating activities	△7,337	△15,319	△7,981
Net cash provided by (used in) investing activities	△2,078	2,504	4,582
Net cash provided by (used in) financing activities	10,758	6,833	△3,925
Net increase (decrease) in cash and cash equivalents	933	△5,848	△6,782
Cash and cash equivalents at the end of period	10,334	11,234	900



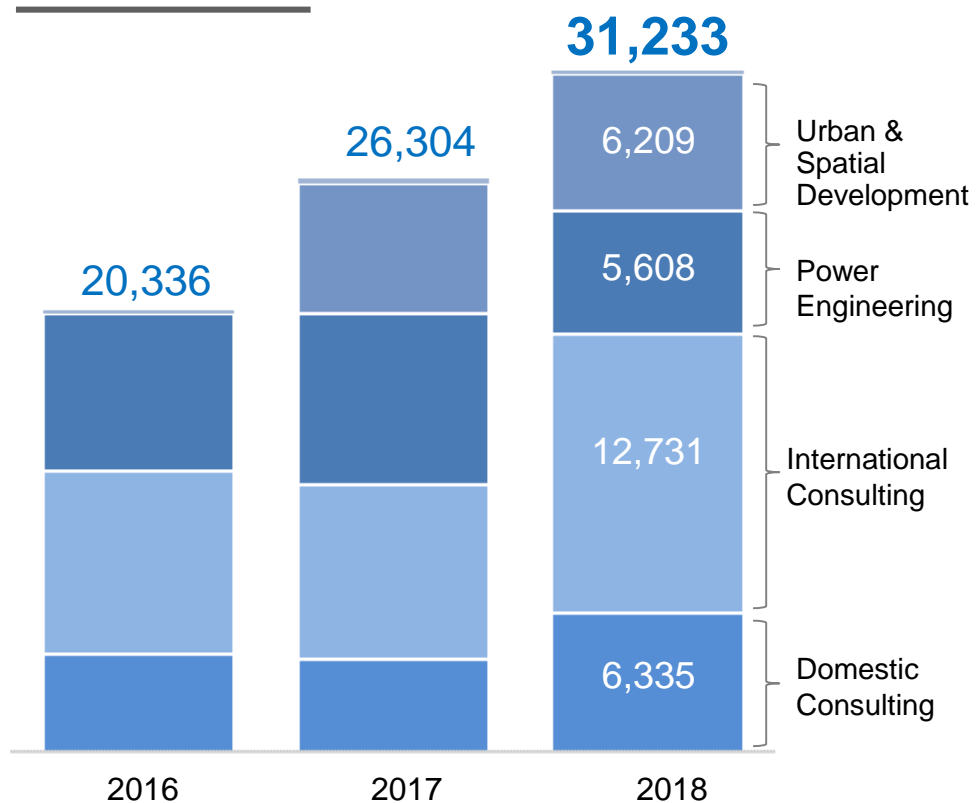
# Results by Business Segment (Orders/Net Sales)

## 2Q Orders



## 2Q Net Sales

(Millions of yen)



- ▶ For FYE17/6, the Company recorded orders for large projects received (Cairo subway/domestic projects 2.0 billion yen and overseas projects 8.0 billion yen)
- ▶ Steady progress compared to FYE16/6, rising by 25.0%

- ▶ Domestic and International Consulting Operations fared strongly
- ▶ As of 2Q, many orders were recorded on the former method basis

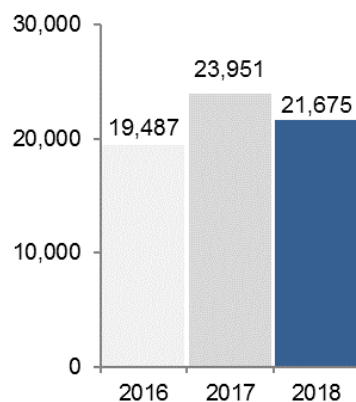
■ Domestic Consulting  
 ■ International Consulting  
 ■ Power Engineering  
■ Urban & Spatial Development  
 ■ Real Estate Leasing  
 ■ Others

# Domestic Consulting

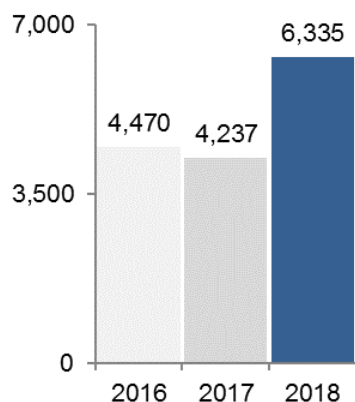
- Orders received were in line with the plan, but decreased year on year due to orders received for the previous fiscal year by Nippon Koei Group companies for large projects as well as to declining orders for earthquake-related projects.
- Net sales increased as work completions grew due to rising national government-related and private-sector orders received by Nippon Koei on a non-consolidated basis.
- Operating income was flat year on year on the former method basis due to higher net sales despite the increase in rent.

(Millions of yen)	FYE17/6 2Q Results		FYE18/6 2Q Results		YoY Change		Reference Values FYE18/6 2Q *	YoY Change	
	Amount	Ratio (vs. sales)	Amount	Ratio (vs. sales)	Amount	%		Amount	%
Orders	23,951		21,675		△2,276	90.5%	-	-	-
Net sales (*)	4,237	100.0%	6,335	100.0%	2,097	149.5%	4,635	397	109.4%
Cost of sales	3,733	88.1%	5,343	84.4%	1,610	143.1%	4,037	304	108.2%
Gross profit	504	11.9%	991	15.6%	487	196.6%	597	93	118.5%
SG & A	3,986	94.1%	4,163	65.7%	177	104.4%	4,163	177	104.4%
Operating income	△3,482	△82.2%	△3,172	△50.1%	309	-	△3,566	△84	-

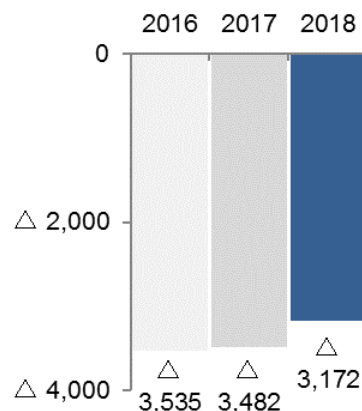
■ 2Q Orders



■ 2Q Net sales



■ 2Q Operating income



\* Reference values determined by calculating the results for FYE18/6 2Q using the former method

## Progress of business strategy

- ✓ On a non-consolidated basis, Nippon Koei steadily secured orders received due to higher orders received from national government-related, private-sector and west Japan area customers
- ✓ Orders received through engineering proposal-based competitive tenders increased significantly (proposal specification rate rose by 5 percentage points)
- ✓ Strong performance was shown by priority businesses such as dam rehabilitation, maintenance-management and traffic safety measures

# Project Case Study / Domestic Consulting

## Autonomous driving demonstration experiment

Michi-no Eki Hitachi Ota autonomous driving demonstration experiment

Experiment area: Hitachiota-shi, Ibaraki Prefecture, Japan

A demonstration experiment using Michi-no Eki as its base. Nippon Koei received orders for three sites out of 18 sites nationwide.

The Company formulated plans for the demonstration experiment while conducting the examination and analysis toward implementation.

Survey of expressway autonomous driving running performance

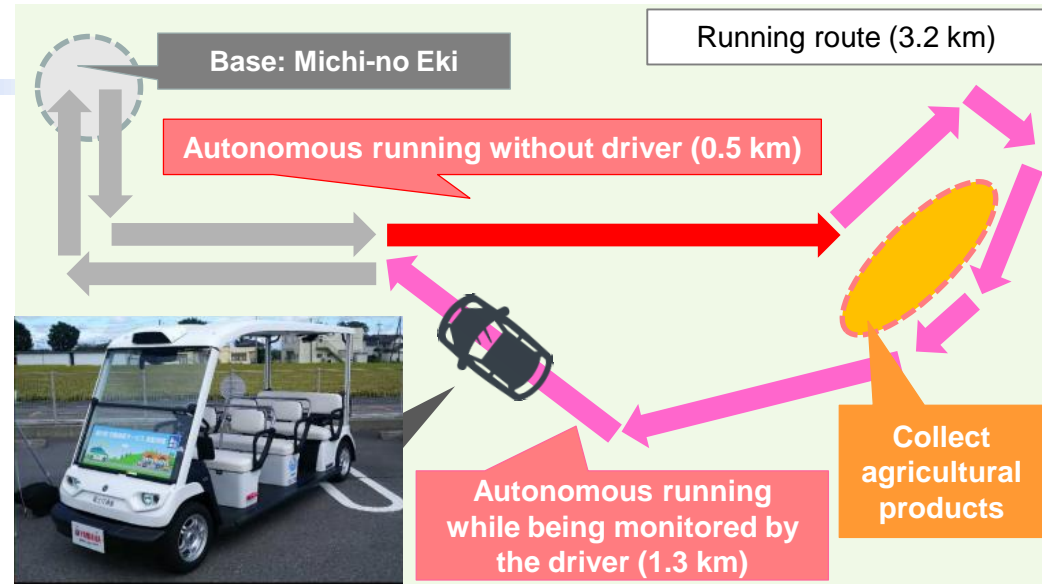
Experiment area: Shin-Tomei Expressway Hamamatsu Hamakita interchange (IC)

A demonstration experiment on truck convoy driving that utilizes a system designed to keep vehicle-to-vehicle distance fixed.

The Company conducted an examination and analysis intended to ascertain the movements of convoy trucks and ordinary vehicles.

Pedestrian-accident reduction demonstration experiment

With the aim of preventing cognition errors, the Company reviewed the effectiveness of a pedestrian communication device equipped with pedestrian-vehicle communication technology and location measurement technology.



Video examination screen image



Key point

Tapping into consulting skills and knowledge fostered to date for traffic system technologies and community building.

# Project Case Study / Domestic Consulting

Developed an embankment maintenance-control system

Through a joint study with JAXA, Nippon Koei developed a system which maintains and controls embankments efficiently through utilizing satellite data to simultaneously screen hazardous embankment spots, a task currently performed by visual observation.

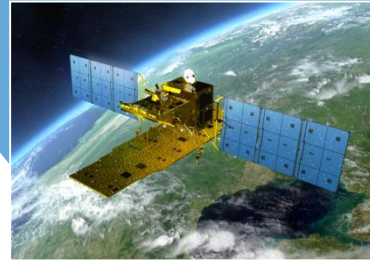
## Key point

Contributing to labor-saving efforts for the inspection and survey of the embankments of Japan's rivers which run over 120,000 km in total.

## SAR satellite automatic analysis tool

### Earth observation satellite ALOS-2

Detect an embankment deformation in a wide area by using information measured by a satellite



JAXA

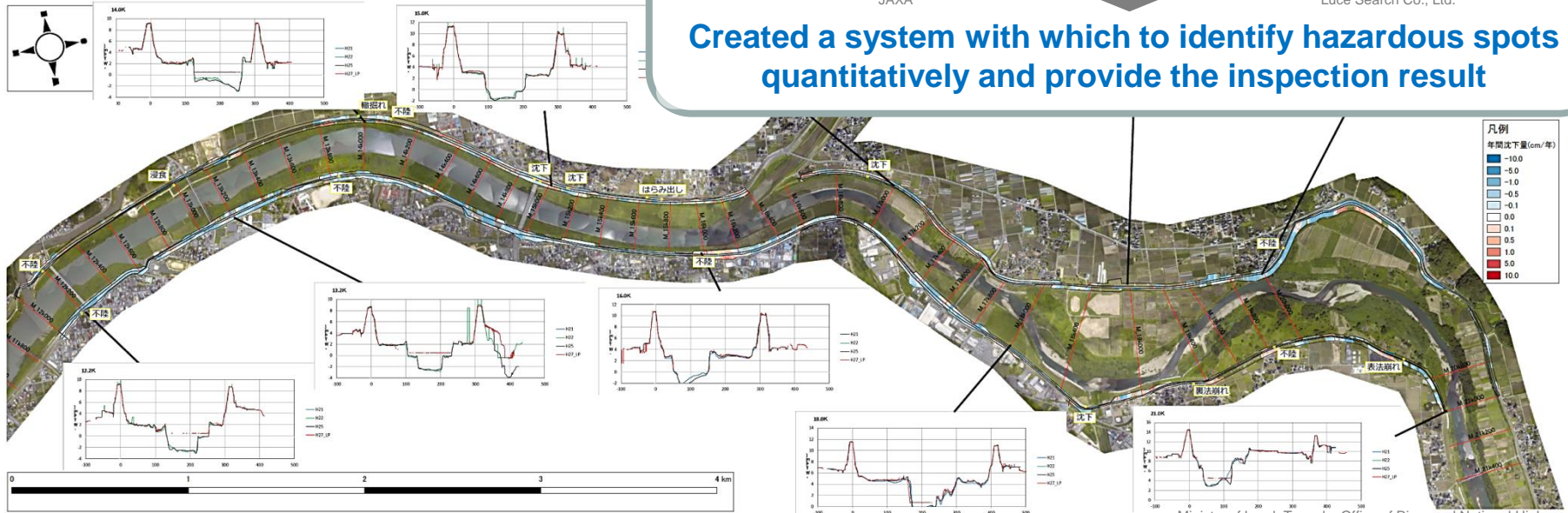
### Unmanned aerial vehicle UAV

Use UAV to take photographs of viewable images and measure the terrain concerning hazardous spots identified



Luce Search Co., Ltd.

Created a system with which to identify hazardous spots quantitatively and provide the inspection result



Ministry of Land, Toyooka Office of River and National Highway

# International Consulting

- Orders received were strong mainly in the transportation and water supply and sewage sectors while decreasing year on year due to orders for large projects recorded during the previous fiscal year.
- Net sales increased year on year even on the former method basis as large projects in South Asia progressed steadily.
- Operating income increased year on year even on the former method basis as the Company continued efforts to bolster its earnings structure through rigorous cost control and enhanced project risk control.

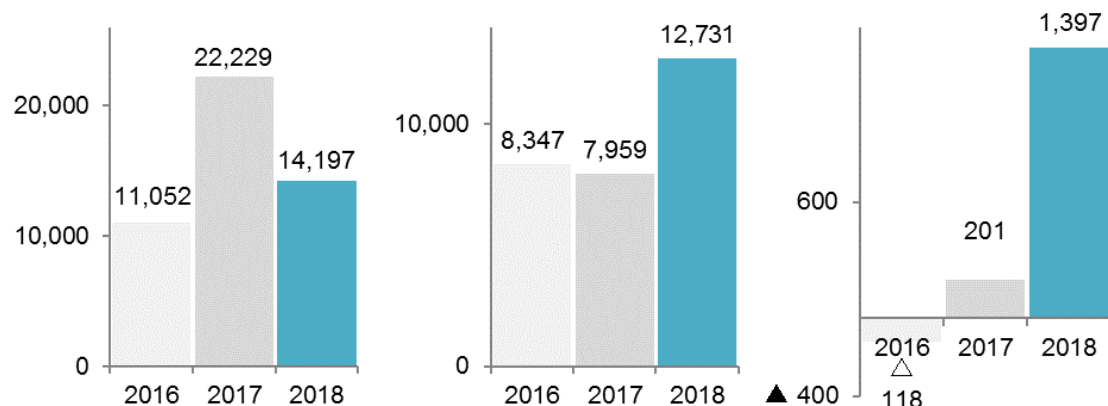
(Millions of yen)	FYE17/6 2Q Results		FYE18/6 2Q Results		YoY Change		Reference Values FYE18/6 2Q *	YoY Change	
	Amount	Ratio (vs. sales)	Amount	Ratio (vs. sales)	Amount	%		Amount	%
Orders	22,229		14,197		△8,032	63.9%	-	-	-
Net sales (*)	7,959	100.0%	12,731	100.0%	4,771	159.9%	9,309	1,350	117.0%
Cost of sales	5,749	72.2%	8,986	70.6%	3,237	156.3%	6,577	828	114.4%
Gross profit	2,210	27.8%	3,745	29.4%	1,534	169.4%	2,732	521	123.6%
SG & A	2,009	25.2%	2,347	18.4%	337	116.8%	2,347	337	116.8%
Operating income	201	2.5%	1,397	11.0%	1,196	694.8%	384	183	191.3%

■ 2Q Orders

■ 2Q Net sales

■ 2Q Operating income

\* Reference values determined by calculating the results for FYE18/6 2Q using the former method



## Progress of business strategy

- ✓ Net sales by Nippon Koei Group companies grew to account for slightly over 40% of the segment due to their steady growth and enhanced collaboration
- ✓ Foster group company employees through the Regional Engineer Program
- ✓ Make thorough efforts to review risks when tendering and manage risks during project implementation

# Project Case Study / International Consulting

## Bago Bridge Construction Project

Location: Myanmar

Contract work term: From 2017 to 2022

Contract value: Approximately 660 million yen

Service description: Creation of tender documents, tender assistance and work supervision

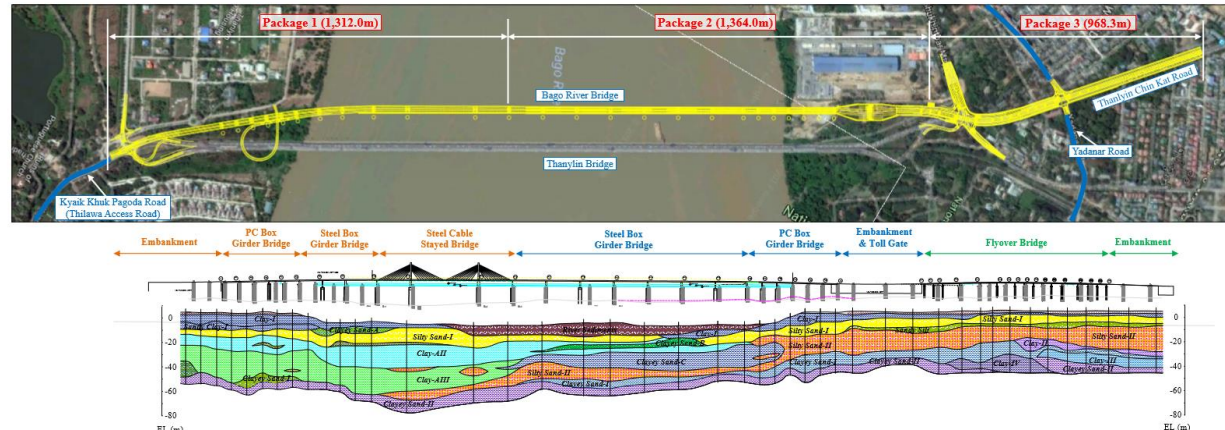
Scheme: Yen loan

Construct a 3.57 km-long bridge over Bago River connecting Yangon City to the Thilawa Special Economic Zone. Create and bolster smooth traffic and logistic networks, contributing to the sustainable development and growth of the Yangon area.



### Key point

The Nippon Koei Group has been building on its achievements in the transport segment in Myanmar. Through this project, we will solidify our presence in the country, paving the way for winning ODA-related orders in the country's transport segment, an order category that will likely grow further in the future.



# Project Case Study / International Consulting

## Mamelles Seawater Desalination Project

Location: Senegal

Contract work term: From 2017 to 2023

Contract value: Approximately 1,300 million yen

Service description: Design and work supervision

Scheme: Yen loan

Nippon Koei will construct a seawater desalination plant with a production capacity of 50,000 cubic meters per day in Dakar, the capital of Senegal, as the nation's first-ever facility of this kind. This project will help enhance the water supply network in the city, diversify local water sources, and bolster the water supply capacity, thus contributing to improving the living environment there.

### Key point

A seawater desalination project is a segment for which the provision of ODA will likely grow in the future as an area for which Japanese technologies can be properly utilized. We would like to use the results of this project for paving the way for winning orders for seawater desalination projects in other countries.

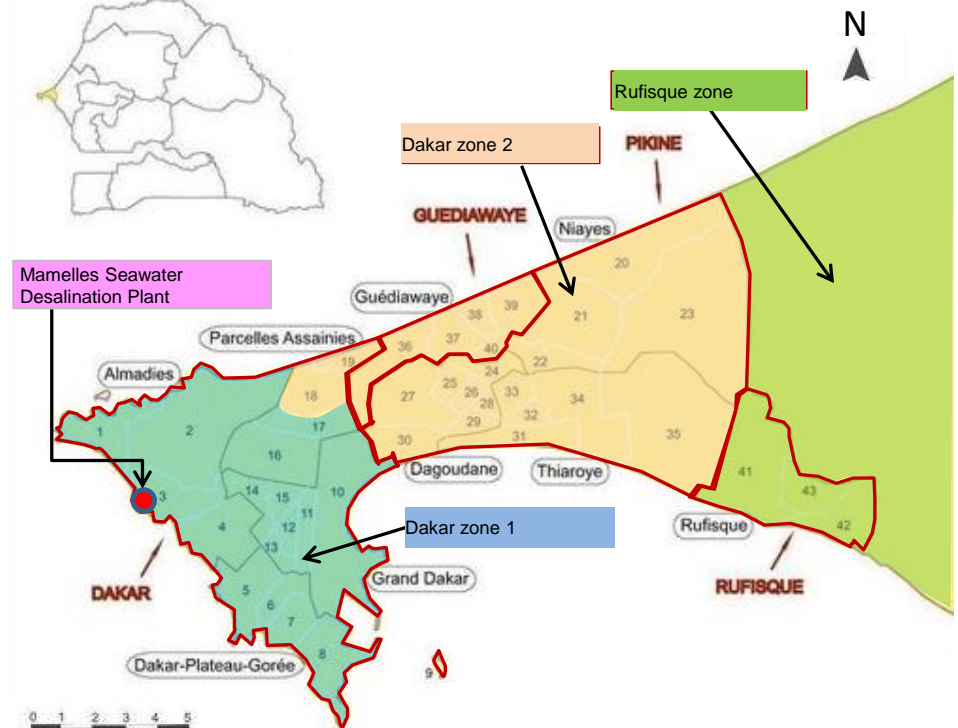
This project aims to reduce water waste (leaked water from pipes and water stolen due to illegitimate use), so we also expect to expand into the water waste reduction business.



Conceptual diagram of the plant



Water intake spots



# Project Case Study / International Consulting

## Hartha Thermal Power Station Rehabilitation Project

Location: Basra Province, Iraq  
Contract work term: From 2017 to 2020  
Contract value: Approximately 1,100  
million yen

Nippon Koei won the order for a rehabilitation project for one of Iraq's biggest gas or oil thermal power generation station through international competition. This will support the nation's economic activities by helping meet power demand in Iraq, a country for which securing stable power supply is a pressing challenge.

### Key point

Thermal power station construction is a business category in which the Company can exercise its strength of being a comprehensive consultant covering main building renovation, peripheral infrastructure, and environmental impact assessment. We will deliver services in a manner that leverages our comprehensive capabilities.





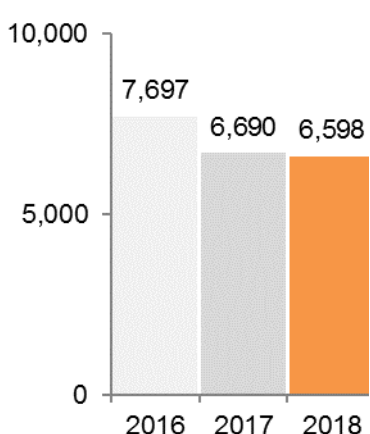
# Power Engineering

- Orders received were flat year on year due to lower power transformer orders, although the Company won orders postponed from the end of the previous fiscal year.
- Net sales decreased year on year due to a delay in the conclusion of contracts on large projects.
- Operating income decreased, affected by lower net sales, a rise of competitive ordering, and requests from customers to cut costs.

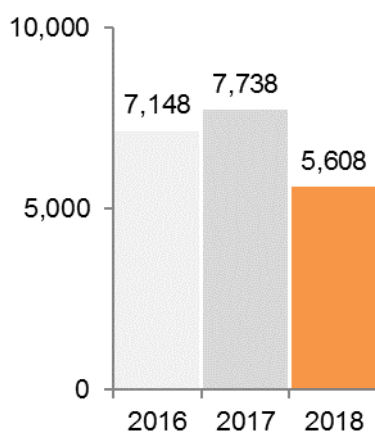
(Millions of yen)	FYE17/6 2Q Results		FYE18/6 2Q Results		YoY Change		Reference Values FYE18/6 2Q *	YoY Change	
	Amount	Ratio (vs. sales)	Amount	Ratio (vs. sales)	Amount	%		Amount	%
Orders	6,690		6,598		△91	98.6%	-	-	-
Net sales (*)	7,738	100.0%	5,608	100.0%	△2,129	72.5%	5,283	△2,454	68.3%
Cost of sales	4,921	63.6%	3,859	68.8%	△1,062	78.4%	3,614	△1,307	73.4%
Gross profit	2,816	36.4%	1,749	31.2%	△1,066	62.1%	1,669	△1,147	59.3%
SG & A	1,373	17.8%	1,509	26.9%	135	109.9%	1,509	135	109.9%
Operating income	1,442	18.6%	240	4.3%	△1,202	16.7%	159	△1,282	11.1%

\* Reference values determined by calculating the results for FYE18/6 2Q using the former method

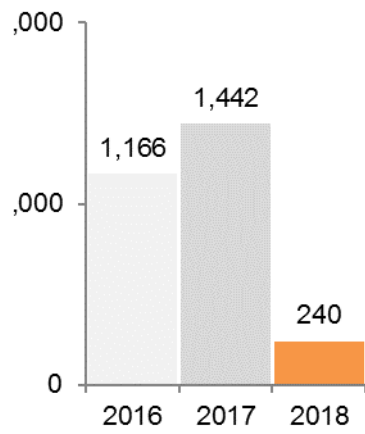
■ 2Q Orders



■ 2Q Net sales



■ 2Q Operating income



## Progress of business strategy

- ✓ Continue efforts to lower costs by revising designs and specifications and streamlining operations in response to price competition and requests to cut costs
- ✓ Aggressive sales endeavors are now underway for electric power companies other than Tokyo Electric Power, government agencies, and private-sector customers
- ✓ Orders received from priority sectors such as thermal power generation are steady

# Project Case Study / Power Engineering

## Oyu Power Plant Water Turbine Generator Renewal Work

A project for renewing a Mitsubishi Materials Corporation power plant that went into operation in 1920. This is an FIT-applied full-scale facility renewal and all electricity generated is intended to be sold.

### Key point

Cooperation was provided by the Production Department, the Fukushima Works, and the Construction Department.



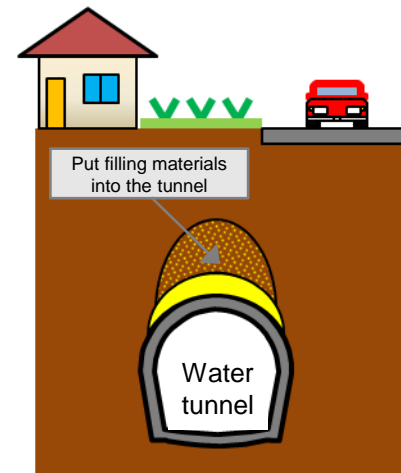
Water turbine under assembly

## Waterway Tunnel Preservation Work

Many existing hydroelectric power stations were constructed from several decades to nearly a century ago, meaning facility preservation measures must urgently be taken. If any cavity is found to exist in the upper part of a waterway tunnel, we put filling materials into the cavity and reinforce the tunnel steel frame, among other safety measure works, thus lowering the risk of road subsidence and securing safety.

### Key point

Assess soundness and forecast erosion progress according to accumulated preservation data. Propose methods for countermeasure works and monitoring in consideration of water circulation and water supply suspension plans.



# Project Case Study / Power Engineering

## Conducted a Power Generation Project with the Okura-mura Municipal Government, Yamagata, Japan

Nippon Koei set up a special purpose company (SPC) jointly with the Okura-mura Municipal Government and a local enterprise, and this SPC engaged in small hydroelectric power generation operations by using the sand control dam of the Dozan River in Yamagata, Japan.

Power station: Okura Mazudama Hydroelectric Power Station  
Annual power generation: Approximately 3,500MWh  
Equivalent to power consumption by about 1,200 ordinary households

Construction start: April 2018

### Key point

#### ■ Local community vitalization through small hydroelectric power generation

Municipality plus, local enterprise and private-sector company (KOEI Energy Co., Ltd.\*).

Utilizing abundant water resources to deliver a self-supporting energy profile while rejuvenating the local community (KOEI Energy Co., Ltd. is a wholly-owned subsidiary of Nippon Koei).

#### ■ Utilization of non-recourse loan

Formed a non-recourse financing (project financing) scheme utilizing a program loan service from the Yamagata Prefectural Government, which was made available in recognition of the results of small hydroelectric power generation run by the Nippon Koei Group in six locations in Japan. It was rare for a hydroelectric power generation borrower to procure funds through a non-recourse financing scheme.

#### ■ One-stop engineering service

Provided one-stop service from design to construction to operation by leveraging the strength of having the consulting and power engineering business units.



# Urban & Spatial Development

- Orders received were more or less flat year on year and in line with plan.
  - Net sales grew due to steady contributions from the Westminster renovation and other projects.
  - Operating income declined due to higher selling, general and administrative expenses such as rent.
- \* Depreciation and amortization of approximately 1.0 billion yen for FYE18/6 (approximately 0.4 billion yen for goodwill and 0.5 billion yen for other intangible non-current assets)

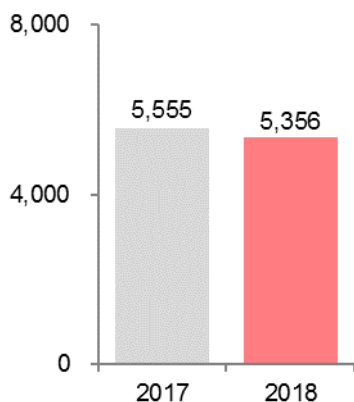
(Millions of yen)	FYE17/6 2Q Results		FYE18/6 2Q Results		YoY Change	
	Amount	%	Amount	%	Amount	%
Orders	5,555	Ratio (vs. sales)	5,356	Ratio (vs. sales)	△199	96.4%
Net sales (*)	5,993	100.0%	6,209	100.0%	216	103.6%
Cost of sales	3,299	55.0%	3,346	53.9%	47	101.4%
Gross profit	2,694	45.0%	2,862	46.1%	168	106.3%
SG & A	2,617	43.7%	2,873	46.3%	255	109.8%
Operating income	76	1.3%	△10	△0.2%	△87	-

\* Actual rate for FYE18/6 2Q: 148.37 yen to the pound sterling (projected rate for FYE18/6: 139.56 yen to the pound sterling)

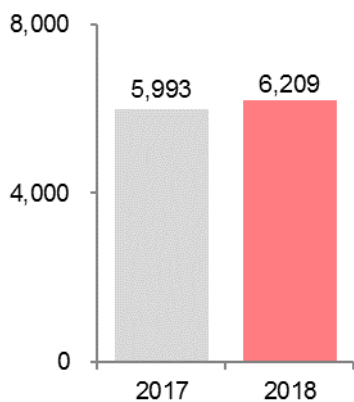
\* The results of BDP for the April to September 2016 period were consolidated into the results of the Urban & Spatial Development segment for FYE17/6 2Q.

\* The revision to the method of revenue recognition did not affect the Urban & Spatial Development segment since BDP had previously been applying the percentage of completion method.

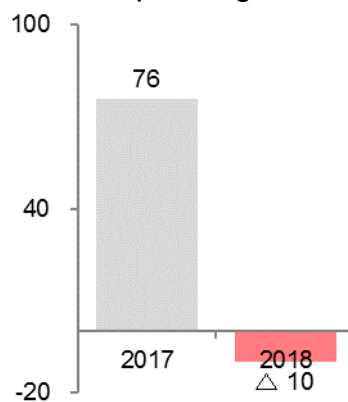
■ 2Q Orders



■ 2Q Net sales



■ 2Q Operating income



## Progress of business strategy

- ✓ The Company has yet to record orders received for the main building of the Westminster renovation project as Parliament deliberations were in progress. However, progress was made by related projects such as relocation destination site renovation.
- ✓ Preparations were underway for establishing local subsidiaries in Singapore and Canada.
- ✓ Made sales pitches in six ASEAN countries, ending up winning orders for five projects as the Nippon Koei Group.

# Project Case Study / Urban & Spatial Development

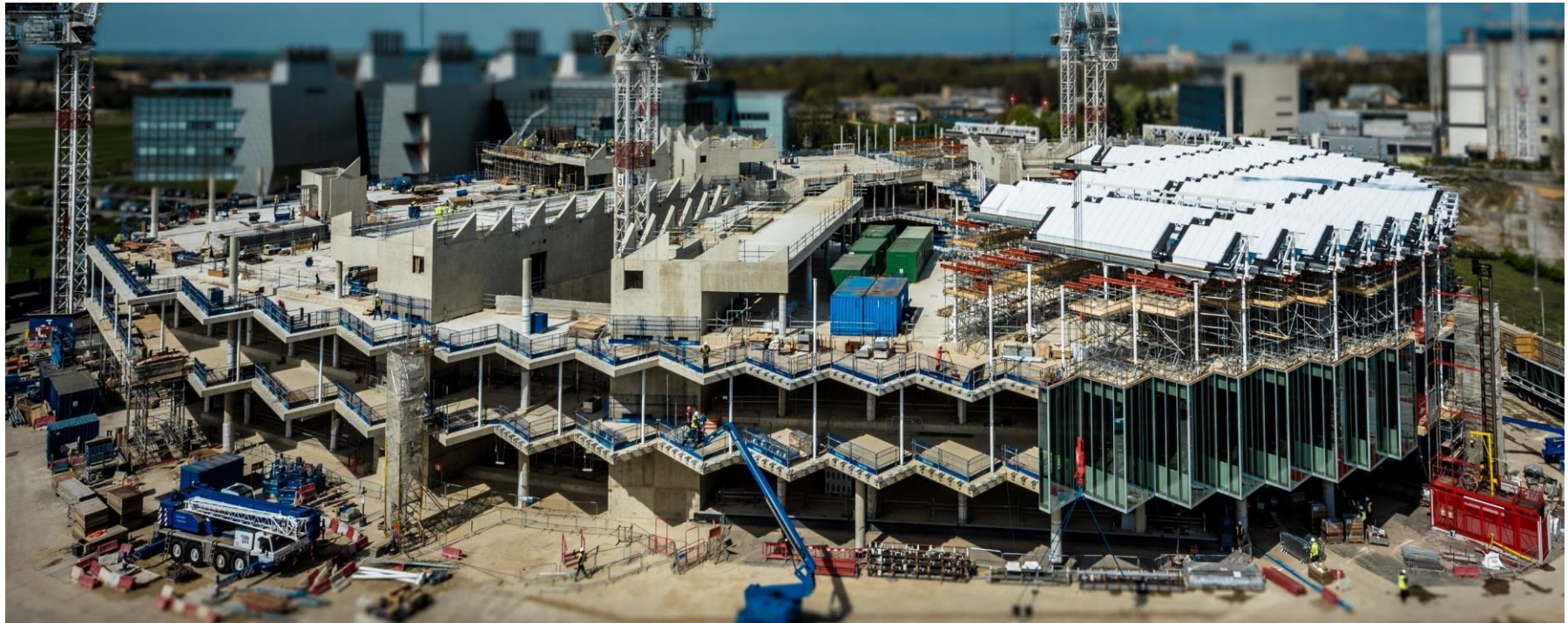
## AstraZeneca Headquarters Renovation Project

Order value: Approximately 6,760 million yen (cumulative)  
Contract term: From 2015 to 2019

BDP won an order for the renovation project for AstraZeneca's global R&D center and headquarters.

### Key point

BIM was shared by all entities involved, from the ordering customer to the contractor.



# Project Case Study / Urban & Spatial Development

## Great Ormond Street Children's Hospital

Order value: Approximately 1,320 million yen

Contract term: From 2018 to 2022

BDP won an order for a children's hospital redevelopment project in the U.K. The firm will conduct a full renovation of the facility, and newly build and develop a clinical space consisting mainly of examination rooms and patient rooms, as well as a doctor training room, school, teenage patient area and rooftop garden.

### Key point

Used a design allowing sunshine to reach all patient rooms, at the request of the ordering customer.



## II: FYE 18/6 Forecast

# FYE June 2018 Forecast

No changes have been made to the forecast for the entire FYE June 2018 period.

Securely achieve targets in line with the period-start plan, paving the way for the final phase of the Long-Term Management Plan.

(Millions of yen)	FYE18/6 Forecast	FYE17/6 Results	YoY Change		FYE18/6 Reference*
			Amount	%	
Orders	<b>103,000</b>	117,442	- 14,442	87.7%	103,000
Net sales	<b>114,000</b>	101,338	12,662	112.4%	104,000
Domestic Consulting	47,200	43,516	3,684	108.4%	43,000
International Consulting	31,800	24,491	7,309	129.8%	28,200
Power Engineering	21,200	17,577	3,623	120.6%	19,100
Urban & Spatial Development	12,000	14,347	- 2,347	83.6%	12,000
Energy/Real Estate/Others	1,800	1,405	395	128.1%	1,700
Operating Income	<b>7,700</b>	5,464	2,236	140.9%	5,800
Domestic Consulting	3,500	3,298	202	106.1%	2,700
International Consulting	2,400	1,887	513	127.1%	2,000
Power Engineering	3,500	2,683	817	130.4%	2,800
Urban & Spatial Development	50	81	- 31	61.7%	50
Energy/Real Estate/Others	- 1,750	- 2,485	735	-	- 1,750
Ordinary Income	<b>7,800</b>	5,958	1,842	130.9%	6,000
Profit attributable to owners of parent	<b>4,900</b>	3,288	1,612	149.0%	3,600
Operating margin (%)	<b>6.8</b>	<b>5.4</b>			
ROE (%)	<b>8.7</b>	<b>6.2</b>			

\* Estimated budget target June 2018, based upon previous standard (completed-contract method)



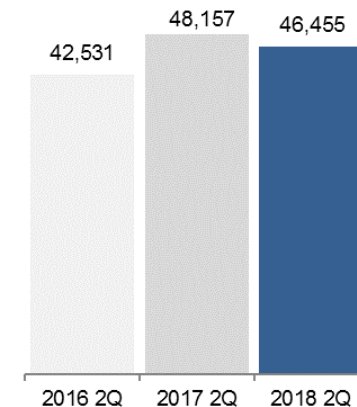
# III: Initiatives in the Second Half of the Fiscal Year Ending June 30, 2018 and Beyond

# Initiatives from FYE 18/6 3Q - to achieve NK-AIM -

## Domestic Consulting

- Ensure to win orders for engineering competition-based projects to be publicly announced from February 2018 onwards
- Achieve improved customer satisfaction and acquire high evaluation scores and awards by raising the quality of deliverables to be delivered by the end of March 2018
- Attain improved price competitiveness by discovering new regional partner vendors and promoting local joint venture (JV) formation
- Expand our customer base by making sales pitches to municipalities by utilizing previously-ordered projects as well as the results of ministry head office projects

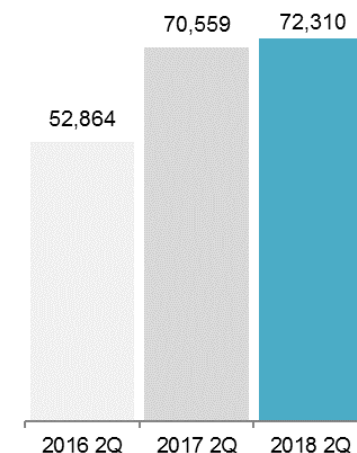
Outstanding orders (JPY million)



## International Consulting

- Ensure to win orders for large projects and bolster the execution structure through appropriate risk management
- Launch the operation of the Regional Engineer Program\* (approximately 70 employees at present) and promote its utilization
- Enhance education and training for raising management capabilities (contract, process, safety, and profits)
- Raise the capabilities of our group companies and promote collaboration with them
- Continue thorough safety measures

Outstanding orders (JPY million)



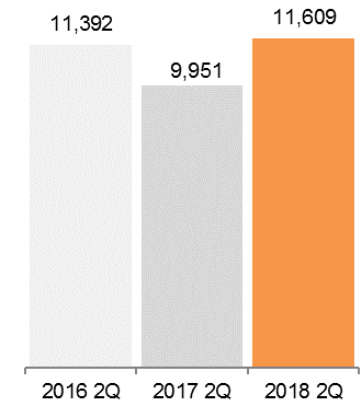
\* A program in which selected Nippon Koei Group employees are developed to serve in a project other than those in the country of their residence, and dispatched for projects underway at different companies in the segment.

# Initiatives from FYE 18/6 3Q - to achieve NK-AIM -

## Power Engineering

- Secure orders designed to generate sales within the current fiscal year by making an aggressive sales pitch to all electric power companies, government agencies, and private-sector customers, and discovering prospects
- Secure proper profits by revising our production system and making thorough cost reduction efforts
- Strive to develop product technologies with a focus on onsite-based technology development and product core technology development
- Expand new domains for the electric equipment consulting business (thermal power, road-intelligent transportation system (road ITS), backbone communication network, water supply, sewage and drainage pump station)

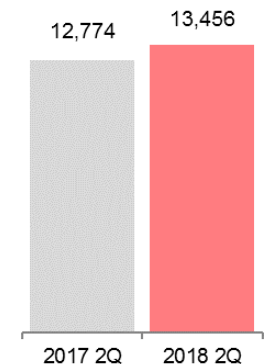
Outstanding orders (JPY million)



## Urban & Spatial

- Develop our operations execution system for the Westminster Palace renovation project
- Establish the Singapore base within the current period. Aim to accelerate its collaboration with Nippon Koei Group entities and improve productivity while serving expanded markets in ASEAN countries. Aim to permeate the BDP brand.
- In its BIM development initiative, BDP will develop Level 3 (a level at which project personnel design by accessing one single integrated database in which data updating histories are managed). Nippon Koei and BDP will continue to engage in personnel interaction and joint technology development such as for BIM.

Outstanding orders (JPY million)



# Medium-Term Management Plan/Long-Term Management Strategy

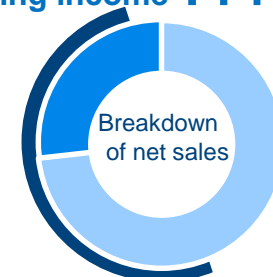
## Tackle in NK-AIM and expand in the next medium-term plan

- (i) Step up efforts to cater to railroad projects showing strong demand  
Step up our production structure through internal and external collaborations and merger and acquisition (M&A) activities  
Bolster our group collaboration and sales through the IT system and support framework of headquarters business units
- (ii) Establish the energy management business  
Build a business model by refining our knowledge in energy management and mini grid development in preparation for the post-power generation-transmission unbundling
- (iii) Global engagement in the construction area  
Discover new market segments through integration with the civil engineering side  
Put the BDP Asia engagement plan into action

## Long-Term Management Strategy

Net sales **¥140** billion

Operating income **¥14** billion



■ Three core businesses  
■ New businesses ■ Overseas markets



Continuation and expansion domains

### Current Medium-Term Management Plan "NK-AIM"

- Sustainable growth of three core businesses
- Generation and expansion of new businesses
- Autonomy and collaboration

### New Medium-Term Management Plan (under formulation)

FY2015

FY2018 | FY2019

FY2021 | FY2022

Continue to evolve into a global consulting and engineering firm

# Acceleration of NK-AIM

## Domestic Consulting

- Achieve higher production capability and productivity by building a production structure designed to address expanding businesses and the market environment
- Accelerate moves to expand our operations under a clear-cut business strategy while consolidating segments sharing a common strategy
- Generate new businesses strategically in a manner that expands operations beyond conventional market boundaries
- Reinforce our sales capabilities intended to drive the above-mentioned efforts

## International Consulting

- Bolster our corporate structure in response to growing overseas projects such as for high-speed railroads as well as customer needs
- Engage in cross-sectional collaboration designed to cater to a packaged infrastructure project in which to develop railroad stations and station zones in an integrated fashion
- Foster Nippon Koei Group companies, develop technologies in collaboration with the Technology Headquarters (R&D Center) and pursue sales activities jointly with the Global Strategy Headquarters with the aim of securing sustainable earnings capabilities through production structure reinforcement
- Continue management education in order to raise management capabilities

## Power Engineering

- Collaborate with the Global Strategy Headquarters and overseas Nippon Koei Group companies for the purpose of capturing overseas infrastructure demand mainly in emerging countries
- Accelerate winning orders on the strength of our one-stop service delivery
- Consider rebuilding an optimal supply chain that integrates domestic and overseas production bases
- In Japan, step up sales to all electric power companies, government agencies, and private-sector customers while continuing to provide solution proposals for power transformer products

# Acceleration of NK-AIM

## Urban & Spatial Development

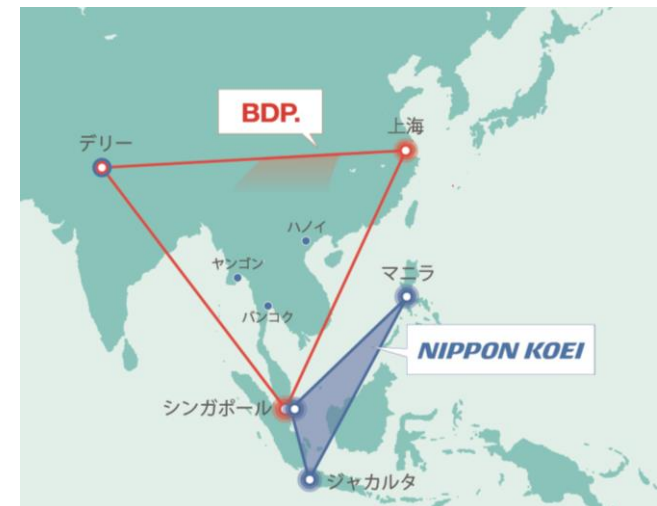
Advance the generation of synergy for the technology field as well as engagement areas and key customers by means of collaboration between the two companies

■ Projects involving collaboration between the Nippon Koei Group and BDP

<p>Riverfront development master plan (PPP project)</p>	<p>High function hospital and health center design in Vietnam</p>
<p><b>BDP</b> Construction: Designing of a riverside promenade, shopping facilities, and underground shopping areas</p> <p><b>NK</b> Civil engineering: Pier, underground bypass, pedestrian bridge and underground area structure</p>	<p><b>BDP</b> Private-sector project. Nippon Koei and BDP were invited to participate in the design competition and were awarded the runner-up prize in recognition of the superior design features of the proposal.</p> <p><b>NK</b></p>
<p>Regional airport development plan (PPP project)</p>	<p>Super high-rise building concept design in China</p>
<p><b>BDP</b> Construction: Concept and design of terminal building</p> <p><b>NK</b> Civil engineering: Overall airport plan</p>	<p><b>BDP</b> Private-sector project. BDP delivered concept design service for a super high-rise building on the back of customers' confidence in Nippon Koei.</p> <p><b>NK</b></p>

■ Establishment of the Singapore base

- Bolster the collaboration between BDP and three Nippon Koei bases  
Expand business in ASEAN countries showing significant private-sector growth, by tapping into BDP's high-level capabilities and results
- Enhance production capabilities, by utilizing Delhi and Shanghai offices
- In Singapore, it is mandatory to use BIM in construction areas  
Make the most of the advantageous situation for BDP, a player retaining leading-edge techniques



# Efforts under the Current Medium-Term Management Plan NK-AIM toward the New Medium-Term Management Plan

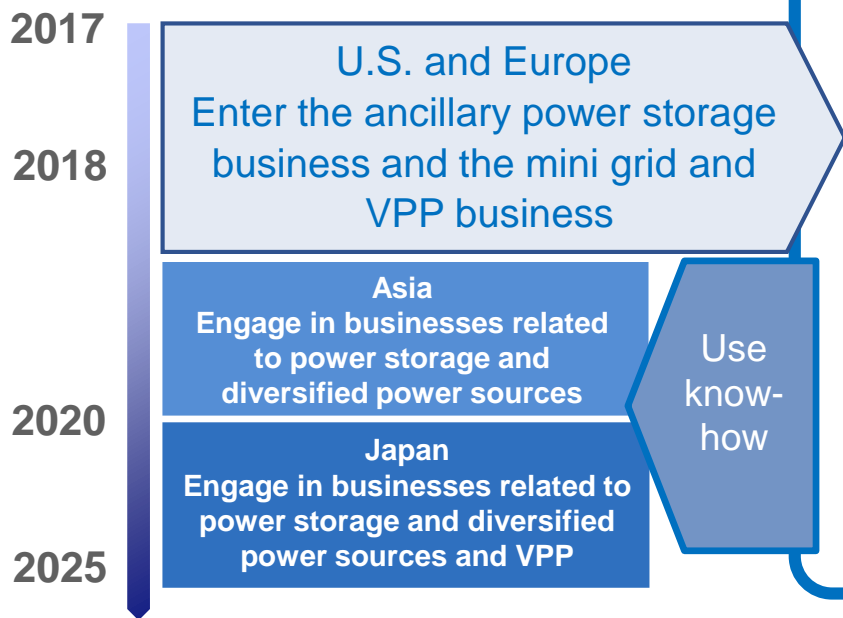
## Energy management

### Energy market trend

Decarbonization as a counter-climate warming measure  
 Electric power liberalization and power generation-transmission unbundling  
 Grid stabilization programs

- ▶ Expansion of renewable energy (diversified energy)
- ▶ Japan: From 2016 to 2020; U.S. and Europe: 1990s
- ▶ Japan: System under consideration; U.S. and Europe: Battery use in progress

Business engagement with **energy storage** as the core in the form of creation, storage and conservation of energy



## Enter the U.K. energy management market

Nippon Koei's Fukushima Works developed the storage battery control system for power frequency adjustment (NK-EMS). Starting from February 2018, the Company began to provide the frequency adjustment service to National Grid UK, an electric power company in the U.K. We adjust supply-demand balance and maintain frequencies in the country's power grid.



# Efforts under the Current Medium-Term Management Plan NK-AIM toward the New Medium-Term Management Plan

## Technology policies

- Engage in research and development from a medium- to long-term perspective with a focus on themes appropriate to changes in the market environment and needs
- BIM has been incorporated into our production process and is now underway in multiple domestic projects
- Promoting our BIM-incorporated PM-IT (a technology to integrate and oversee project data for design, work and maintenance-control) as a measure to raise the productivity of our overseas projects, which is gradually leading to favorable results

## Human resources policies

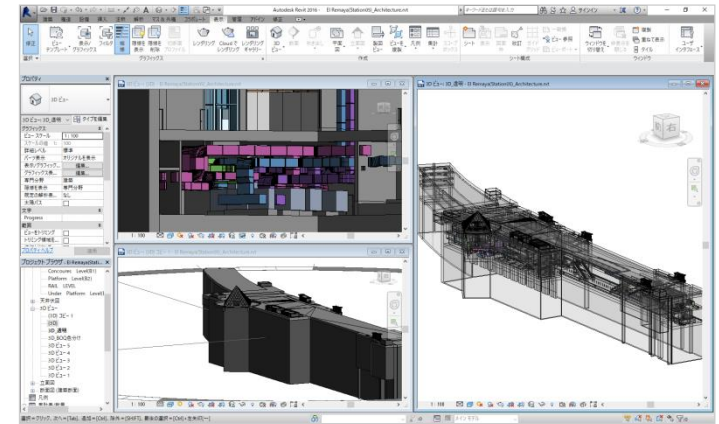
- Completed developing human resources schemes and employee development schemes, and entered into the operation phase
- Work on recruitment and employee development, globalization and diversity in a manner befitting the expanding group business size, corresponding to our future growth strategy, and the changing job market

## Organization policies

- Reinforce governance across the entire group by streamlining the business management platform such as for global accounting

## Investment policies

- Expand investing in priority areas comprising railroads, energy management, and construction
- Continue to actively participate in domestic and overseas concessions



PM-IT: Allows 3D designing as well as construction fee and progress management.

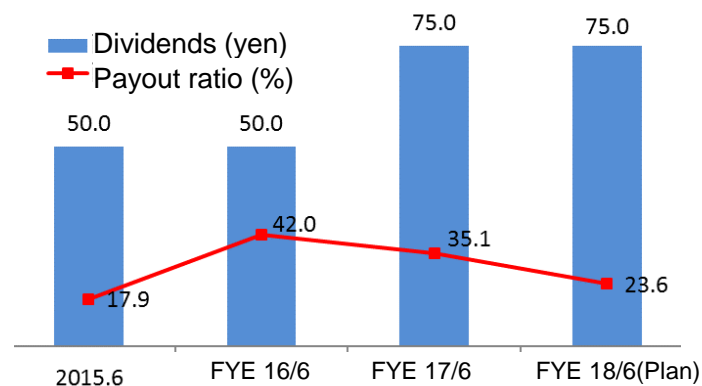


# Capital Policy/Dividend Policy

## Dividend policy

- Pay dividends steadily for intended payout ratio of 30% and enhance returns for shareholders in a manner commensurate with rising levels of income

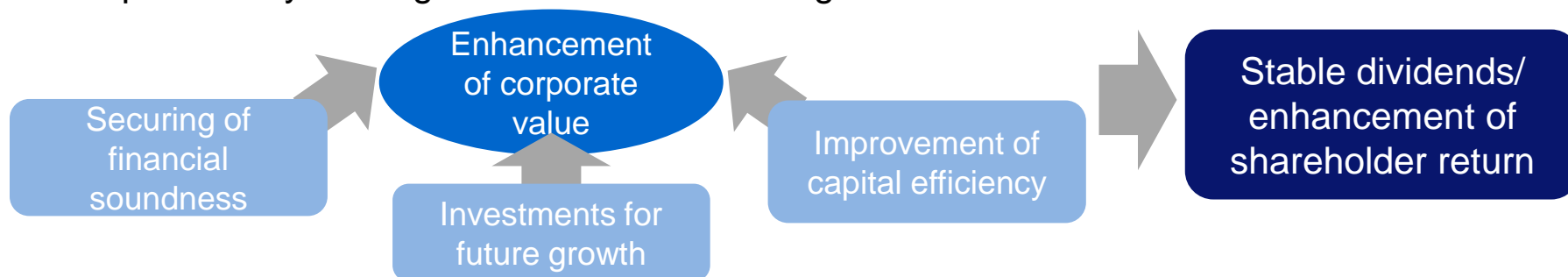
✓ Planning to pay a dividend of ¥75.0 for FYE 18/6.



\*Past dividends are recalculated based on the ratio after share consolidation.

## Capital policy

- Enhance corporate value through the improvement of capital efficiency and business expansion by making investments for future growth



Act with integrity and contribute to society through technology and engineering.

***NIPPON KOEI***

This presentation is provided for informational purposes only and is not intended to solicit any action. Nippon Koei prepared this presentation (including forecasts of financial results) based on credible information available at the time of publication and certain assumptions the Company believes to be reasonable. Various factors may cause actual results to differ materially from the projected results or other expectations implied or expressed in this presentation.

**IR-related inquiries**

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**[www.n-koei.co.jp/english/](http://www.n-koei.co.jp/english/)**

## (Reference) On changes in calculation standards for Sales (from June 2018)

- \* Effective from the Fiscal Year Ending June 30, 2018, the Group has changed the primary method of revenue recognition from the completed-contract method to the percentage-of-completion method.

### Calculation by “Percentage of Completion Method”

(Sales Amount) = (Estimated Total Revenue) x Progression Rate - (Cumulative Sales by the End of Previous Period)

$$\text{Progression Rate} = \frac{\text{Costs occurred (labor cost, subcontract cost, costs, etc.)}}{\text{Total Estimated Costs}}$$

### Sales Recording by “Percentage-of-Completion Method”

Case: Project of 3-year contract period, JPY 30-million value



	1st year Progression Rate: 25%	2nd year Progression Rate: 70%	3rd year Completion	Total
Completed-contract method	0	0	3,000	3,000
% of completion method	<b>750</b>	<b>1,350</b>	<b>900</b>	<b>3,000</b>
	3,000 x 25%	3,000 x 70% - 750	3,000 x 100% - 750 - 1,350	

\* For projects that were awarded or started before FYE June 30, 2017, the completed-contract method is used.

\* For the amount of effect, see “Changes in accounting policies” on p.9 of the Summary of Financial Reports .

# IV: Reference

# Corporate Profile

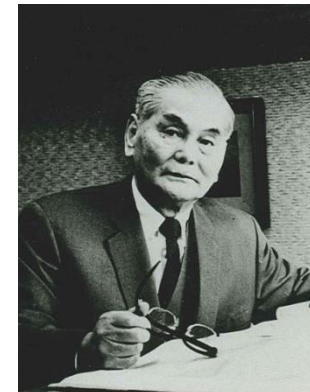
- Corporate Name      NIPPON KOEI CO., LTD.
- Date of Foundation    June 7, 1946
- Capital                ¥7,393 million
- Number of Employees  4,566 (consolidated)
- Consolidated Subsidiaries  16
- Businesses    Domestic Consulting  
                          International Consulting (ODA, etc.)  
                          Power Engineering  
                          Urban & Spatial Development

## ■ Management Philosophy

Act with integrity and contribute to society through technology and engineering.

- Founder                Yutaka Kubota (1890-1986)

Before WWII, Yutaka Kubota was engaged in the development of hydropower resources (e.g. Suiho Dam/700MW, in the Korean Peninsula, one of the world's largest at that time).

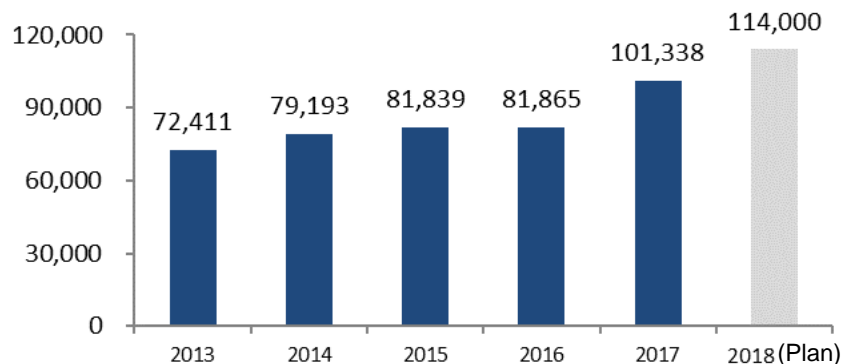


After the War, in a bid to work toward the restoration of Japan and reconstruction of countries damaged by the War, he founded the Company at the age of 56.

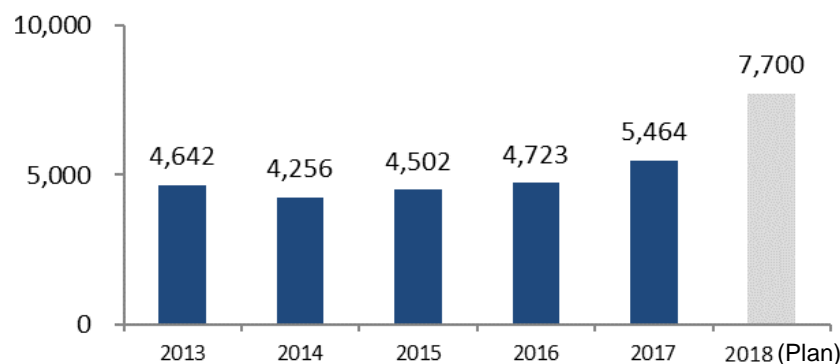
Known as the “Father of Overseas Engineering Cooperation”, he was awarded the Grand Cordon of the First Order of the Rising Sun in 1985.

He directed projects in many countries throughout the world until he was 90 years old, contributing to development in developing countries.

Transition of Sales (consolidated, ¥ million)



Transition of Operating Income (consolidated, ¥ million)



# Business Development

## Domestic Consulting



Nippon Koei has implemented approx. 3,000 projects/year to underpin the foundations of people's daily lives, such as development and maintenance of social capital including rivers, roads, etc., and regional reforms to realize prosperous and safe living.

## International Consulting



Nippon Koei has supported the growth of developing countries in Africa, the Middle East, Latin America and, especially, in Asia by providing support in a broad range of fields including water resources, energy, urban development, transportation, agricultural development, and environment control.

## Power Engineering



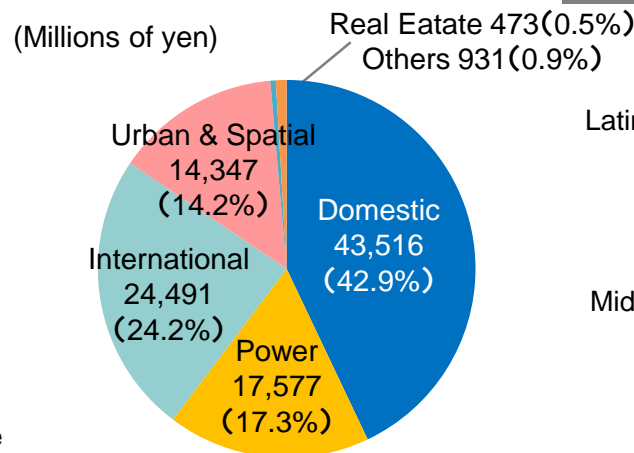
Nippon Koei has worked on the development of power sources and the promotion of business accommodating electricity demand in Japan and overseas. The Company has engaged in new construction and repairs of substations, switching stations, power stations, the formation of dam management systems at hydroelectric power plants, etc.

## Urban & Spatial

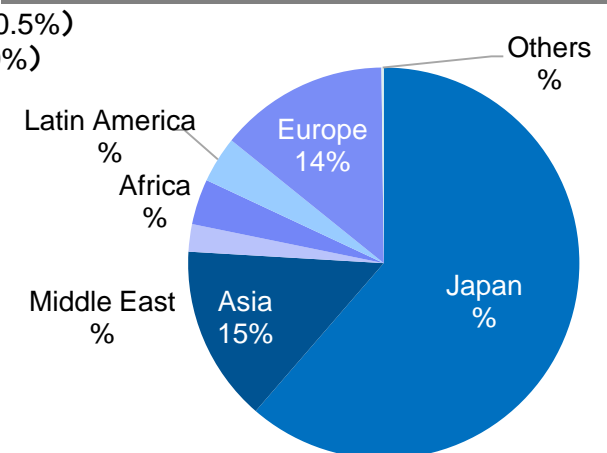


Nippon Koei strives to create multifunctional, well-organized, barrier-free, eco-friendly and beautiful life space in emerging economies in Asia and other developing countries/regions through development projects of social infrastructure design, such as of railway stations, airport buildings, rearrangement of the streetscape, etc.

### FY17/6 Sales distribution ratio



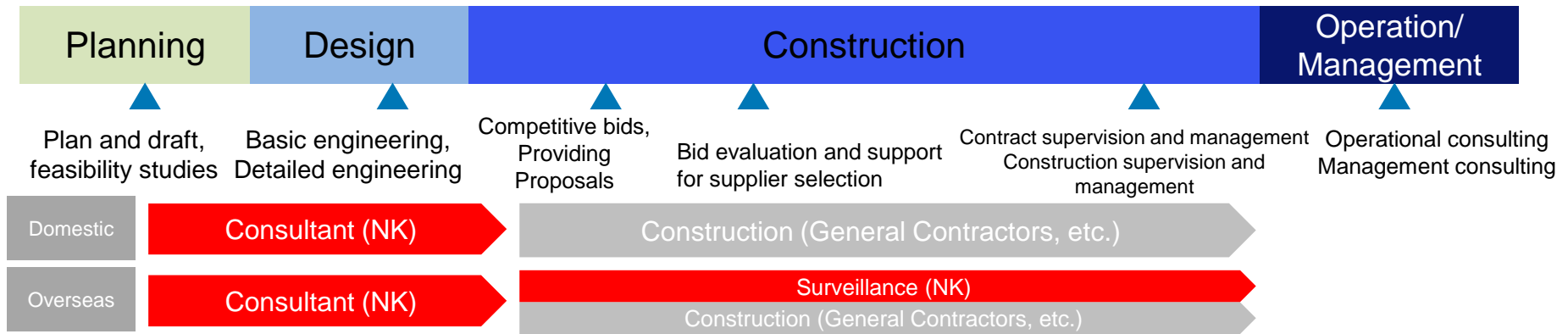
### FY17/6 Sales by Geographical Location



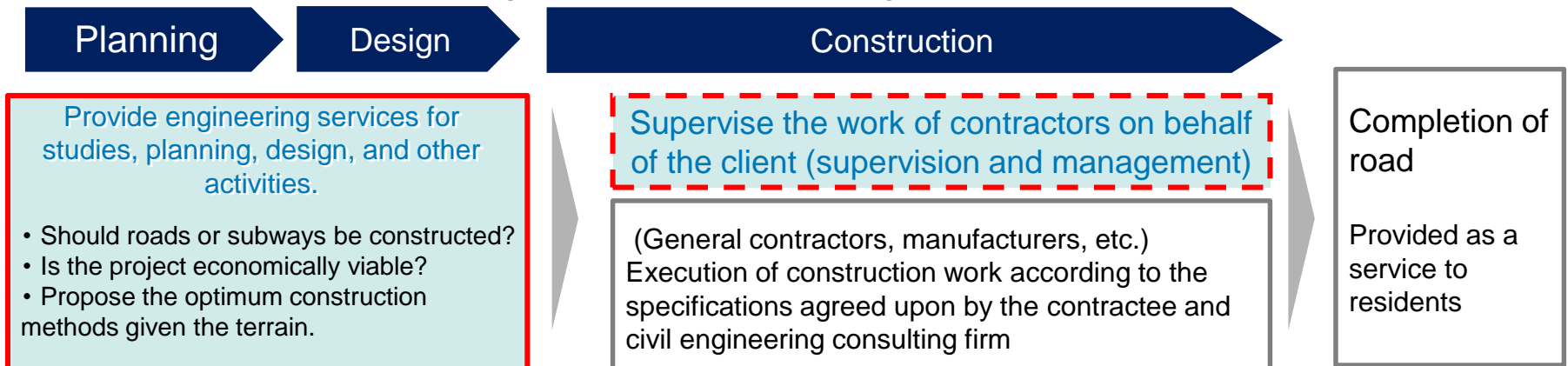
# Job Description for Civil Engineering Consultants

**Domestic:** Mainly involved through the design stage. Core customers are primary government organizations including the Ministry of Land, Infrastructure, Transport and Tourism, and secondary government organizations including prefectural and other local governments.

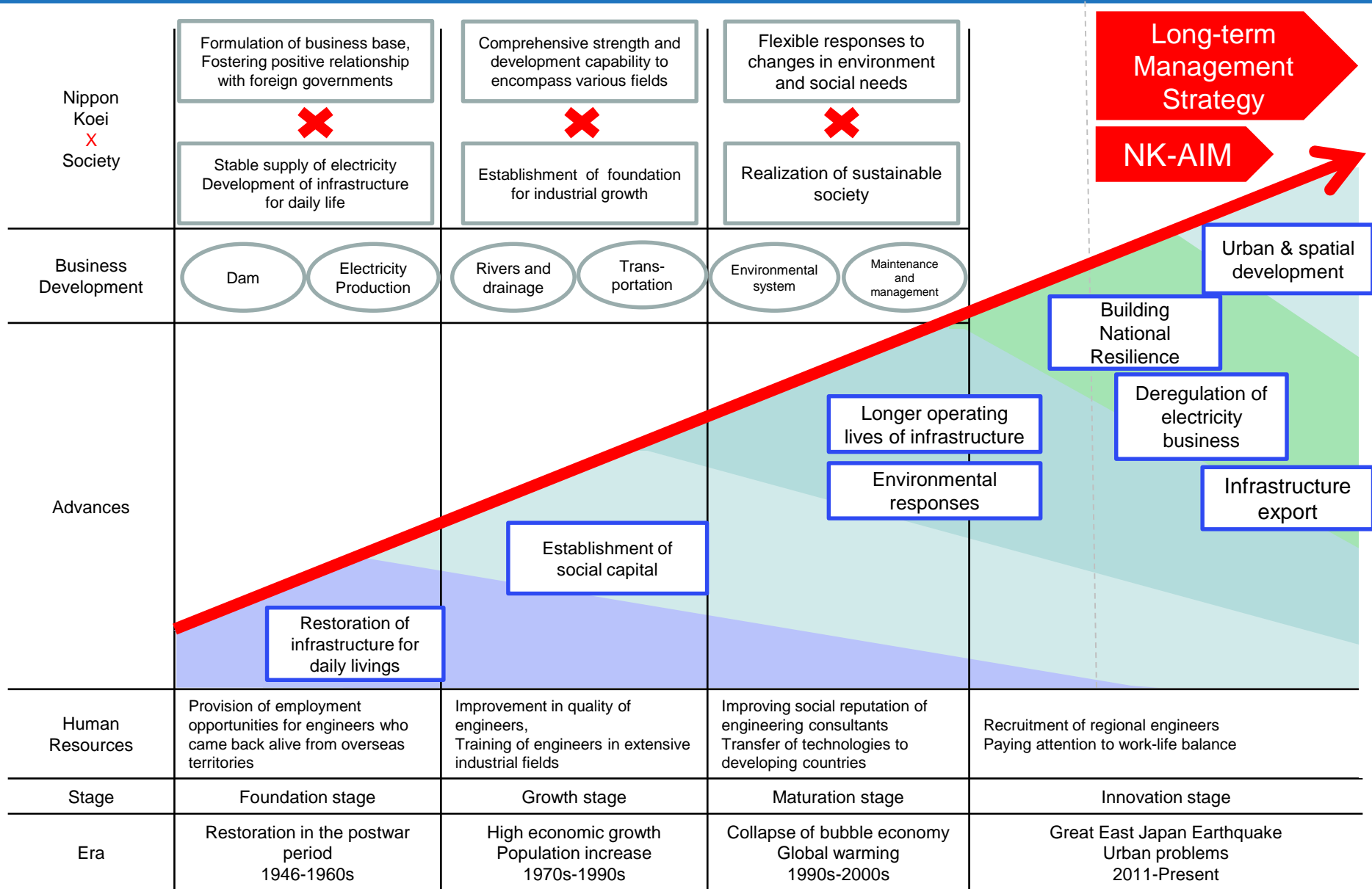
**Overseas:** Involvement varies by project, and can range from planning and construction to construction supervision and management. Core customers include the Japan International Cooperation Agency (JICA), other governmental agencies, the United Nations and the World Bank.



## Example: Chronic traffic congestion problems in Region A



# Nippon Koei's Development Along with Social Progress





# Strengths of Nippon Koei

(1) Sustainable business model developed along with progress in society  
(Win-win relationship between society and the Company)

Implementation of transformation to meet market needs



Commercialization of solutions on social issues

(2) Japan's leading engineering consultant  
(Business domains, technologies, and human resources)

**Comprehensive strength:** Capable of solving sophisticated or complex issues

**Human resources:** Has the largest number of engineers in the industry

**Technologies:** Equipped with in-house R&D facilities and a number of patents

Consolidated net sales:  
¥101.3 billion

No. of countries in which business is undertaken:  
160

No. of orders per year: over 4,500

No. of patents acquired:  
82

No. of Professional Engineers\*:  
1,534

\*Certified by the Japanese government

Provide solutions on needs of the era and realize sustainable business expansion and profitability growth

# Position in Industry

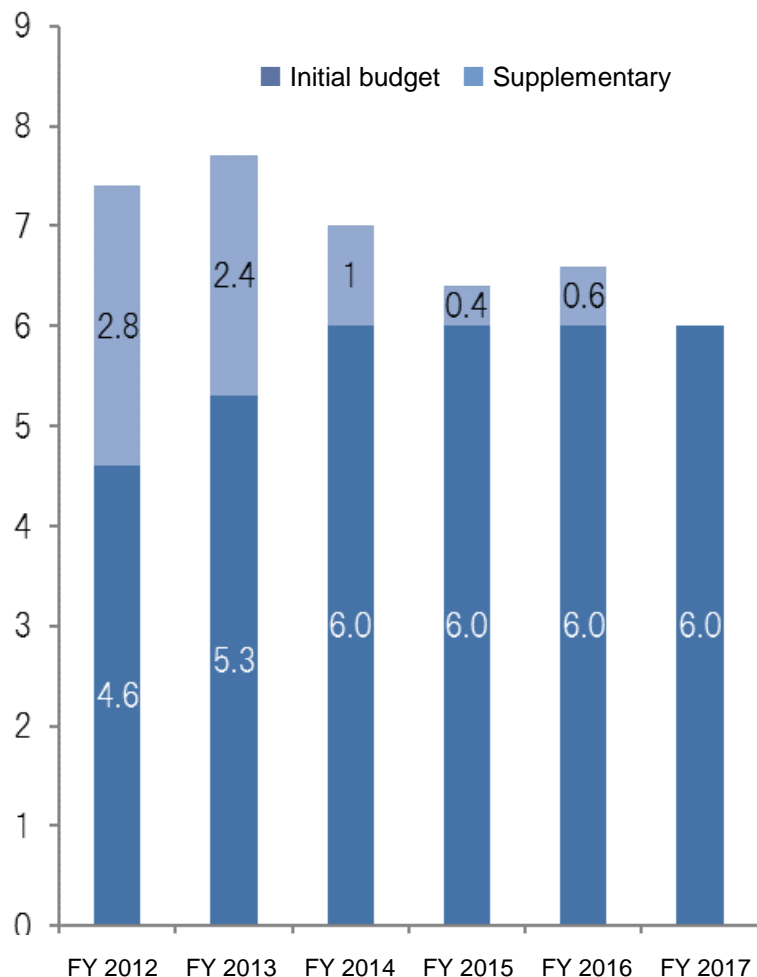
Nippon Koei is Japan's leading civil engineering consultant.

Rank	Company	Sales (Millions of yen)	
		Segment of Const. Consultation	Corporate Total
1	Nippon Koei	44,214	60,327
2	Pacific Consultants Co.,LTD.	40,477	42,511
3	CTI Engineering Co., Ltd.	32,626	34,256
4	Yachiyo Engineering Co., Ltd.	19,426	19,668
5	JR East Consultants Company	18,044	20,134
6	Oriental Consultants Co., LTD.	17,419	17,644
7	Nihon Suido Consultants Co., Ltd	17,134	17,365
8	KOKUSAI KOGYO CO., LTD.	16,325	35,022
9	Eight-Japan Engineering Consultants Inc.	15,362	17,531
10	NEWJEC Inc.	15,149	15,613
20	Tamano Consultants Co., Ltd. (strong point: urban planning)	9,779	11,499
87	NIPPON CIVIC CONSULTING ENGINEERS CO.,LTD (strong points: underground spatial planning, tunnels)	1,899	1,933

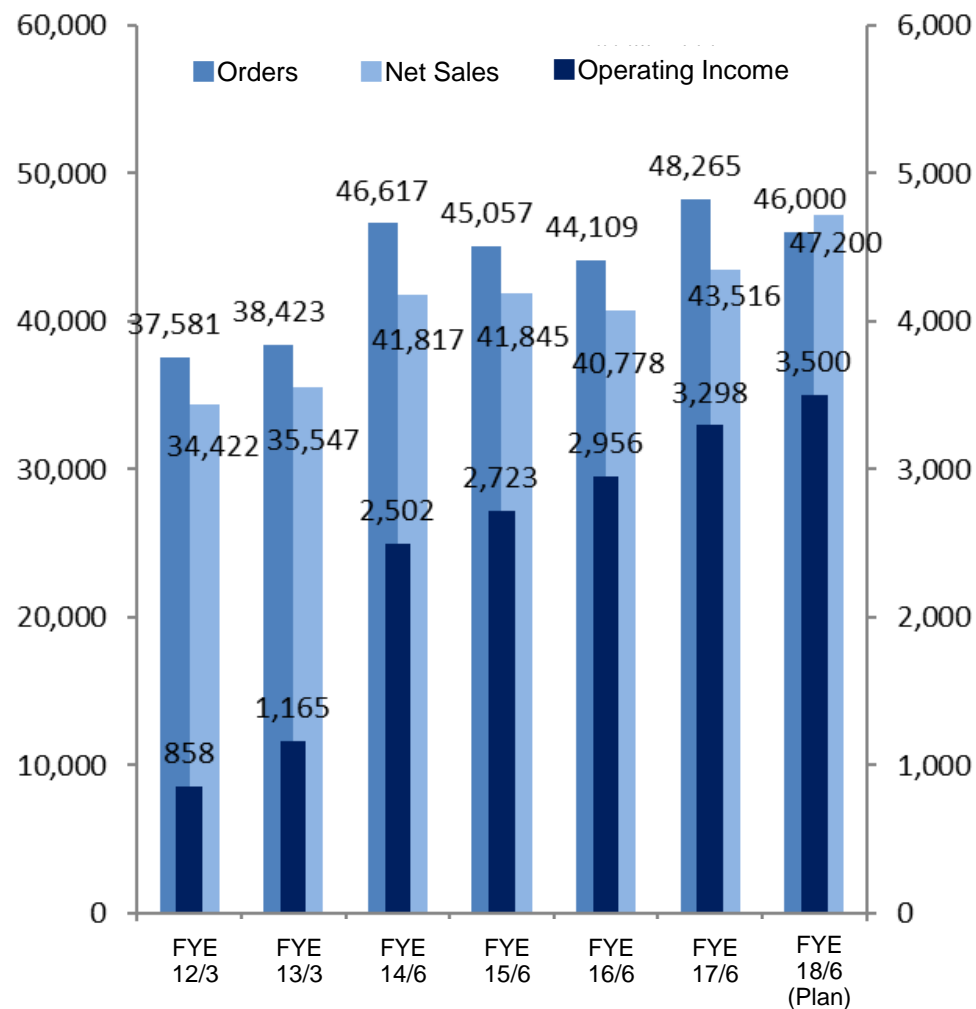
※ Source: *Nikkei Construction*, May 8, 2017 edition. Ranking by engineering consultant division sales (according to published financial results)

# Domestic Consulting

## Public Works Expenditures (¥ trillion)



## Nippon Koei's Operating Results in Domestic Consulting (¥ million)

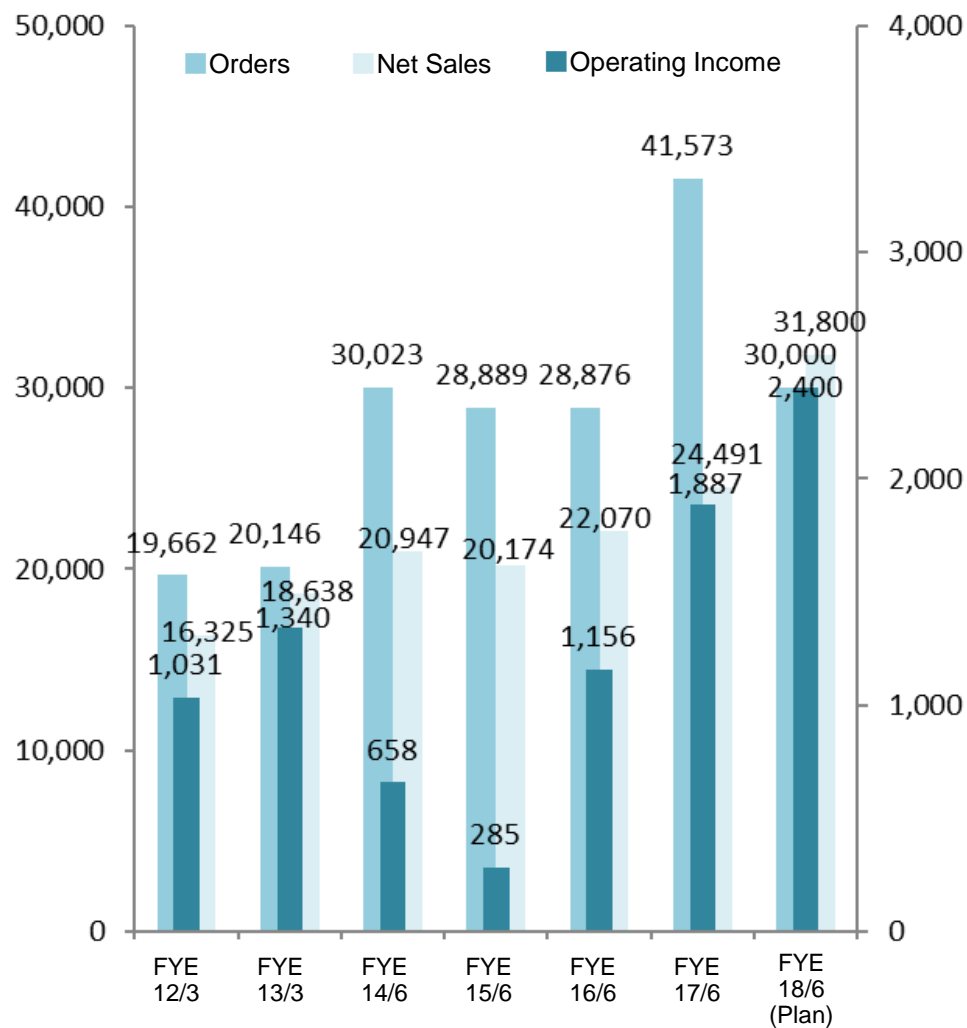


# International Consulting

Initial ODA Budget in the General Account  
(¥ billion)



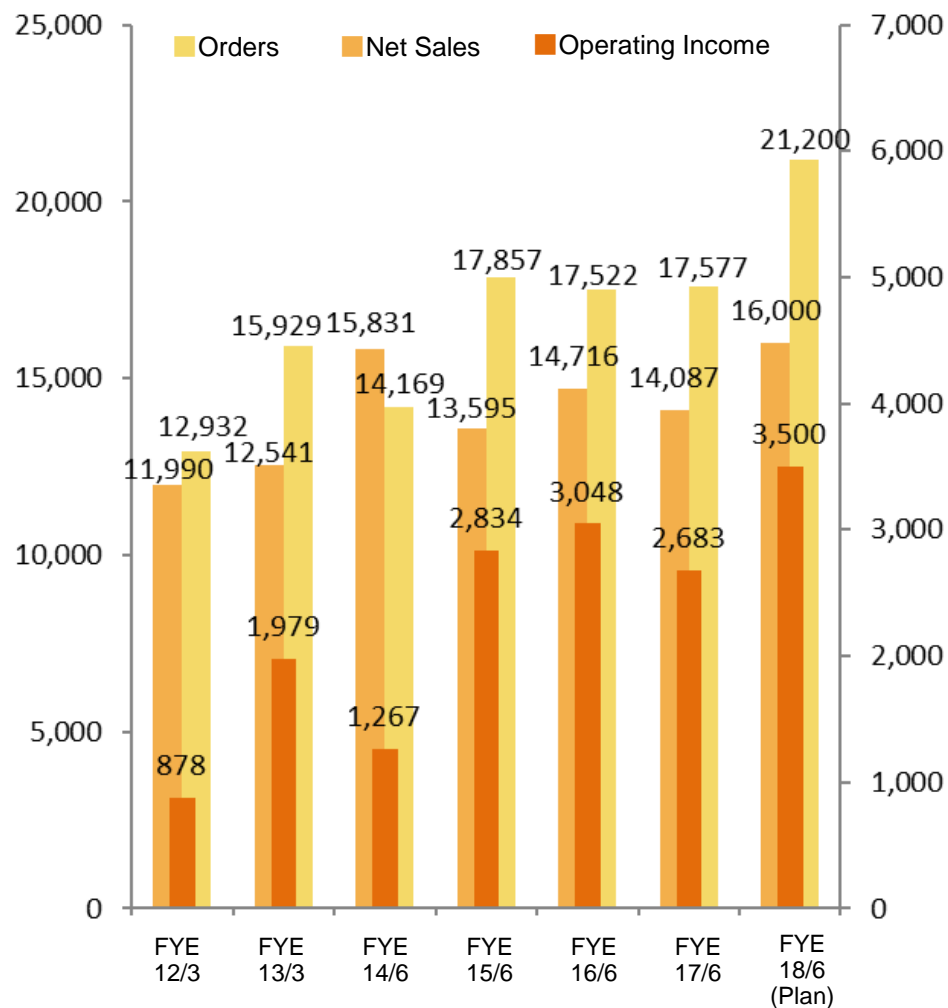
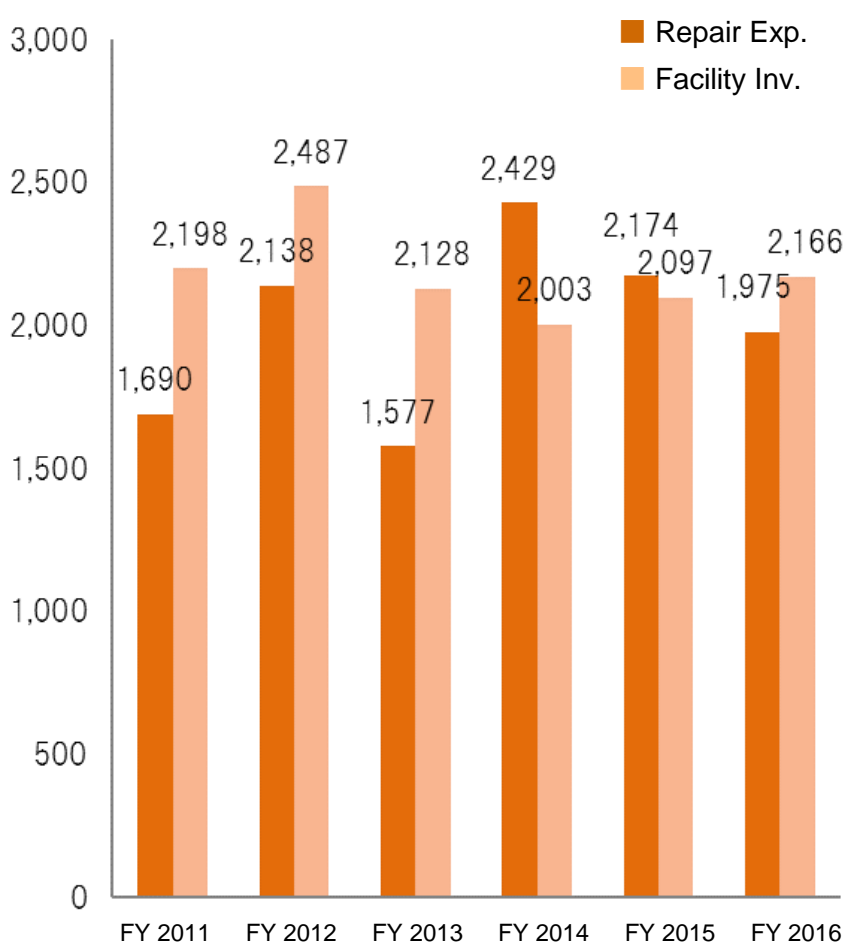
Nippon Koei's Operating Results in International Consulting  
(¥ million)



# Power Engineering

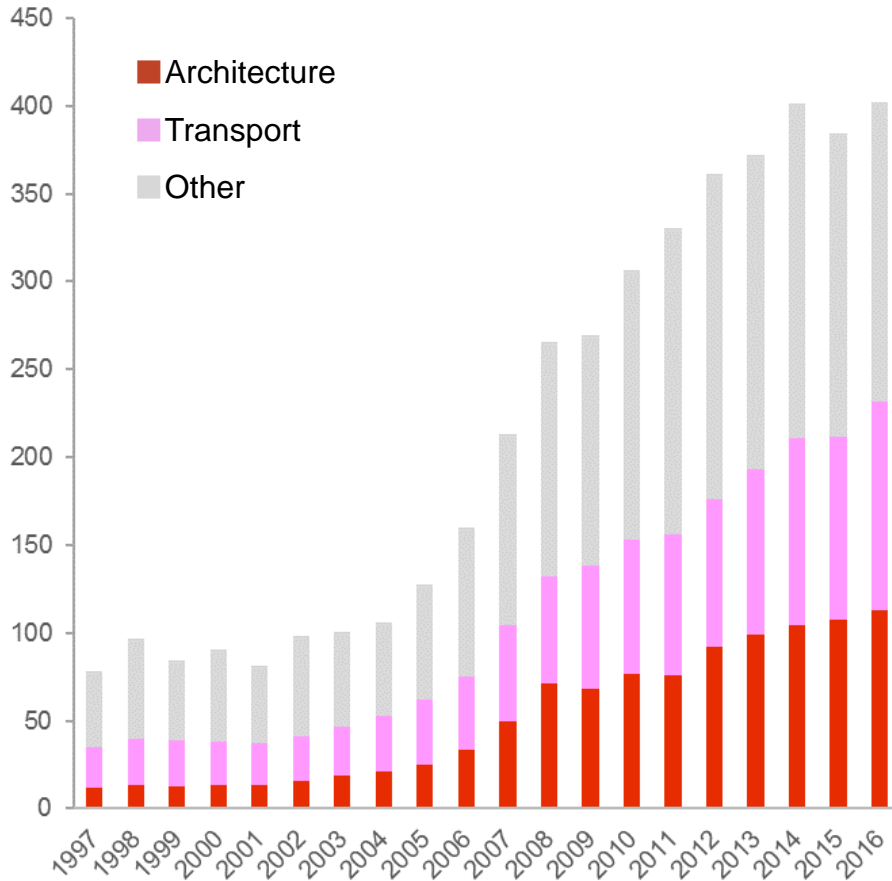
Repair Expenses and Facility Investment and Its Distribution for Tokyo Electric Power Co., Ltd. (¥ billion)

Nippon Koei's Operating Results in Power Engineering Business (¥ million)



# Urban & Spatial Development

Sales Trend of Top 164 Research and Designing Companies (Billions of dollars)



Source of data: ENR Magazine (issued in August 2017)

Sales of top 164 firms in 2015 by sector (Billions of dollars)

