

Presentation of Results Half Year, FYE June 30, 2019

February 26, 2019

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

I: Accounting Report (July 2018 - Dec 2018, FYE19/6 1H)

2Q Results for FYE June 30, 2019

Net sales increased driven by the strong performance of the Domestic Consulting segment. Operating loss increased due to delays in starting large-scale projects in the International Consulting segment.

(Millions of yen)	FYE18/6 2Q Results	FYE19/6 2Q Results	YoY Change	
			Amount	%
Orders	47,832	47,707	△ 125	99.7%
Net Sales	31,233	39,146	7,912	125.3%
Gross profit	9,523	10,215	691	107.3%
Operating Income	△ 2,597	△ 2,817	△ 219	-
Ordinary income	△ 2,344	△ 2,901	△ 557	-
Profit attributable to owners of parent	△ 1,312	△ 2,331	△ 1,019	-

- While orders in the International Consulting and Power Engineering segments declined, the Domestic Consulting and Urban & Spatial Development segments performed well. As a result, total orders remained at the same level as the previous year.
- Net sales increased year on year due to sales growth in Domestic Consulting and also due to a rise in the proportion of projects to which the percentage-of-completion method is applied.
- For operating income, loss was reduced in Domestic Consulting and profit increased in Power Engineering segment. However, because of the reduced profits in other businesses, operating loss increased year on year.
- Profit attributable to owners of parent declined compared with the previous year, in which there was an extraordinary gain on the sale of real estate.

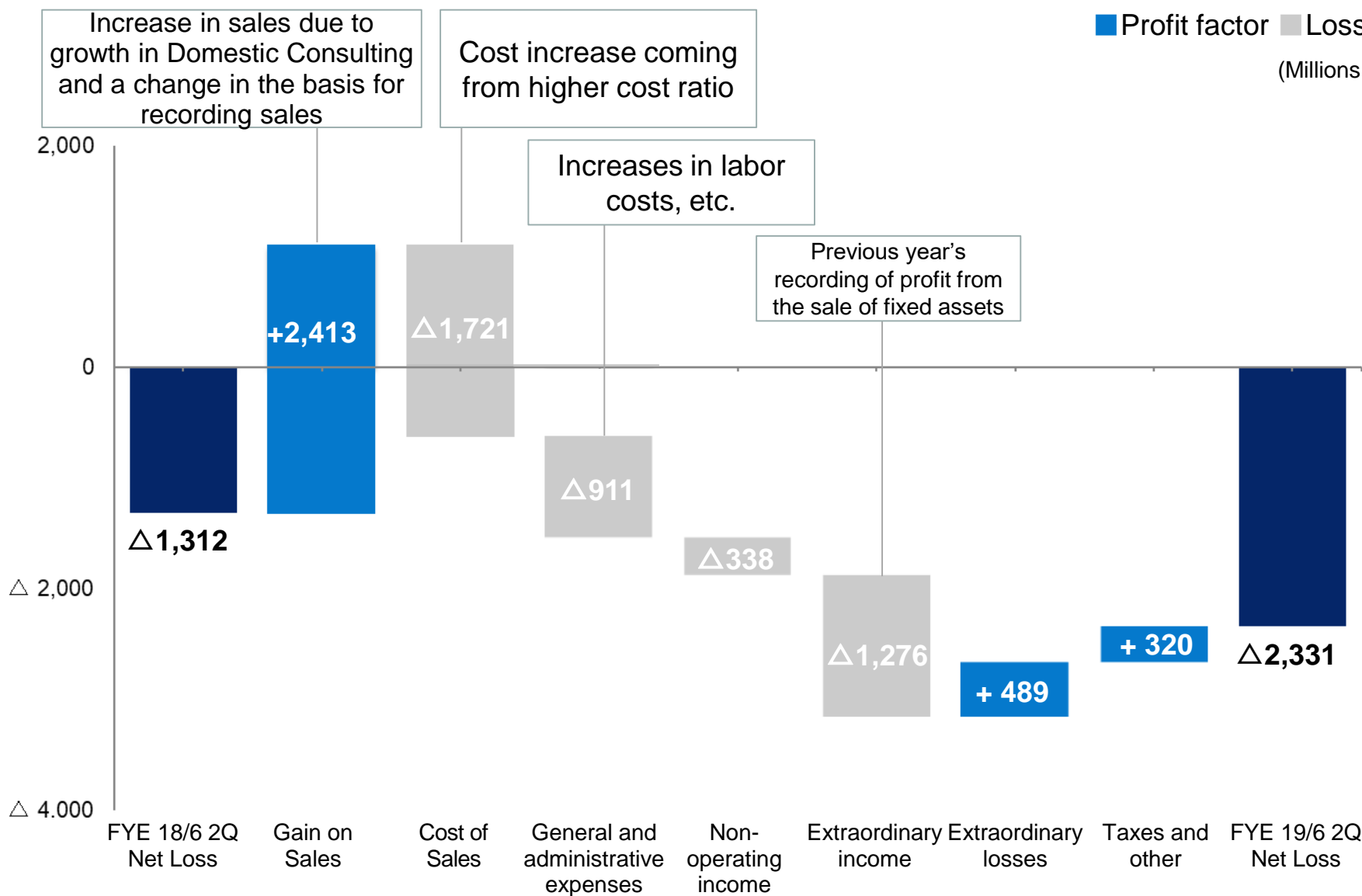
Consolidated Profit and Loss Summary (FYE 19/6 1H)

Selling, general and administrative expenses increased due to investment for growth, e.g., labor costs.

(Millions of yen)	FYE18/6 2Q Results		FYE19/6 2Q Results		YoY Change	
					Amount	%
Orders	47,832	(as a percentage of sales)	47,707	(as a percentage of sales)	△ 125	99.7%
Net sales	31,233	100.0%	39,146	100.0%	7,912	125.3%
Cost of sales	21,709	69.5%	28,930	73.9%	7,220	133.3%
Gross profit	9,523	30.5%	10,215	26.1%	691	107.3%
SG&A	12,121	38.8%	13,033	33.3%	911	107.5%
Operating income	△2,597	△8.3%	△ 2,817	△ 7.2%	△ 219	-
Non-operating income / expenses	253	0.8%	△ 84	△ 0.2%	△ 337	-
Ordinary income	△2,344	△7.5%	△ 2,901	△ 7.4%	△ 557	-
Extraordinary income/loss	787	2.5%	-	-	△ 787	-
Profit attributable to owners of parent	△ 1,312	△4.2%	△ 2,331	△ 6.0%	△ 1,019	-

Profit/Loss Analysis

■ Profit factor ■ Loss factor
(Millions of yen)



Balance sheet

- In the current assets section, trade accounts receivable increased with further progress in shifting to the percentage-of-completion method
- Investments and other assets decreased as a result of the sale of investment securities
- Current liabilities increased due to an increase in short-term borrowings
- Net assets declined due to current loss and dividend payment, etc.

(Millions of yen)	FYE18/6 Results	FYE19/6 2Q Results	Amount
Assets	113,890	122,072	8,182
Current assets	54,263	63,909	9,645
Property, plant and equipment	27,624	27,961	337
Intangible assets	12,964	12,106	△858
Investments and other assets	19,037	18,095	△942
Liabilities	54,440	67,049	12,609
Current liabilities	28,441	43,161	14,720
Non-current liabilities	25,999	23,887	△2,111
Net assets	59,449	55,022	△4,426

Cash Flows

- For net cash from operating activities, negative cash flow was reduced due to increases/decreases in trade receivables/payables
- Net cash from investing activities declined year-on-year due to the previous year's recording of a gain on the sale of land.
- Net cash from financing activities increased due to an increase in short-term borrowings

(Millions of yen)	FYE18/6 2Q Results	FYE19/6 2Q Results	YoY
Net cash provided by (used in) operating activities	△15,319	△13,816	1,502
Net cash provided by (used in) investing activities	2,504	△310	△2,814
Net cash provided by (used in) financing activities	6,833	14,636	7,803
Net increase (decrease) in cash and cash equivalents	△5,848	335	6,184
Cash and cash equivalents at the end of period	11,234	15,569	4,334

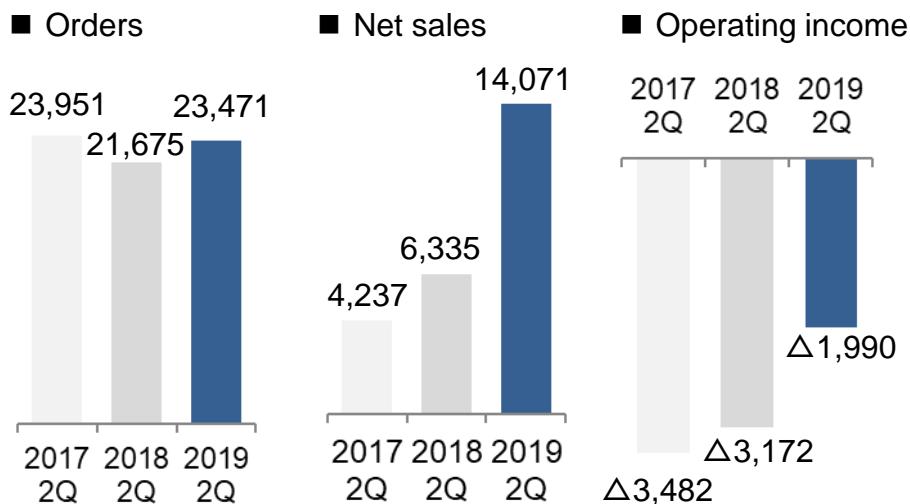
Results by Business Segment (Orders/Net Sales)

(Millions of yen)	FYE18/6 2Q Results	FYE19/6 2Q Results	YoY Change Amount	YoY Change %
Orders	47,832	47,707	△125	99.7%
Domestic Consulting	21,675	23,471	1,795	108.3%
International Consulting	14,197	11,569	△ 2,627	81.5%
Power Engineering	6,598	4,568	△ 2,030	69.2%
Urban & Spatial Development	5,356	7,824	2,467	146.1%
Energy	-	225	225	-
Net sales	31,233	39,146	7,912	125.3%
Domestic Consulting	6,335	14,071	7,736	222.1%
International Consulting	12,731	10,685	△ 2,045	83.9%
Power Engineering	5,608	6,718	1,110	119.8%
Urban & Spatial Development	6,209	6,761	551	108.9%
Energy	-	364	364	-
Real Estate/Others	349	543	194	155.8%
Operating Income	△ 2,597	△ 2,817	△ 219	-
Domestic Consulting	△ 3,172	△ 1,990	1,182	-
International Consulting	1,397	△ 72	△ 1,470	-
Power Engineering	240	519	279	216.4%
Urban & Spatial Development	△ 10	△ 21	△ 11	-
Energy	-	△ 113	△113	-
Real Estate/Others	△ 1,053	△ 1,139	△86	-

Domestic Consulting

- Orders exceeded the level recorded a year earlier, because large contracts were awarded by municipalities, and because of strong orders for projects in the private sector.
- Net sales increased due to strong orders in the current period as well as a rise in the proportion of projects to which the percentage-of-completion method is applied.
- Operating loss was reduced with an increase in net sales.

(Millions of yen)	FYE18/6 2Q Results		FYE19/6 2Q Results		YoY Change	
					Amount	%
Orders	21,675	(as a percentage of sales)	23,471	(as a percentage of sales)	1,795	108.3%
Net sales	6,335	100.0%	14,071	100.0%	7,736	222.1%
Cost of sales	5,343	84.4%	11,652	82.8%	6,308	218.1%
Gross profit	991	15.6%	2,419	17.2%	1,427	244.0%
SG & A	4,163	65.7%	4,409	31.3%	245	105.9%
Operating income	△3,172	△50.1%	△1,990	△14.1%	1,182	-



Progress of business strategy

- Won several contracts worth 100 million yen or above each as a result of successful promotional activities toward municipalities. For NK alone, orders from municipalities increased by 20% year-on-year.
- Orders for high-margin, competitive tender projects remained at the same high level as the previous year.
- According to the November 2019 Dynamics Survey of 50 major companies conducted by the Ministry of Land, Infrastructure, Transport and Tourism, NK has a 6.6% market share of the Japanese market, an increase of 0.3 pts year-on-year.
- CIM-related business has increased. Actively make proposals to orders.

Project Case Study / Domestic Consulting

Development of a flood forecasting system in the Chugoku region

Orderer	River Department, Chugoku Regional Development Bureau
Contract value	250 million yen
Summary of project	<ul style="list-style-type: none"> • Building of a flood forecasting system for the first-class river systems (12 river systems) in the Chugoku region • Improve forecasting accuracy by employing new methods for flood forecasting, including using data on water levels measured at many locations and applying the particle filter-based data assimilation method



Source: Chugoku Regional Development Bureau

Western Japan heavy rain disaster recovery project

Orderer	Chugoku Regional Development Bureau; Hiroshima Prefectural Government; Higashihiroshima City Government; and Kurashiki City Government
Contract value	280 million yen (in total)
Summary of project	<ul style="list-style-type: none"> • A series of activities to address the heavy rain disaster in July 2018 • Planning, design and construction for restoration of the Oda River in the Takahashi River system, which flooded into Mabi, Okayama Prefecture. Investigation of damage, preparation of damage assessment documents and design that cover hundreds of locations in Hiroshima Prefecture that were affected by river and landslide disasters <p>* Activities under way are also included.</p>

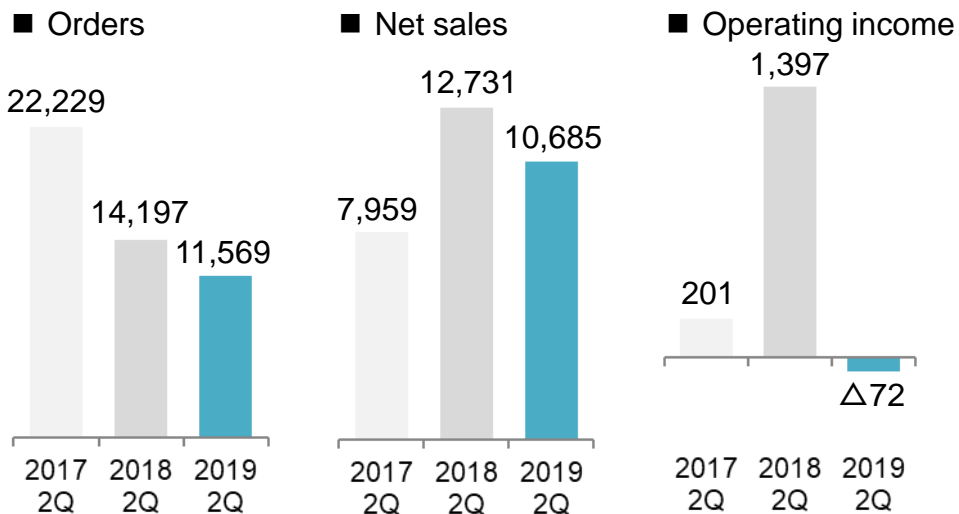


Source: Chugoku Regional Development Bureau

International Consulting

- Orders fell below the level a year earlier, because of a lag in the timing of receiving an order for a large-scale project and also because of delays in tender invitations for JICA projects.
- Net sales declined year on year, because the months under review comprise a period between two phases of a large-scale project and also because there was a lag in the timing of receiving an order.
- Operating loss was posted as a result of a lower operating rate due to a lag in the timing of receiving an order, in addition to a decline in net sales.

(Millions of yen)	FYE18/6 2Q Results		FYE19/6 2Q Results		YoY Change	
					Amount	%
Orders	14,197	(as a percentage of sales)	11,569	(as a percentage of sales)	△ 2,627	81.5%
Net sales	12,731	100.0%	10,685	100.0%	△ 2,045	83.9%
Cost of sales	8,986	70.6%	8,107	75.9%	△ 878	90.2%
Gross profit	3,745	29.4%	2,578	24.1%	△ 1,166	68.8%
SG & A	2,347	18.4%	2,650	24.8%	303	112.9%
Operating income	1,397	11.0%	△ 72	△0.7%	△ 1,470	-



Progress of business strategy

- Orders for projects in the railway sector, one of our priority investment areas, grew by 167% year on year; however, a further increase will be needed to achieve the plan.
- For the development and nurturing of local engineers, the assignment of such engineers to NK's projects is being conducted steadily, standing at 50% of the level set in the annual plan.
- A task force has been formed to ensure the thorough implementation of risk management.
- Enhanced approaches to non-ODA related businesses, such as concession business

Project Case Study / International Consulting

Peru: Yellow Line (Road) Project

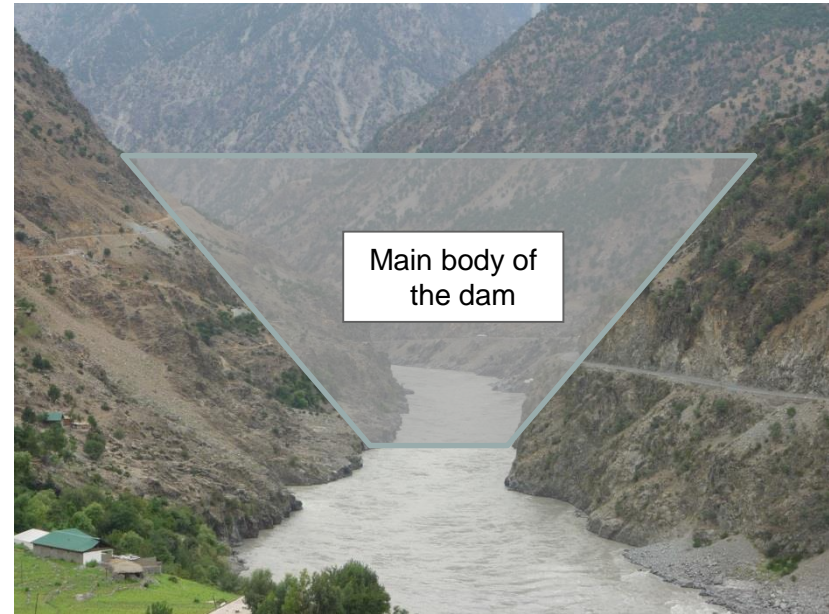
Location	Lima, Peru
Contract construction period	2010-2018
Contract value	approx. 1,800 million yen
Parties involved	JV of Nippon Koei LAC and Nippon Koei; engineers seconded from Nippon Civic Consulting Engineers Co., Ltd.
Summary of project	<ul style="list-style-type: none">• Engaged in design, review, construction supervision and management, as well as project management, as a consultant for the Lima Municipal Government, which is the concession project supervisor• Total distance: 18.45 km (new road length: 9 km, widened road length: 9.45 km)(including the 2 km length of tunnels and 13 raised intersections)• In order to construct a tunnel underneath the Trujillo Bridge, a historical structure built in 1610, the stone bridge needs to be maintained through a construction method that prevents the subsidence of the land on which the existing structure is located.



Project Case Study / International Consulting

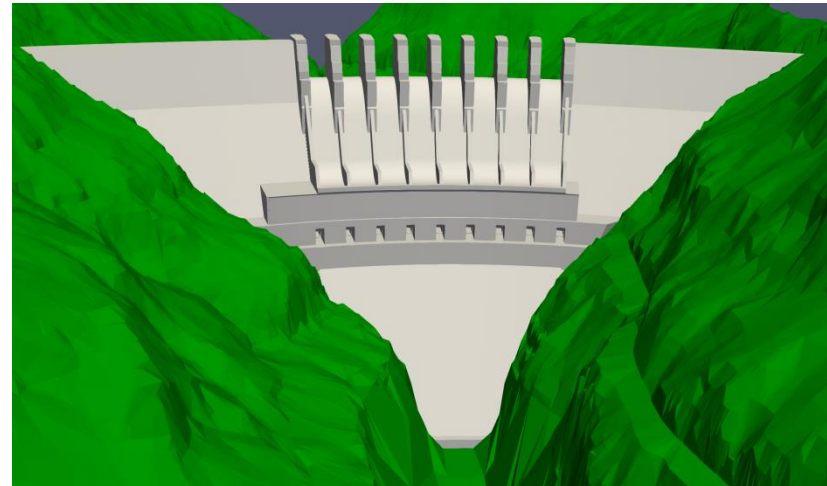
Pakistan: Dasu Hydropower Project

Location	Pakistan Kohistan District in Khyber Pakhtunkhwa Province
Contract construction period	2011–2023
Contract value	approx. 3,600 million yen
Parties involved	JV of five companies: Nippon Koei (lead firm), DOLSAR (Turkey), and three local companies
Summary of project	<ul style="list-style-type: none">• A large-scale dam that is unparalleled in the world. The project is led by the Water and Power Development Authority (WAPDA).• The dam is planned to be constructed on the main stream of the Indus River, and will be located 350 km north of Pakistan's capital, Islamabad, and 7 km upstream from Khyber Pakhtunkhwa Province.• Consultants are engaged in detailed engineering, bidding support, as well as construction supervision and management.• Height of dam: 242m• Power generation capacity: 4,320MW (360MW x 12 units)• RCC gravity dam, an underground power supply type



Main body of the dam

Location of the dam seen from the lower river



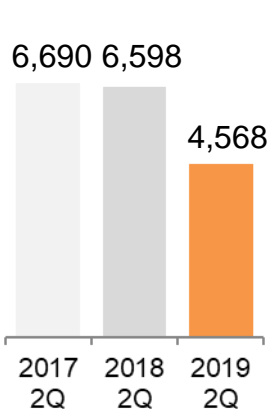
A 3D model of the dam and topography

Power Engineering

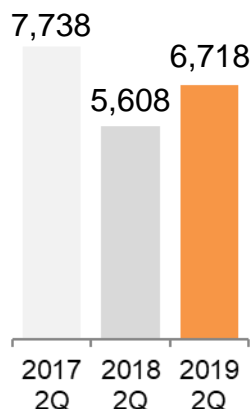
- Compared with the previous year, in which contracts for large-scale projects were awarded, orders for the period under review declined, but still remain at the planned level.
- Net sales increased as the abundance of outstanding orders received through the previous year were recognized as sales.
- Operating income increased due to sales growth.

(Millions of yen)	FYE18/6 2Q Results		FYE19/6 2Q Results		YoY Change	
					Amount	%
Orders	6,598	(as a percentage of sales)	4,568	(as a percentage of sales)	△ 2,030	69.2%
Net sales	5,608	100.0%	6,718	100.0%	1,110	119.8%
Cost of sales	3,859	68.8%	4,727	70.4%	867	122.5%
Gross profit	1,749	31.2%	1,991	29.6%	242	113.8%
SG & A	1,509	26.9%	1,472	21.9%	△37	97.5%
Operating income	240	4.3%	519	7.7%	279	216.4%

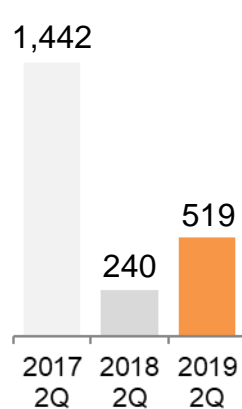
■ Orders



■ Net sales



■ Operating income



Progress of business strategy

- Tokyo Electric Power Company increased competitive bidding projects for its substation facilities, among contract awarding methods. As it was difficult to win contracts, we made a positive shift to making proposals by capitalizing on our strengths.
- The mechanical and electrical consulting business performed well, with accelerated expansion into overseas markets.
- In response to price competition and requests for cost-cutting, continued efforts to review designs and specifications and to ensure efficient operations.

Project Case Study / Power Engineering

Project for replacement of remote monitoring and control equipment, etc. at Shinkeiyo Substation

Orderer	TEPCO Power Grid
Summary of project	<ul style="list-style-type: none">• NK had been engaged in many engineering projects for the Shinkeiyo Substation, including new construction, construction and updating work. Our track record was highly recognized, which led to the awarding of the contract.• Full updating of the remote monitoring and control equipment in the high-voltage substation of over 500 kV, for purposes of maintaining functions and improving electric supply reliability



The remote monitoring and control equipment before replacement work

Hotokebara Dam control system update project

Orderer	Hokuriku Electric Power Company
Summary of project	<ul style="list-style-type: none">• Updating of a unit of systems in the Hotokebara Dam in Fukui Prefecture, for monitoring and controlling the water discharge facilities (gates, bulbs, etc.) and for supporting proper operation• The systems are capable of intensive monitoring and control from the administration office near the dam and also from remote control points. Aiming to develop a function to display guidance information for error-free dam operation• Completion is scheduled for March 2019



Dam control system

Project Case Study / Power Engineering

Pacifico Energy Bizen Mega Solar Project

Summary of project

- Won a contract for owner engineering services for the Bizen Mega Solar Project (electricity generation capacity of 112 MW) at the former site of a golf course in Wake District, Okayama Prefecture
- As an engineer for the operator, provide support in design, supervision and management of construction work as well as assessment of electricity generation efficiency.
- Construction commenced in August 2018, and commercial operation is scheduled to be launched in around the spring of 2020



Project site (source: Pacifico Energy)

Improvement plan for the Philippines Bicol River Flood Forecasting and Warning System

Location	Bicol Region, Southern Luzon in the Philippines
Contract construction period	November 2011–February 2019 (to be delivered)
Order value	approx. 150 million yen
Parties involved	This plan is led by Power Engineering Operations, which collaborates with overseas business units.
Summary of project	<ul style="list-style-type: none">• An ODA project for the Philippine Atmospheric, Geophysical and Astronomical Services Administration• Engaged in preliminary investigations, detailed engineering, bidding support, as well as construction supervision and management with respect to a flood forecasting and warning system consisting of rain gauge stations, water level measurement stations, and microwave wireless telecommunications lines, for the purpose of reducing flood damage in the Bicol River Basin



Flood forecasting and warning system

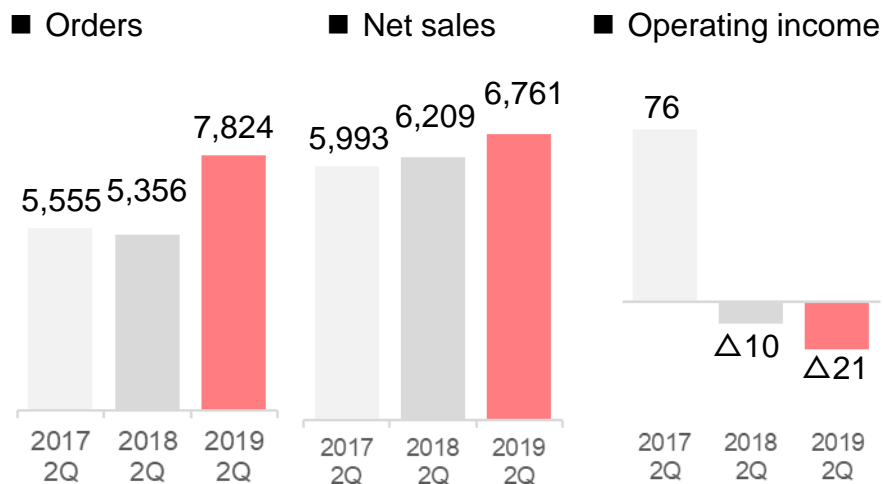
Urban & Spatial Development

- Orders were strong with a contract officially awarded for the Palace of Westminster project.
- Net sales increased from the previous year due to progress in the Palace of Westminster-related operations, among others.
- Operating loss expanded due to anticipatory costs, such as an increase in labor costs.

Note: Amortization and depreciation for FYE June 2019 stood at approx. 1,000 million yen (good will: 400 million yen, other intangible fixed assets: 500 million yen).

(Millions of yen)	FYE18/6 2Q Results		FYE19/6 2Q Results		YoY Change	
					Amount	%
Orders	5,356	(as a percentage of sales)	7,824	(as a percentage of sales)	2,467	146.1%
Net sales	6,209	100.0%	6,761	100.0%	551	108.9%
Cost of sales	3,346	53.9%	3,861	57.1%	514	115.4%
Gross profit	2,862	46.1%	2,900	42.9%	37	101.3%
SG & A	2,873	46.3%	2,922	43.2%	49	101.7%
Operating income	△10	△0.2%	△21	△0.3%	△11	-

* The exchange rate applied to actual results for FYE June 2019: 1£=144.61 yen (The exchange rate applied in the plan for FYE June 2019: 1£=149.17 yen / The exchange rate applied to actual results for FYE June 2018 Q2: 1£=148.37 yen)



Progress of business strategy

- The Palace of Westminster refurbishment project has progressed.
- Partnership with a Canadian architectural design firm → P.28
- As a result of promotional activities toward ASEAN, the NK Group is currently working on 13 projects → P.31

Project Case Study / Urban & Spatial Development

Refurbishment of the Palace of Westminster

Orderer British parliament

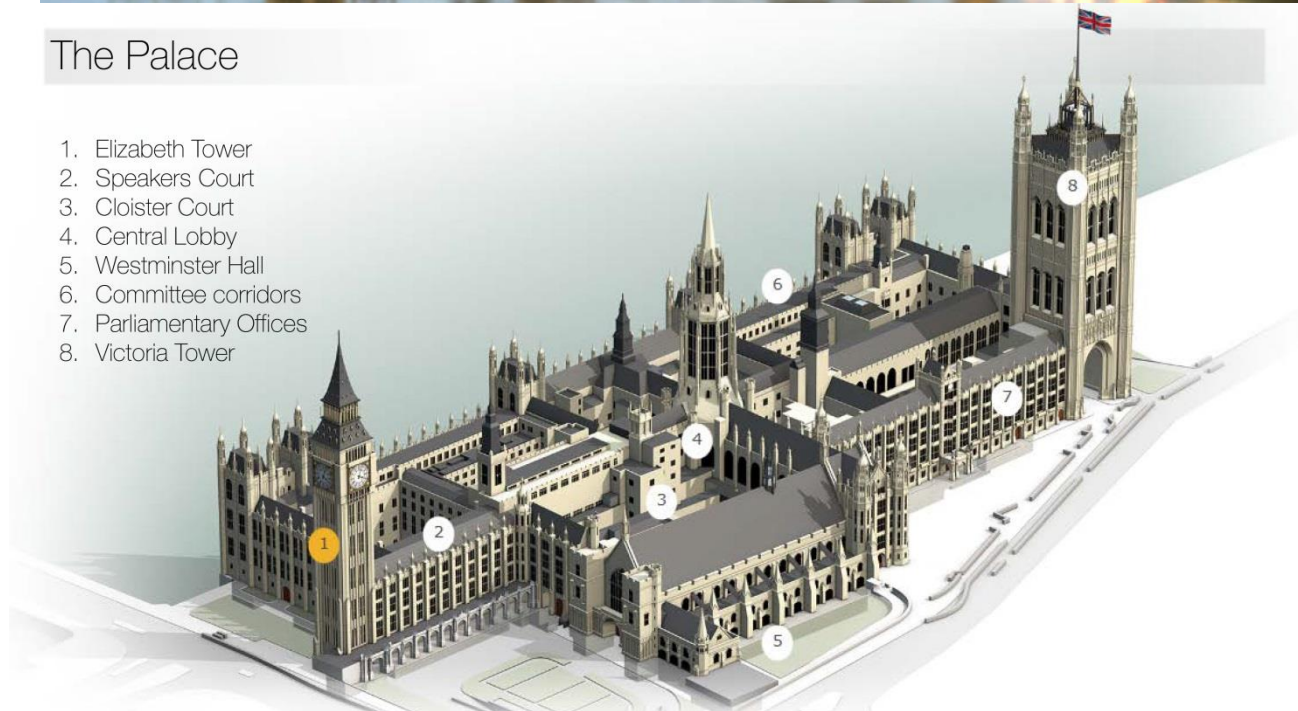
Summary of project

- Overall architectural design tasks for major renovation of the Palace of Westminster
- The project plan consists of plans for Stages 0–7, and a basic plan is currently being implemented in Stage 1.
- Cumulative orders received up to February 2019 amounted to more than approx. 4,000 million yen.



The Palace

1. Elizabeth Tower
2. Speakers Court
3. Cloister Court
4. Central Lobby
5. Westminster Hall
6. Committee corridors
7. Parliamentary Offices
8. Victoria Tower



Project Case Study / Urban & Spatial Development

Cavendish III Physics Laboratory

Orderer	The University of Cambridge
Contract value	500 million yen
Summary of project	<ul style="list-style-type: none">• Construction of a physics laboratory for world-leading research on the premises of the University of Cambridge• BDP's facility design, structural analysis, and sound teams are participating in the project



National Children's Hospital, Dublin, Republic of Ireland

Orderer	National Pediatric Hospital Development Board Irish Government
Contract value	2,900 million yen (cumulative value of orders received by BDP)
Summary of project	<ul style="list-style-type: none">• A central facility in Ireland for pediatric healthcare• BDP has been engaged in basic planning and basic design since 2014, and continues to work on the project through design execution• Scheduled to be completed in 2022

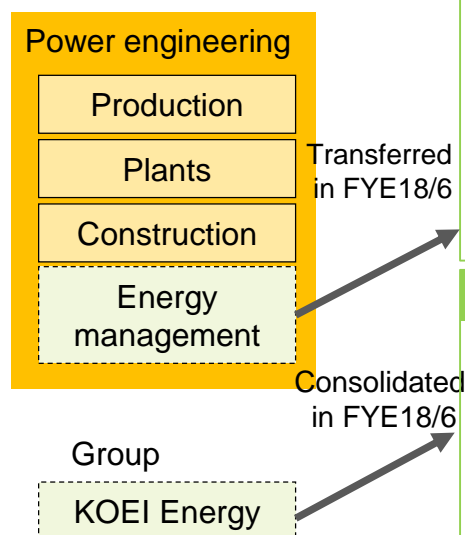


Energy

- Orders for renewable energy (solar) monitoring services, etc. made progress.
- Net sales include revenue from monitoring services and electric power sales in the Domestic Power Generation business.
- There was operating loss due to anticipatory costs for the International Energy Management business.

(Millions of yen)	FYE19/6 2Q Results	
Orders	225	(as a percentage of sales)
Net sales	364	100.0%
Cost of sales	293	80.4%
Gross profit	71	19.6%
SG & A	184	50.5%
Operating income	△113	△31.0%

Energy business areas/progress



Domestic energy management

Renewable energy monitoring/consulting services for rational use of energy



- Won two contracts for an extra high-voltage power plant monitoring system (a track record of five contracts)
- Introduced a battery energy storage system in R&D Center; currently working on the VPP demonstration project funded by METI

International energy management

Ancillary and other services, investment



- Working on two projects for battery storage EPC services in the UK in collaboration with NEC ES
- Established an SPC with Belgian company Yuso BVBA, and projects are being developed

Domestic power generation

Development and operation of hydropower facilities in Japan



- Seven hydropower plants are in operation in Japan, while two plants are under construction
- Won a contract for a power generation facility with a spiral water turbine, which is under construction

International power generation

Development and operation of power facilities abroad



- Development of a small hydropower generation facility in the Cikaengan River Basin, Indonesia
- Working on the Biomass Fuel Power Generation Project in Mindanao, Philippines

Project Case Study / Energy

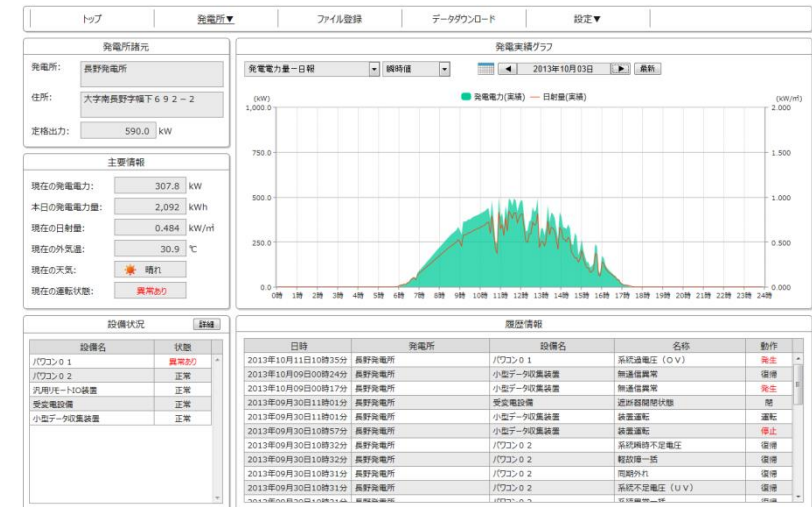
Project for Introduction of a Small Hydropower Generation Facility in Midori Dam

Orderer	Hokkaido Government Okhotsk General Subprefectural Bureau
Contract value	760 million yen
Summary of project	<ul style="list-style-type: none"> A project for constructing a small hydropower generation facility (with an output of 500 kW) in an existing agricultural dam (Midori Dam) situated in Kiyosato, Hokkaido By emphasizing our technical capabilities and proven track record, we won a contract in the form of a package contract consisting of three phases, i.e., engineering, procurement and construction (EPC) Collaboration of three segments: Domestic Consulting (Sapporo branch), Power Engineering, and Energy Scheduled completion date: May 2021



Solar power plant monitoring system

Contract value	46 million yen
Summary of project	<ul style="list-style-type: none"> Won a contract involving a solar power station monitoring system for a large-scale solar power plant (with a maximum capacity of approx. 37 MW) built on the former site of a golf course named Fukushima Ishikawa Country Club Deliver the monitoring system, deploy engineers, and implement monitoring services The largest monitoring system for an extra high-voltage power plant among similar systems awarded to NK



An image of the monitoring display






II: FYE 19/6 Forecast

FYE June 2019 Forecast

No changes have been made to the forecast for the entire FYE June 2019 period.

(Millions of yen)	FYE 18/6 Results	FYE19/6 Forecast	YoY Change Amount	YoY Change %
Orders	104,350	125,000	20,649	119.8%
Domestic Consulting	48,529	46,000	△ 2,529	94.8%
International Consulting	26,716	44,000	17,283	164.7%
Power Engineering	15,943	14,000	△ 1,943	87.8%
Urban & Spatial Development	12,855	16,000	3,144	124.5%
Energy	179	4,000	3,820	2,228.6%
Net sales	106,023	115,000	8,976	108.5%
Domestic Consulting	46,595	44,000	△ 2,595	94.4%
International Consulting	28,889	31,000	2,110	107.3%
Power Engineering	15,762	20,000	4,237	126.9%
Urban & Spatial Development	13,040	16,500	3,459	126.5%
Energy	354	2,500	2,145	704.6%
Real Estate/Others	1,381	1,000	△ 381	72.4%
Operating Income	6,561	6,200	△ 361	94.5%
Domestic Consulting	4,279	3,500	△ 779	81.8%
International Consulting	2,649	2,400	△ 249	90.6%
Power Engineering	1,873	2,600	726	138.8%
Urban & Spatial Development	173	600	426	345.2%
Energy	△ 18	△ 100	△ 81	-
Real Estate/Others	△ 2,396	△ 2,800	△ 403	-
Ordinary Income	6,721	6,100	△ 621	90.8%
Profit attributable to owners of parent	4,555	4,100	△ 455	90.0%
Operating margin (%)	6.2	5.4		
ROE (%)	8.1	6.9		

FYE June 2019 Forecast

Overall		The overall plan will be achieved with the strong performance of the Domestic Consulting and Urban & Spatial Development segments, although there remain uncertain factors regarding the achievement of the profit plan for the International Consulting and Power Engineering segments
Domestic Consulting		<ul style="list-style-type: none">• With the budget for National Resilience totaling 7 trillion yen (through FY2021), orders will increase• Make efforts to win large-scale/important projects
International Consulting		<ul style="list-style-type: none">• Seek to ensure that large contracts are won as market conditions are favorable
Power Engineering		<ul style="list-style-type: none">• In the second half, it is hoped that large-scale projects will progress, while there is a concern that profitability may decrease for projects involving major clients
Urban & Spatial Development		<ul style="list-style-type: none">• The Westminster-related business and healthcare projects make progress• A positive outlook owing to the addition of Canadian firm Quadrangle
Energy		<ul style="list-style-type: none">• The European base begins full operation in April 2019

III: Progress of Priority Investment Areas in the Medium-term Management Plan

Medium-term Management Plan "NK-Innovation 2021" (FYE19/6 - FYE21/6)

In the first half of FYE June 2019, full operation of the railway business was commenced in Bangladesh, while the addition of a Canadian architectural design firm to the Group generated positive effects

Business strategy	Key initiatives	Initiatives in FY2019
Enhancement of operating system for Railways Business	<ul style="list-style-type: none"> ● Develop and strengthen the production system in alliance, etc., with local companies ●● Improve project management ability by further evolution of IT tools ●●● Strengthen technological abilities of regional engineers with teaching materials from the head office and the implementation of OJT 	<ul style="list-style-type: none"> Winning large-scale projects in Bangladesh Establishment of a local subsidiary
Overseas expansion of Urban & Spatial Development Business	<ul style="list-style-type: none"> ● Develop a cooperative structure between the NK Group and BDP local subsidiaries (Singapore, India and China) to win urban development projects in Asia and specific projects ● Strengthen the superiority and uniqueness in smart city development by accumulating track records of projects combining civil engineering and architecture ●●● Construct cooperative structures with each segment and R&D Center led by domestic divisions for the acceleration of global expansion utilizing domestic know-ho 	<ul style="list-style-type: none"> Acquisition of shares in a Canadian architectural design firm Expansion of projects in Asia
Establishment of Energy Business	<ul style="list-style-type: none"> ● Engage in investment and business in Europe where liberalization of electric power is under way to accumulate the know-how for energy management in anticipation of electric power system reform ●●● Construct a supply chain by securing overseas manufacturing bases of water power products ●● Develop products by international standards (mainly equipment for transformer substations) ●●● Develop and operate distributed power sources in Japan and Asian region 	<ul style="list-style-type: none"> Establish a business base in Europe
Creation of businesses and overseas expansion of Consulting Business	<ul style="list-style-type: none"> ●●● Reinforcement of domestic management base and support for the promotion of global strategies ● Promotion of priority business areas(Disaster-prevention/mitigation. Modal connect, local/urban revitalization, information/energy areas) ● Creation of new businesses centered on management techniques to improve the value of infrastructure 	
Product development and overseas expansion of Power Engineering Business	<ul style="list-style-type: none"> ● Expansion of machine/electricity consulting business by offering services relating traffic transportation and maintenance/management, etc. ●●● Achievement of synergies through cooperation with other segments ● Reinforcement of price competitiveness and improvement of productivity in existing business areas 	

- Domestic Consulting
- International Consulting
- Power Engineering
- Urban & Spatial Development
- Energy
- R&D, Head Office

Priority investment area (1)

Enhancement of operating system for Railways Business

Market trends

World population

7.6 billion in 2018



Expected to reach
approx. 9.8 billion by
2050*

Proportion of urban population

55% at present



Expected to
reach 68% by
2050**

* World Bank data

** United Nations World Urbanization Prospects: The 2018 Revision

- The global consulting market is stable and its market size stands at approx. 7.5 trillion yen a year.
- Japan's ODA loans stand at approx. 1.5 trillion yen a year. Its ODA loans to the transportation sector have increased. It is hoped that the amount of loans provided to the railway sector and to the transportation sector as a whole will remain at approximately 500 billion yen and 1 trillion yen, respectively.

Characteristics of railway business consulting

- Cover a wide range of specialty areas
Civil engineering (elevated/underground structures, tunnels, bridges, land formation), architecture (design, structure), architectural equipment, operational planning, demand forecasting, tracks, signals, telecommunications, etc.
- A large number of personnel are needed
e.g., 87 people engaged in designing the Dhaka MRT Line 1; 93 in construction supervision and management for the Cairo Metro Line 4



The team of
engineers
working on the
Dhaka MRT Line
6 project

- Significant workload for detailed engineering
e.g., 15,000 pages of drawings and 60,000 pages of structural calculation sheets for the Cairo Metro Line 4

Production system enhancement measures

- Increase and develop own personnel, and enhance management capabilities
- Increase in personnel from outsourcing companies
- Collaboration among overseas segments and with other segments/Group companies
- Business partnerships with other companies

Under the Medium-term Management Plan, the railway business sales target for FYE 21/6 is **8.8 billion yen**, an increase of **50%** in three years.

Priority investment area (1)

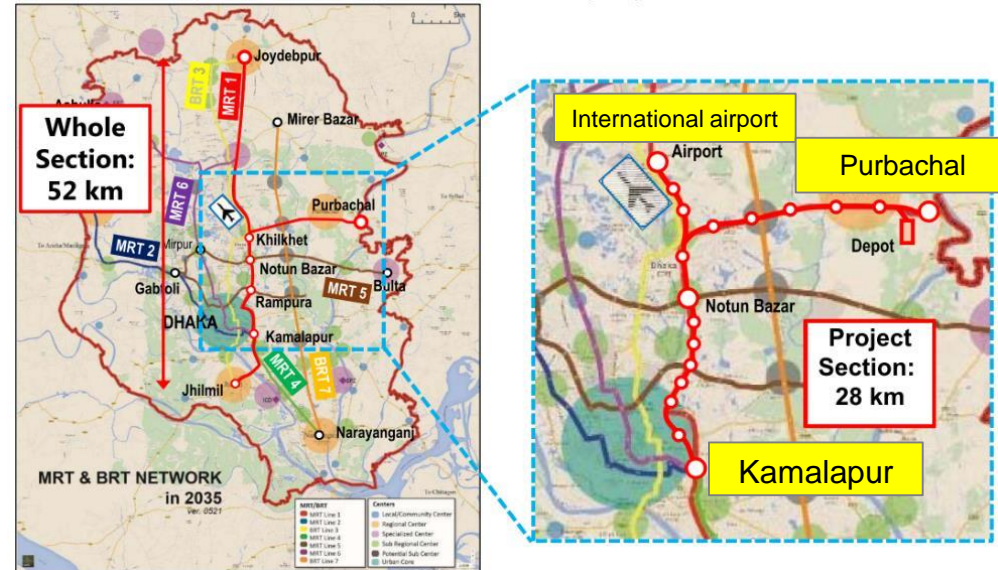
Enhancement of operating system for Railways Business

Won a contract for the Dhaka Mass Rapid Transit Development Project (Line 1) in

A contract for the Dhaka MRT Development Project (Line 1) was awarded to a joint venture formed by seven companies including the NK Group.

BIM is utilized for detailed engineering.

Total distance:	approx. 28 km
Total number of stations:	19 (provisional figure)
Project period:	Nov. 2018–Jun. 2022
Contract value:	approx. 3,200 million yen for the NK Group (total: approx. 5,250 million yen)



Establish a local corporation in Bangladesh

Established in September 2018. We are proactively developing human resources and nurturing local engineers so that they can develop into international engineers.



Recent Projects in Bangladesh for which a Contract Was Awarded

★ = railway projects included

Project name	Service period	Order value
Dhaka Mass Rapid Transit (MRT) Development Project (Line 1) ★	Nov. 2018–May 2022	3,117
Small-scale Water Resources Development Project (Phase 2)	Nov. 2018–Dec. 2023	556
Local Administration Enhancement Project	Jan. 2018–Jun. 2021	40
Expansion Project for Existing Airport in Dhaka	Apr. 2017–Apr. 2021	2,258
Project for Construction of New Airport in Dhaka	Jul. 2016–Mar. 2019	1,307
Matarbari Ultra Super Critical Coal-fired Power Project	Jan. 2015–Dec. 2023	1,508
National Transmission Network Development Project	Dec. 2013–Jun. 2019	278
Dhaka Mass Transit Development Project ★	Nov. 2013–Apr. 2023	3,722

Priority investment area (2)

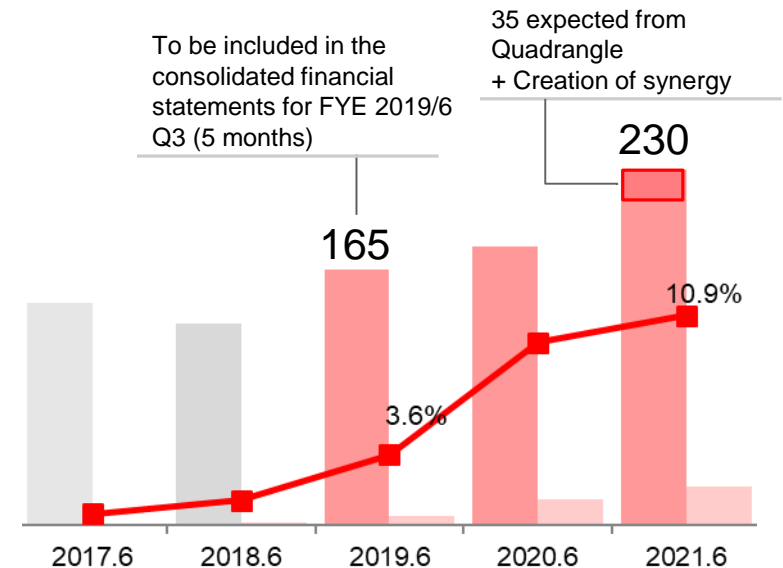
Overseas expansion of Urban & Spatial Development Business

Added a Canadian architectural design firm to the NK Group in February 2019 with an aim to expand markets outside the UK



Method of acquisition	BDP's local subsidiary in Canada acquired a 49% share in Quadrangle
Location	Toronto, Canada
Year of foundation	1986
Number of employees	approx. 200

Medium-term Management Plan sales forecast for Urban & Spatial Development (in 100 million yen)



Quadrangle's strong areas

- Multifunctional high-rise buildings
- Broadcasting facilities
- Universal design
- Interior design

BDP's strong areas

- Large-scale urban development
- Healthcare facilities
- Educational facilities
- Repair of historical structures

Expansion of businesses in both Canada and the UK through the combination of the two companies' strengths

Proportion of BDP's sales outside the UK

FYE 18/6

14%

FYE 20/6

30%

Priority investment area (2)

Overseas expansion of Urban & Spatial Development Business

Track record of Quadrangle Architects Limited

Characteristics of the Canadian market

- Has many similarities to the UK in terms of business practices
- PPP and concession business are thriving
- Construction demand is strong, with a significant number of high-rise building construction projects



Priority investment area (2)

Overseas expansion of Urban & Spatial Development Business

Track record of Quadrangle Architects Limited



Valhalla Urban Community
Toronto
Completion: 2025



80 Atlantic Avenue
Toronto
2019



100 Broadview Avenue
Toronto
2016



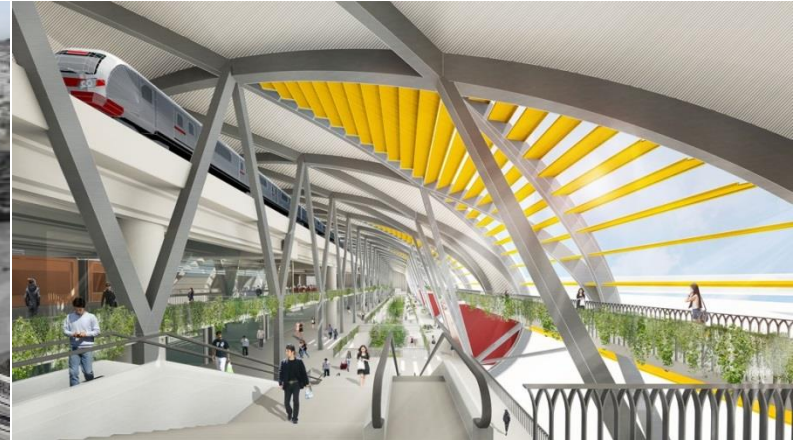
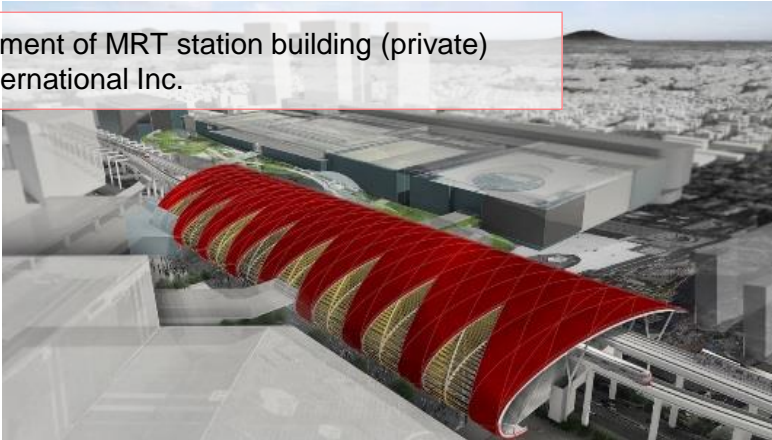
Samsung Electronics
Toronto
2017

Priority investment area (2)

Overseas expansion of Urban & Spatial Development Business

The NK Group, including BDP, is currently working on 13 projects in Asia

Philippines: development of MRT station building (private)
NK/BDP/Philkoei International Inc.



Thailand: Development of areas surrounding rapid transit stations
NK/BDP/Tamano Consultants/
Thai Koei



India: Smart Cities Development Project
NK India/BDP India



Priority investment area (3)

Establishment of Energy Business

Market environment

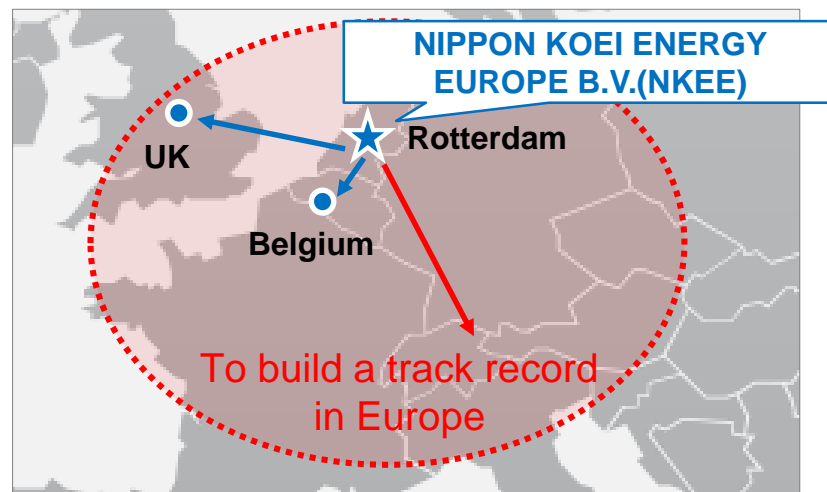
- The U.S. and Europe are ahead of the rest of the world in the ancillary power storage business and the mini grid VPP business
- In Asia, energy storage, distributed power source and other related businesses are in progress
- In Japan, preparations are being made toward the goal of separating power transmission from power generation in 2020, but at present, the situation is not clear

Establishing a business base in Holland for the energy business in Europe

Key activities

- Establishment of energy business in Europe
- Business development and sales promotion aimed at project formation
- Provision of information toward the development of power storage business in Asia and Japan
- EPC services, etc.

Steps for business development



FYE 18/6

FYE 19/6

FYE 20/6

Provide ancillary services to National Grid of the UK through our product (NK-EMS)

Investment in Gore Street Capital (renewable energy fund)

Develop 25 MW electric power storage system business with Yuso

Participate in battery storage EPC projects together with NEC ES

Establish a business base in Europe

Make achievements in the energy business in Europe, acquire relevant know-how and build a network in the industry

Develop projects in the energy storage system business, regulation, establish a profit structure through multiple services such as operational know-how

Develop the energy storage and distributed power source business in Asia and Japan

Technology / Human Resources

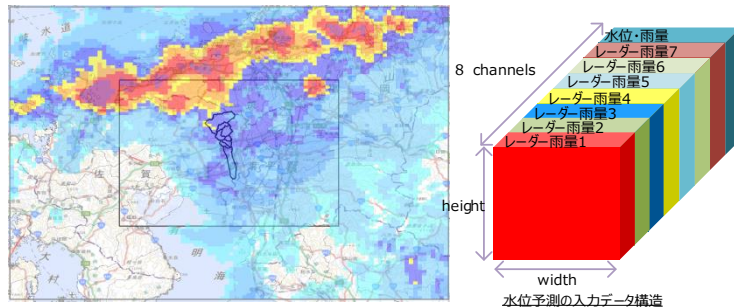
Technology

Promotion of company-wide technology strategies

- Steadily making progress. For the 10 themes in the third year after the launch, an assessment of possible continuation will be carried out, by taking into consideration the level of progress, information sharing and collaboration status, business status, etc.

Development of critical next-generation technology

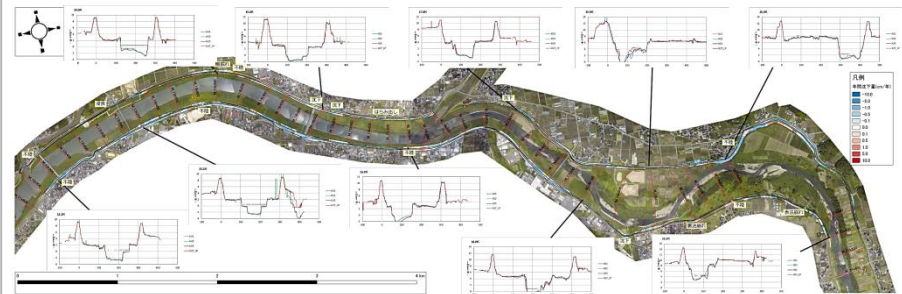
AI-based flood forecasting model



Won a contract for AI-based river technology development services.

(led by Kyushu Technology Office of the Ministry of Land, Infrastructure, Transport and Tourism; and R&D Center of Nippon Koei)

Satellite monitoring of infrastructure deterioration



This is a system that allows for efficient monitoring of infrastructural deterioration through the use of Earth observation satellites. As a result of demonstration experiments conducted on the banks of first-class rivers, the system was determined to have reached a level for practical use.

Human Resources

Human resources programs

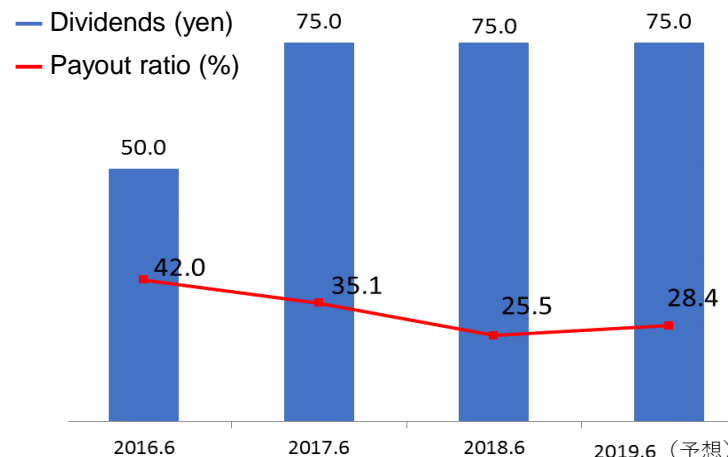
- Existing training programs are being operated smoothly, and new programs for skill improvement are to be launched.
- For overseas group companies, E-Learning contents will be distributed beginning in April 2019.

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

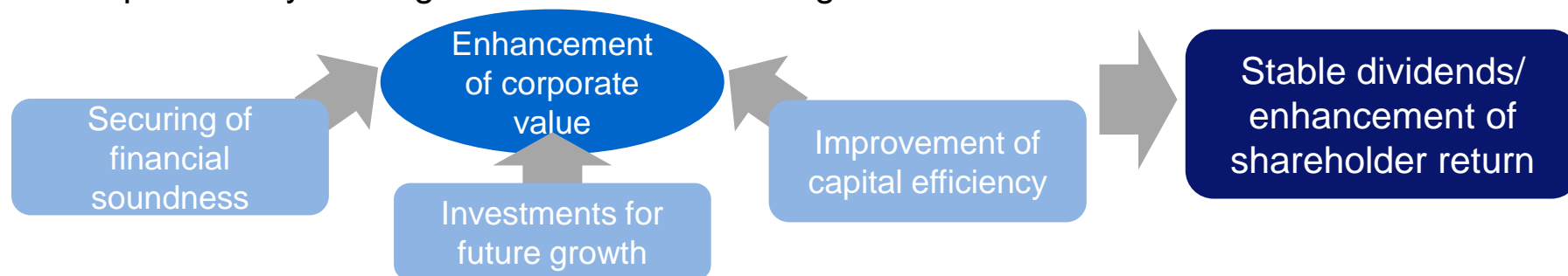
✓ Planning to pay a dividend of ¥75.0 for FYE 18/6.



*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 material is for information purposes only and is not intended to solicit any action. Nippon Koei prepared this material (including earnings forecast) based on credible information available at the time of publication and on certain assumptions we deemed reasonable at the time. Actual business results, etc. may vary substantially due to various factors.

For inquiries about our IR information, please contact:

Corporate Communication Office, Corporate Planning Dept., Nippon Koei Co., Ltd.

03-5276-2454

IV: References

Corporate Profile

■ Corporate Name	NIPPON KOEI CO., LTD.
■ Date of Foundation	June 7, 1946
■ Capital	¥7,437 million
■ Number of Employees	4,923 (consolidated)
■ Consolidated Subsidiaries	62
■ Businesses	Domestic Consulting International Consulting Power Engineering Urban & Spatial

Development

Energy

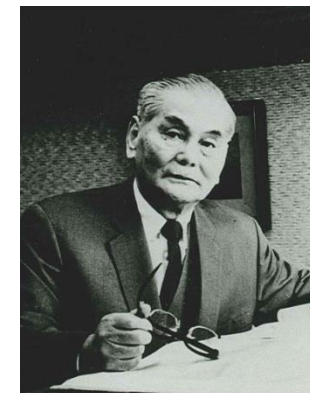
■ Management Philosophy

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).

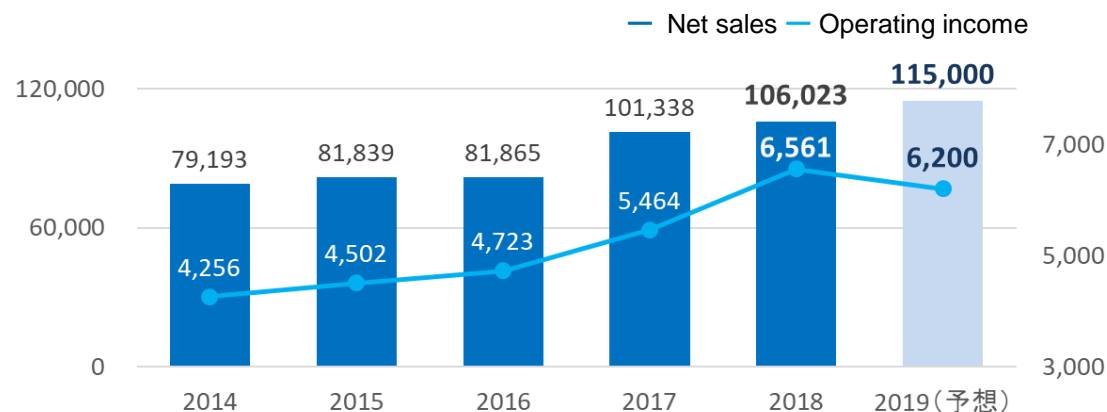
After the War, in a bid to work toward the restoration of Japan and reconstruction of countries damaged by the War, he founded the Company at the age of 56.



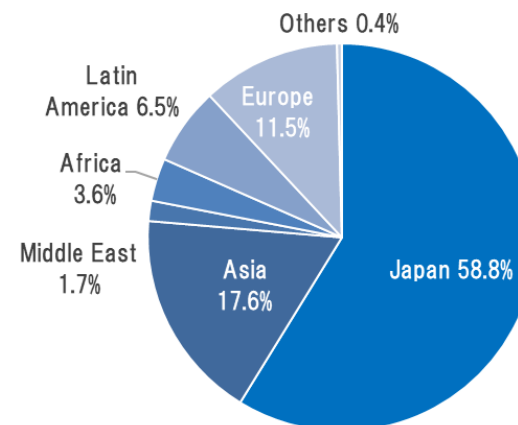
Known as the "Father of Overseas Engineering Cooperation", he was awarded the Grand Cordon of the First Order of the Rising Sun in 1985.

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

Transition of Sales / Operating Income (Millions of yen)



FY18/6 Sales by Geographical Location



Business Development

Domestic Consulting



We have 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



We have 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



We have 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



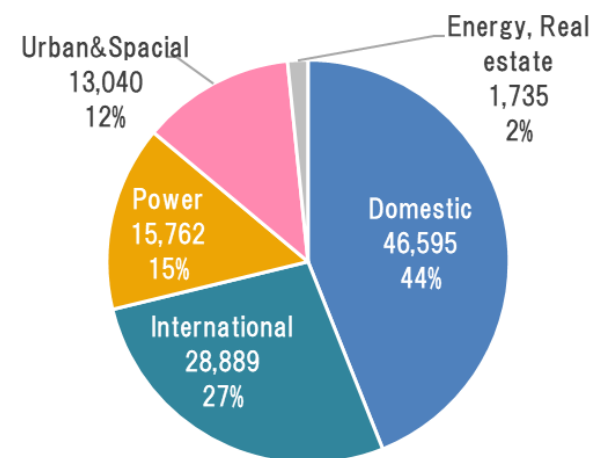
We strive to create multifunctional, well-organized, barrier-free, eco-friendly and beautiful life space in emerging economies in Asia and other developing countries/regions through development projects of social infrastructure design, such as of railway stations, airport buildings, rearrangement of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

Energy



Amid increasingly strict environmental regulations, we provide energy consultation and perform design and installation of hydropower/solar facilities in the field of renewable energy.

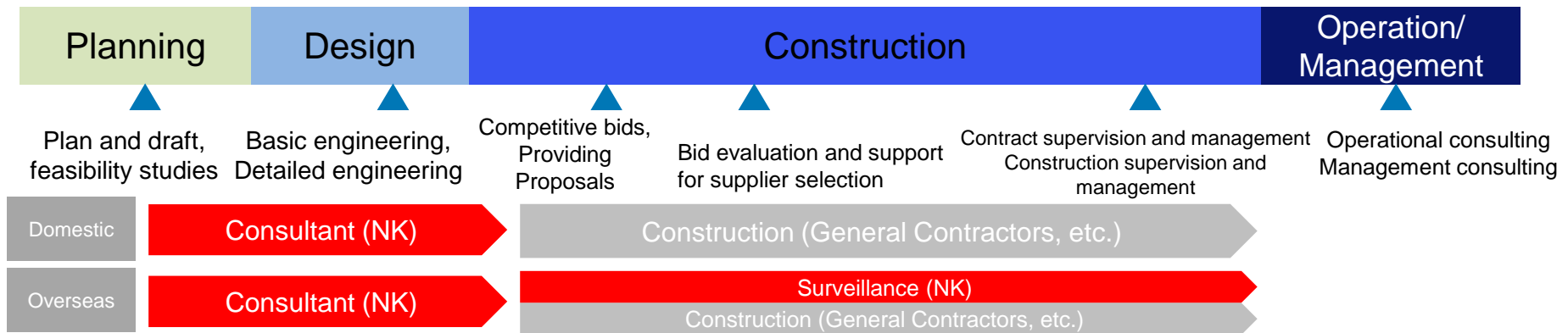
FY18/6 Sales distribution ratio



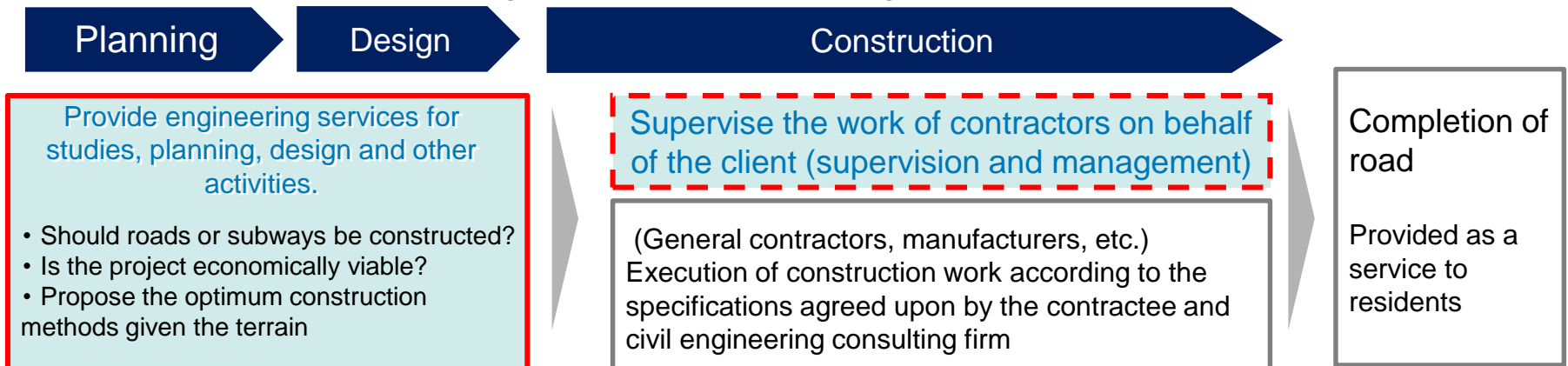
Job Description for Civil Engineering Consultants

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.

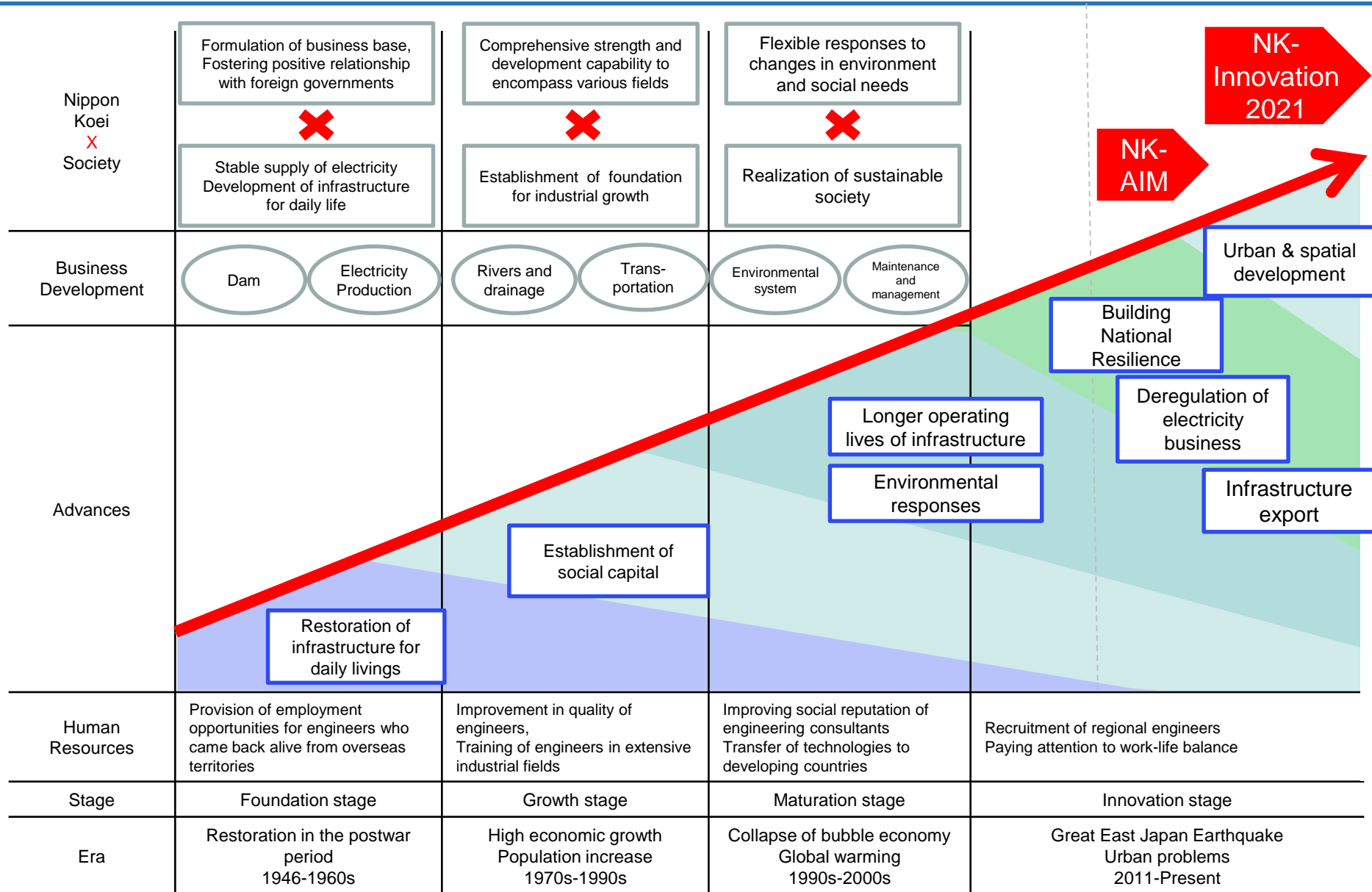
Overseas: Involvement varies by project, and can range from planning and construction to construction supervision and management. Core customers include the Japan International Cooperation Agency (JICA), other governmental agencies, the United Nations and the World Bank.



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:
¥106 billion

No. of countries in which business is undertaken:
160

No. of orders per year: over 5,500

No. of patents acquired:
92

No. of Professional Engineers*:
1,584

*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	45,379	61,734
2	Pacific Consultants Co.,LTD.	44,341	46,522
3	CTI Engineering Co., Ltd.	33,863	35,440
4	Yachiyo Engineering Co., Ltd.	20,402	20,747
5	JR East Consultants Company	19,591	21,008
6	Oriental Consultants Co., LTD.	19,143	19,186
7	Nihon Suido Consultants Co., Ltd	17,335	17,511
8	KOKUSAI KOGYO CO., LTD.	16,946	37,914
9	NEWJEC Inc.	16,463	16,812
10	IDEA Consultants, Inc.	16,420	16,880
18	Tamano Consultants Co., Ltd. (strong point: urban planning)	11,237	13,012
89	NIPPON CIVIC CONSULTING ENGINEERS CO.,LTD (strong points: underground spatial planning, tunnels)	1,992	2,001

※ Source: *Nikkei Construction*, April 23, 2018 edition. Ranking by engineering consultant division sales (according to published financial results)

Group Vision

To provide services that are of value in building safe and reliable social infrastructure and comfortable living spaces.



NK-Innovation 2021

Continue to evolve into a global consulting and engineering firm

To provide services that are of value in building safe and reliable social infrastructure and comfortable living spaces

NK-Innovation 2021

Net sales ¥140 billion

Operating income
¥12.6 billion
(IFRS)

2030 Social Development Goals (SDGs)



1st STEP

2nd STEP
NK-AIM

3rd STEP
NK-Innovation

Rapid progress of urbanization

Climate change and lack of natural resources

Changes in demographics

Progress in technologies

Higher geopolitical risks

Concentrated
investment areas
Common measures
for all companies

New Medium-term Management Plan "NK-Innovation 2021"

(FYE19/6 - FYE21/6)

- NK-Innovation 2021 -

Three years of tackling various innovations to become a truly global company

FYE2021/6 Plan (IFRS assumed)

Net sales
¥140 billion

Operating income
¥12.6 billion

Operating margin
9.0%

ROE (Return on Equity)
12.7%

Basic Objective

Continue to evolve into a global consulting and engineering firm

Business strategy

Enhancement of operating
system for Railways Business

Overseas expansion of Urban &
Spatial Development Business

Establishment of Energy
Business

Creation of businesses and overseas
expansion of Consulting Business

Product development and overseas expansion of
Power Engineering Business

Group-wide measures

Establishment of one-stop marketing system / Investment in technologies and human
resources / Enhancement of group governance

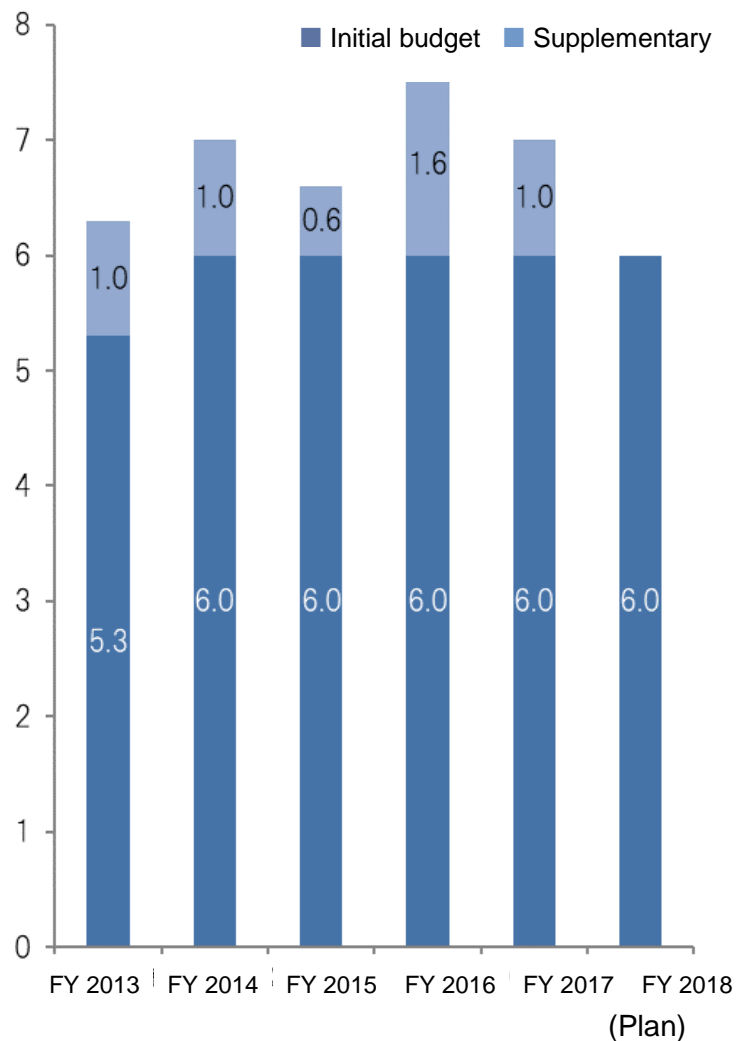
NK-Innovation 2021 Plan by Business Segment

(Millions of yen)	FYE18/6 Results	FYE19/6 Plan	FYE20/6 Plan (IFRS)	FYE20/6 Plan (IFRS)
Orders	104,350	125,000	125,000	140,000
Domestic Consulting	48,529	46,000	49,000	52,000
International Consulting	26,716	44,000	36,200	39,700
Power Engineering	15,943	14,000	15,800	17,000
Urban & Spatial Development	12,855	16,000	18,000	23,800
Energy	179	4,000	5,900	7,300
Net sales	106,023	115,000	125,000	140,000
Domestic Consulting	46,595	44,000	45,500	50,000
International Consulting	28,889	31,000	36,500	40,000
Power Engineering	15,762	20,000	20,500	22,000
Urban & Spatial Development	13,040	16,500	18,000	23,000
Energy	354	2,500	3,500	4,000
Real Estate/Others	1,381	1,000	1,000	1,000
Operating Income	6,561	6,200	7,900	12,600
Domestic Consulting	4,279	3,500	3,500	3,600
International Consulting	2,649	2,400	3,100	3,400
Power Engineering	1,873	2,600	2,600	3,200
Urban & Spatial Development	173	600	1,700	2,500
Energy	- 18	- 100	0	1,700
Real Estate/Others	- 2,396	- 2,800	- 3,000	- 1,800
Ordinary income	6,721	6,100	-	-
Profit attributable to owners of parent	4,555	4,100	5,200	8,700

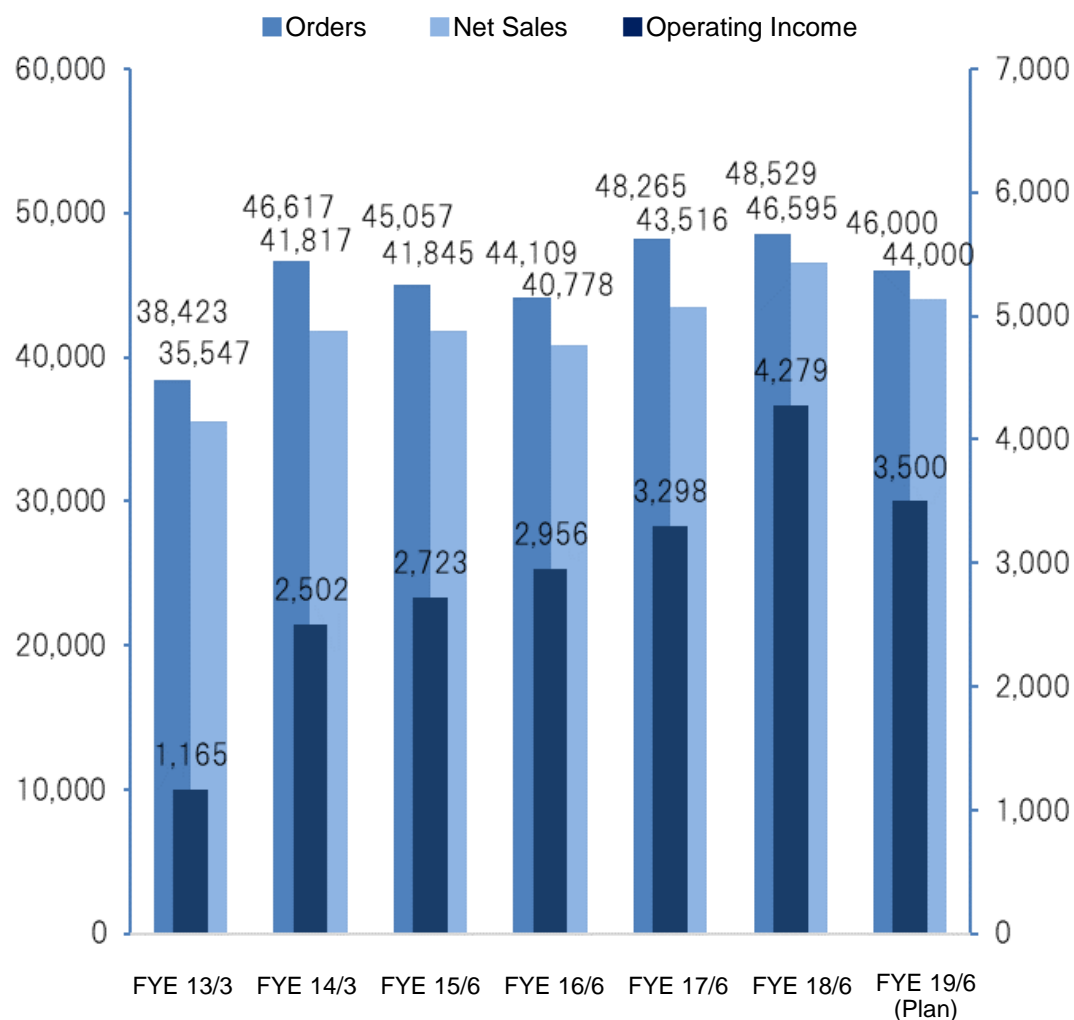
Introduction of International Financial Accounting Standards (IFRS) is scheduled for FYE20/6, and plans for FYE20/6 and FYE21/6 show IFRS-applied figures.

Domestic Consulting

Public Works Expenditures (¥ trillion)



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

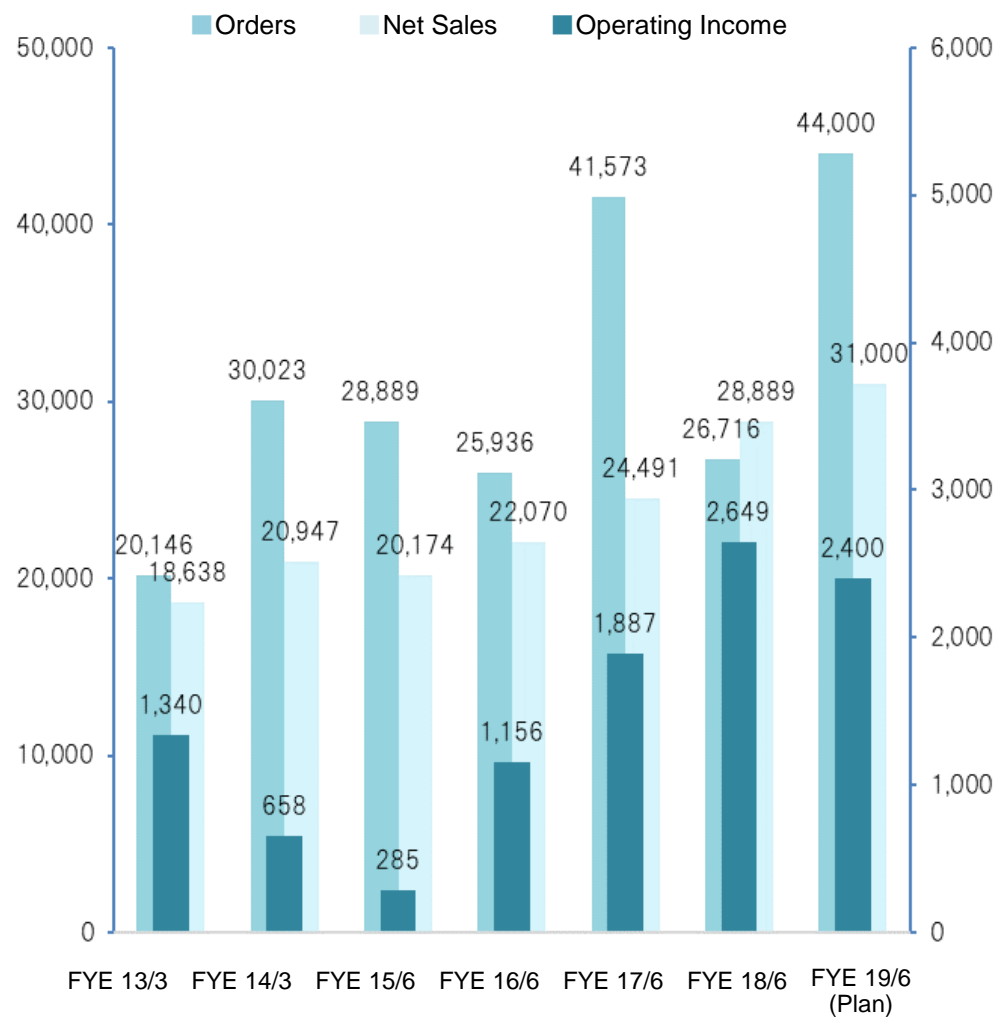


International Consulting

Initial ODA Budget in the General Account
(¥ billion)

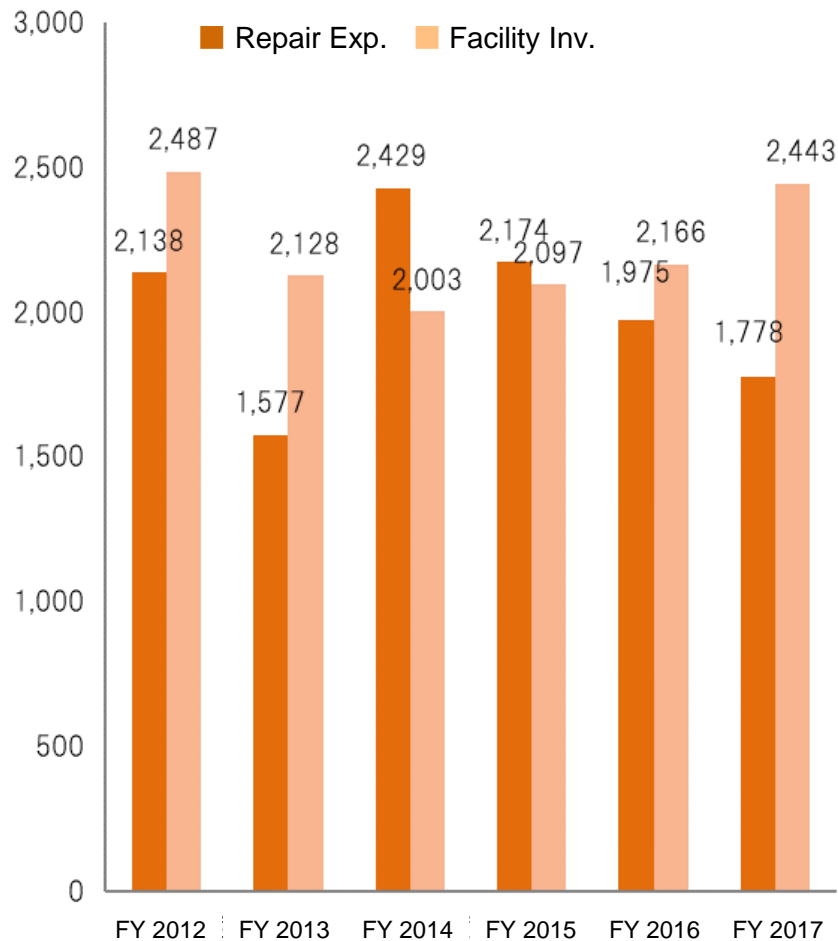


Nippon Koei's Operating Results in International Consulting
(¥ million)

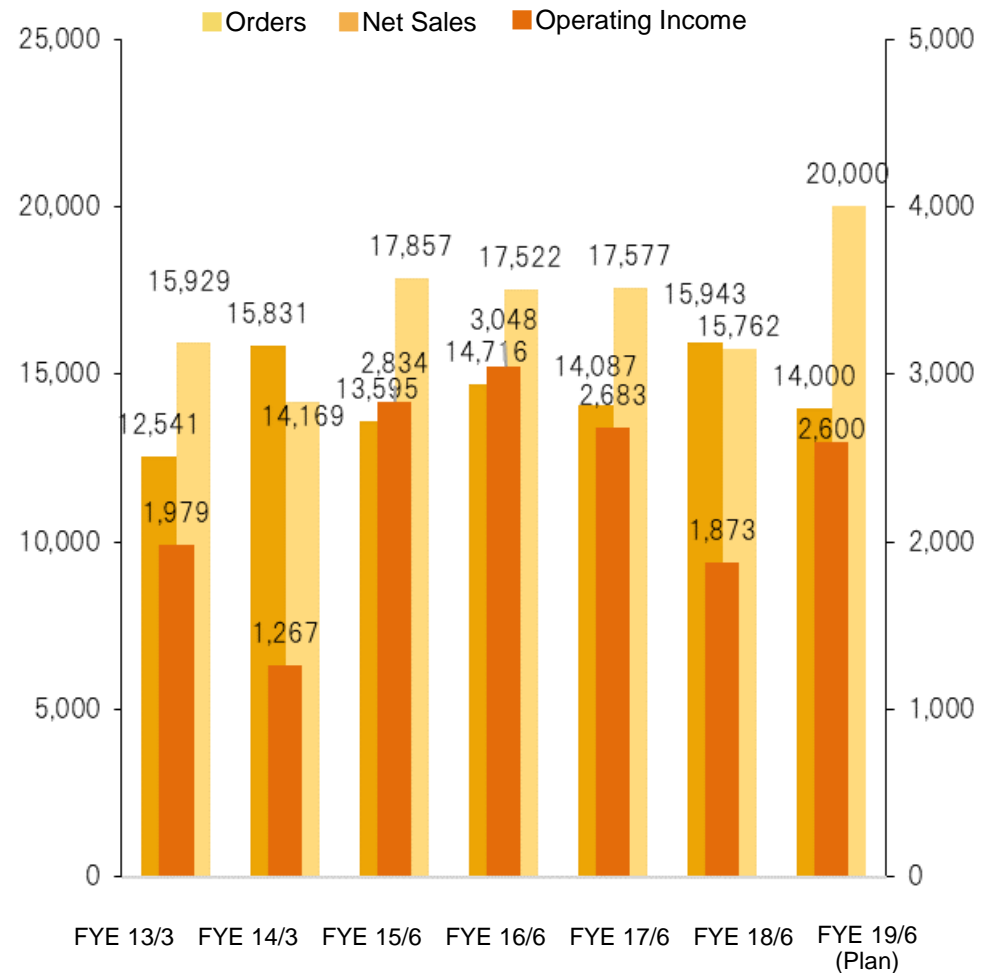


Power Engineering

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

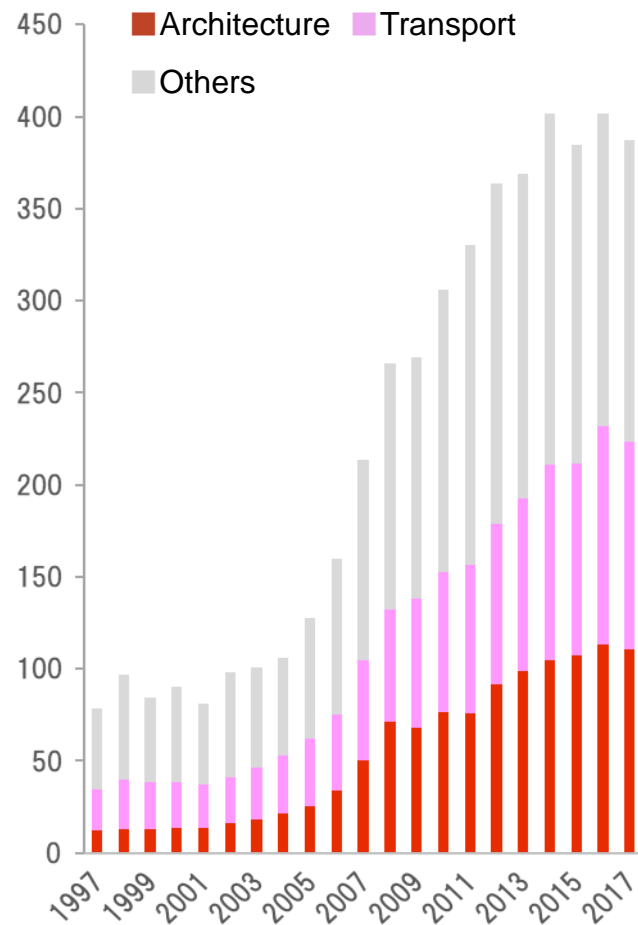


Nippon Koei's Operating Results in Power Engineering Business (¥ million)

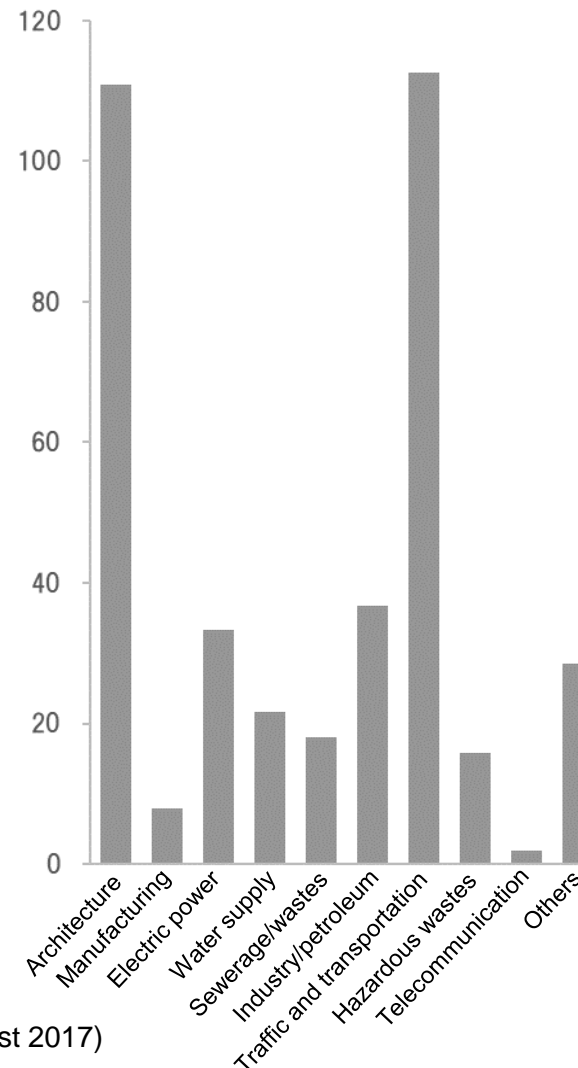


Urban & Spatial Development

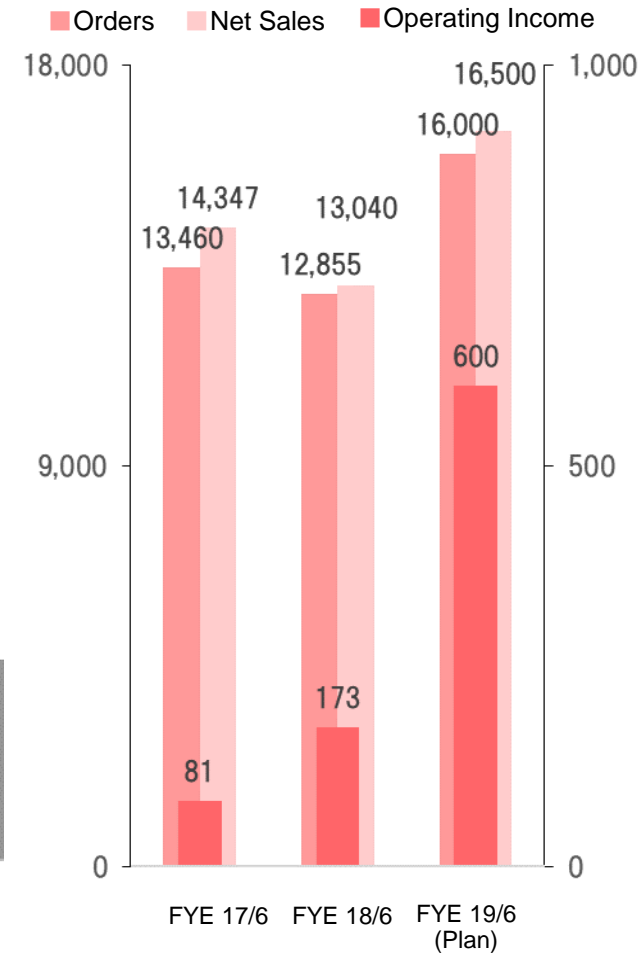
Sales Trend of Top 164 Research and Designing Companies (Billions of dollars)



Sales of top 164 firms in 2016 by sector (Billions of dollars)



Nippon Koei's Operating Results in Urban & Spatial Development Business (¥ million)



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