

Presentation of Results
Half Year, FYE June 30, 2019

March 2, 2020

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

I: Accounting Report
(July 2019 - Dec 2019, FYE20/6 1H) and
FYE 20/6 Forecast

2Q Results for FYE June 30, 2020

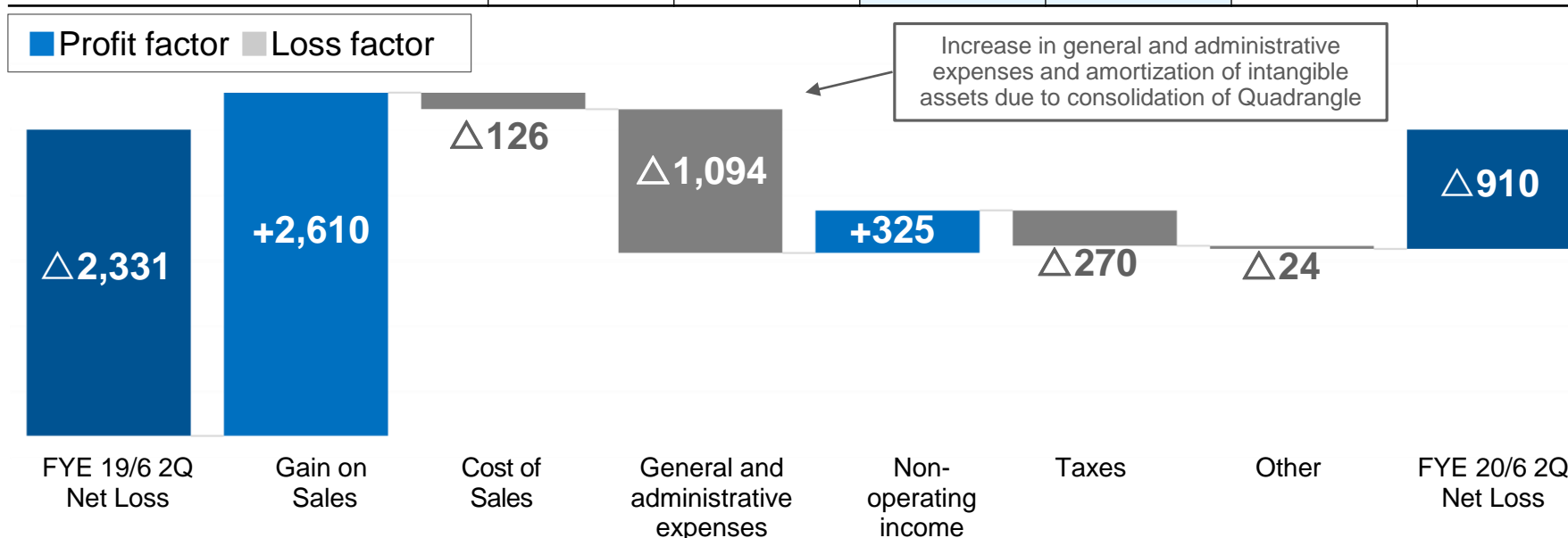
Net sales increased as all segments performed well. Operating loss was reduced. Records of sales and income still tend to concentrate at the year end (March) after the application of the percentage-of-completion method.

(Millions of yen)	FYE19/6 2Q Results	FYE20/6 2Q Results	YoY Change	
			Amount	%
Orders	47,707	58,395	10,618	122.4%
Net Sales	39,146	49,148	10,002	125.6%
Gross profit	10,215	12,700	2,484	124.3%
Operating Income	△2,817	△1,427	1,390	-
Ordinary income	△2,901	△1,185	1,715	-
Profit attributable to owners of parent	△2,331	△910	1,421	-

- Orders received were higher than in the same period of the previous year as International Consulting and Power Engineering performed well.
- Net sales increased year-on-year in all segments.
- For operating income, although losses in energy business expanded, losses were reduced overall year on year due to sales growth in other segments.
- Quarterly net loss was reduced due to an increase in operating income and an improvement in non-operating expenses.

Consolidated Profit and Loss Summary (FYE 20/6 1H) and Profit/Loss Analysis

(Millions of yen)	FYE19/6 2Q Results		FYE20/6 2Q Results		YoY Change	
		(as a percentage of sales)		(as a percentage of sales)	Amount	%
Orders	47,707		58,395		10,618	122.4%
Net sales	39,146	100.0%	49,148	100.0%	10,002	125.6%
Cost of sales	28,930	73.9%	36,447	74.2%	7,517	126.0%
Gross profit	10,215	26.1%	12,700	25.8%	2,484	124.3%
SG&A	13,033	33.3%	14,127	28.7%	1,094	108.4%
Operating income	△2,817	-	△1,427	-	1,390	-
Non-operating income / expenses	△84	-	241	0.5%	325	-
Ordinary income	△2,901	-	△1,185	-	1,715	-
Extraordinary income/loss	0	-	0	-	0	-
Profit attributable to owners of parent	△2,331	-	△910	-	1,421	-



Balance sheet

- In the current assets section, trade accounts receivable increased with further progress in shifting to the percentage-of-completion method.
- Current liabilities increased due to seasonal short-term borrowings, while notes and trade accounts payable decreased.
- All leases of IFRS-applied subsidiaries are recognized as assets and liabilities.
- Net assets declined due to current loss, dividend payments, increase in treasury shares, etc.

(Millions of yen)	FYE19/6 Results	FYE20/6 2Q Results	Amount
Assets	113,175	129,372	16,197
Current assets	52,446	63,487	11,040
Property, plant and equipment	29,882	34,159	4,277
Intangible assets	13,501	13,429	△ 71
Investments and other assets	17,345	18,296	951
Liabilities	52,969	72,341	19,372
Current liabilities	28,082	46,076	17,993
Non-current liabilities	24,886	26,265	1,378
Net assets	60,205	57,031	△ 3,174

Cash Flows

- For net cash from operating activities, negative cash flow expanded due to an increase in trade receivables.
- For net cash from investing activities, negative cash flow expanded due to acquisition of property, and plant and equipment.
- Net cash from financing activities increased due to an increase in short-term borrowings.

(Millions of yen)	FYE19/6 2Q Results	FYE20/6 2Q Results	YoY
Net cash provided by (used in) operating activities	△ 13,816	△ 15,457	△ 1,640
Net cash provided by (used in) investing activities	△ 310	△ 1,451	△ 1,141
Net cash provided by (used in) financing activities	14,636	16,352	1,716
Cash and cash equivalents at the end of period	15,569	12,399	△ 3,170

Results by Business Segment (Orders/Net Sales)

(Millions of yen)	FYE19/6 2Q Results	FYE20/6 2Q Results	YoY Change Amount	YoY Change %
Orders	47,707	58,395	10,687	122.4%
Domestic Consulting	23,471	24,495	1,024	104.4%
International Consulting	11,569	17,627	6,057	152.4%
Power Engineering	4,568	7,182	2,614	157.2%
Urban & Spatial Development	7,824	8,984	1,159	114.8%
Energy	225	56	△ 169	24.9%
Net sales	39,146	49,148	10,002	125.6%
Domestic Consulting	14,071	19,267	5,196	136.9%
International Consulting	10,685	12,025	1,339	112.5%
Power Engineering	6,718	7,583	864	112.9%
Urban & Spatial Development	6,761	8,963	2,201	132.6%
Energy	364	710	345	194.7%
Real Estate/Others	543	597	53	109.9%
Operating Income	△ 2,817	△ 1,427	1,390	-
Domestic Consulting	△ 1,990	△ 1,338	651	-
International Consulting	△ 72	173	245	-
Power Engineering	519	620	100	119.4%
Urban & Spatial Development	△ 21	504	526	-
Energy	△ 113	△ 175	△ 62	-
Real Estate/Others	△ 1,139	△ 1,211	△ 71	-

Domestic Consulting

Progress in 1H

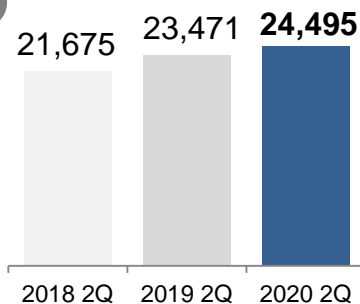
- Orders received were higher than the same period of the previous year due to Typhoon Hagibis disaster-related orders and large-scale orders.
 - After Typhoon Hagibis, we received requests for river and sediment disaster support from a wide range of areas.
- Net sales increased due to continued efforts and steady progress in projects related to national land resilience, as well as the expansion of the scope of application of the percentage-of-completion method.
- Operating loss was reduced with an increase in net sales.
 - The ratio of outsourcing decreased, and in-house production increased due to an increase in manpower.
 - Indirect costs increased due to the impact of the percentage-of-completion method and the mandatory use of paid holidays.
 - Impact of transient costs (expenses for relocation of branch offices, etc.)

Points in 2H

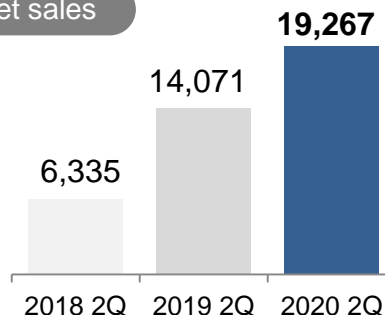
- Thorough implementation of measures to increase orders in response to the government's policy to expand competitive tender projects.
- More frequent and wider-area disasters, strengthened cooperation among branch offices in emergency responses, cooperation with partner companies, etc.
- The per-engineer cost will increase by 2.5 pts from March 2020.

(Millions of yen)	FYE19/6 2Q Results		FYE20/6 2Q Results		YoY Change	
	Amount	%	Amount	%	Amount	%
Orders	23,471	(as a percentage of sales)	24,495	(as a percentage of sales)	1,024	104.4%
Net sales	14,071	100.0%	19,267	100.0%	5,196	136.9%
Cost of sales	11,652	82.8%	15,949	82.8%	4,297	136.9%
Gross profit	2,419	17.2%	3,318	17.2%	899	137.2%
SG & A	4,409	31.3%	4,657	24.2%	247	105.6%
Operating income	△ 1,990	-	△ 1,338	-	651	-

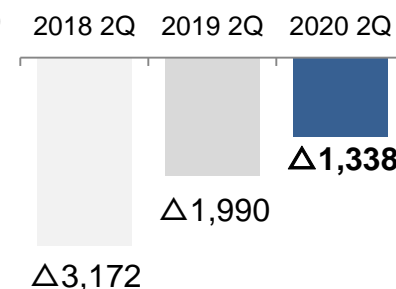
Orders



Net sales



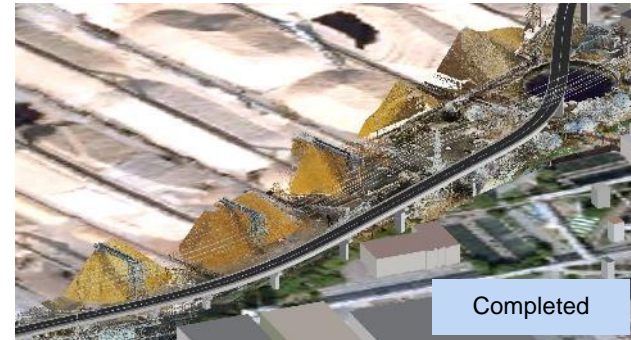
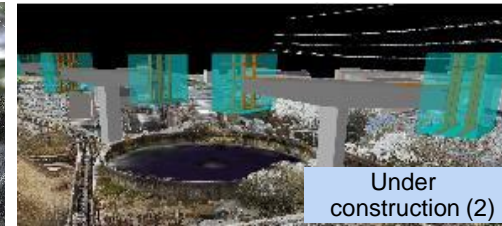
Operating income



Project Case Study / Domestic Consulting

Detailed engineering of Iwakuni Port Road (2)

Client	Port and Airport Department, Chugoku Regional Development Bureau
Contract value	210 million yen (for FYE June 2020)
Summary of project	<ul style="list-style-type: none">Facilitating port cargo transport and mitigating traffic congestion on National Route 2 is plannedDetailed engineering of a 1 km continuous viaduct passing through plantsDevelopment of a rational design with a structural type suitable for soft ground and a construction plan achieving both consideration for plant operation and a shorter construction period, and preparation of all documents necessary for construction



Preparation of documents on the travelling environment of the Pacific Cycling Road

Client	Road Traffic Management Division, Kinki Regional Development Bureau
Summary of project	<ul style="list-style-type: none">Creation of an action plan to improve the travelling and accepting environments on the 1,400 km Pacific Cycling Road between Chiba Prefecture and Wakayama PrefectureCreation of websites and cycling maps as measures to enhance information disseminationSupport for the operation of the Pacific Cycling Road NCR Designation Promotion Council



Source: Website of Kinki Regional Development Bureau, Ministry of Land, Infrastructure, Transport and Tourism

International Consulting

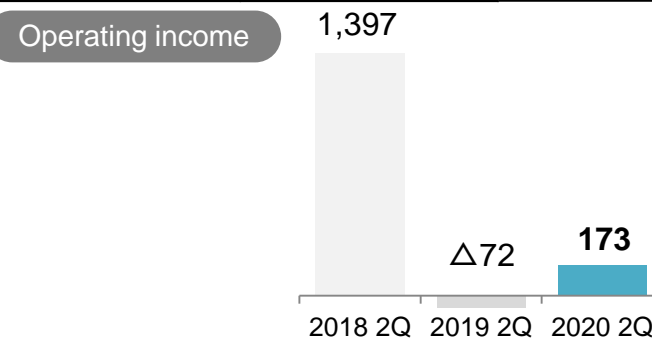
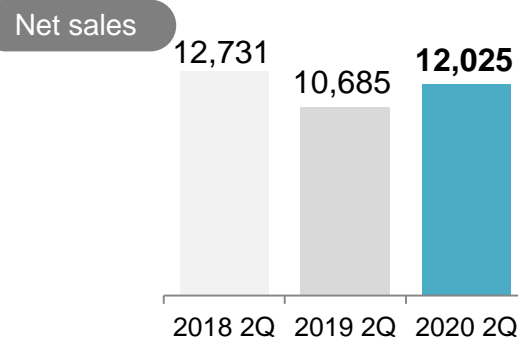
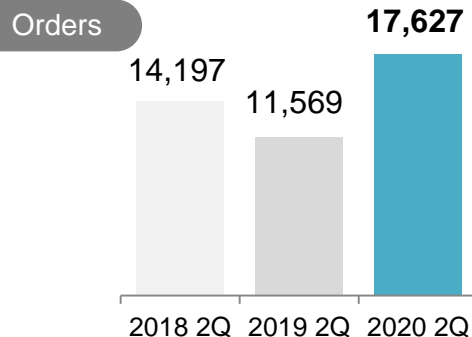
Progress in 1H

- Orders received were higher than the same period of the previous year as we obtained orders for a large-scale project in the Chennai metropolitan region in India.
 - Orders for large-scale projects have progressed as planned in the current period.
 - Orders for projects in the railway sector, one of our priority investment areas, grew by 145% year on year
- Net sales increased due to steady progress in projects
 - 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.
- Operating loss turned positive as net sales increased.

Points in 2H

- Recording of delayed orders in the first half (scheduled after 3Q)
- Maintenance of the contract operating rate through the operation of large-scale projects won in the current period
- Improvement of productivity and profitability through collaboration among bases and Group companies

(Millions of yen)	FYE19/6 2Q Results		FYE20/6 2Q Results		YoY Change	
	Amount	%	Amount	%	Amount	%
Orders	11,569	(as a percentage of sales)	17,627	(as a percentage of sales)	6,057	152.4%
Net sales	10,685	100.0%	12,025	100.0%	1,339	112.5%
Cost of sales	8,107	75.9%	9,069	75.4%	961	111.9%
Gross profit	2,578	24.1%	2,956	24.6%	378	114.7%
SG & A	2,650	24.8%	2,783	23.1%	132	105.0%
Operating income	△ 72	-	173	1.4%	245	-



Project Case Study / International Consulting

Traffic transportation projects in Chennai, India

Contract value	3 projects totaling about 7 billion yen
Summary of project	<p>Provision of consulting services on the following three projects</p> <ul style="list-style-type: none">● Chennai Metro Rail Project (Phase 2) Line 3 and part of Line 5, 57 stations, about 52.0 km Our Group's first metro project in India● Project for the Construction of Chennai Peripheral Ring Road (Phase 1) Construction and system introduction for the section of the ring road that provides access to the port (about 25 km)● Project for Installation of Chennai Metropolitan Area Intelligent Transport Systems Collaboration with the Power Engineering Business



Courtesy call on Bansal MD after signing contract

Foreign Direct Investment Promotion Project, Bangladesh

Contract value	approx. 1,300 million yen
Summary of project	<ul style="list-style-type: none">● Project to promote foreign direct investment by improving the investment environment for higher value-added investments to Bangladesh's manufacturing industry and industrial diversification● Major consulting services include basic design, bidding support, and construction supervision and management for the development of basic infrastructures such as land development, roads, and power and gas supply in industrial parks.● JV of Nippon Koei and our Group company Koei Research & Consulting



Signing ceremony

Power Engineering

Progress in 1H

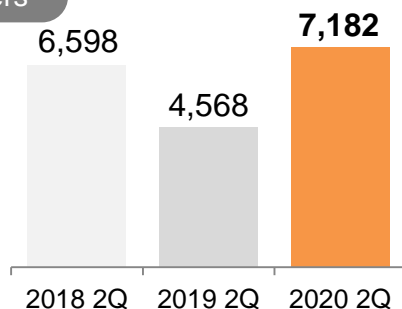
- Orders received were higher than the same period of the previous year due to orders for regional power company projects and other large private projects.
- Net sales increased due to the steady processing of orders in hand.
 - The mechanical and electrical consulting business performed well.
 - In spite of steady order receipt, the design period has been prolonged due to an increase in the size of projects, and sales progress has been delayed.
- Operating loss was reduced with an increase in net sales.

Points in 2H

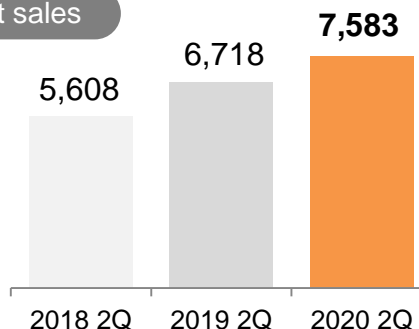
- A change in the construction period of a TEPCO PG project due to a typhoon or the Olympics may affect orders and sales plans.
- Sharing of precedents and activation of activities for cost reduction

(Millions of yen)	FYE19/6 2Q Results		FYE20/6 2Q Results		YoY Change	
	Amount	%	Amount	%	Amount	%
Orders	4,568	(as a percentage of sales)	7,182	(as a percentage of sales)	2,614	157.2%
Net sales	6,718	100.0%	7,583	100.0%	864	112.9%
Cost of sales	4,727	70.4%	5,481	72.3%	754	116.0%
Gross profit	1,991	29.6%	2,102	27.7%	110	105.5%
SG & A	1,472	21.9%	1,481	19.5%	9	100.6%
Operating income	519	7.7%	620	8.2%	100	119.4%

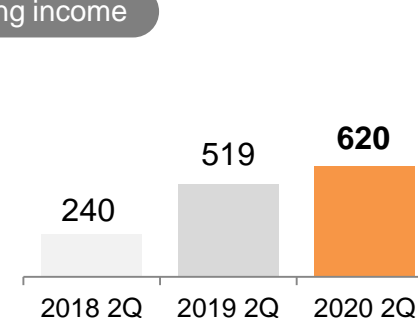
Orders



Net sales



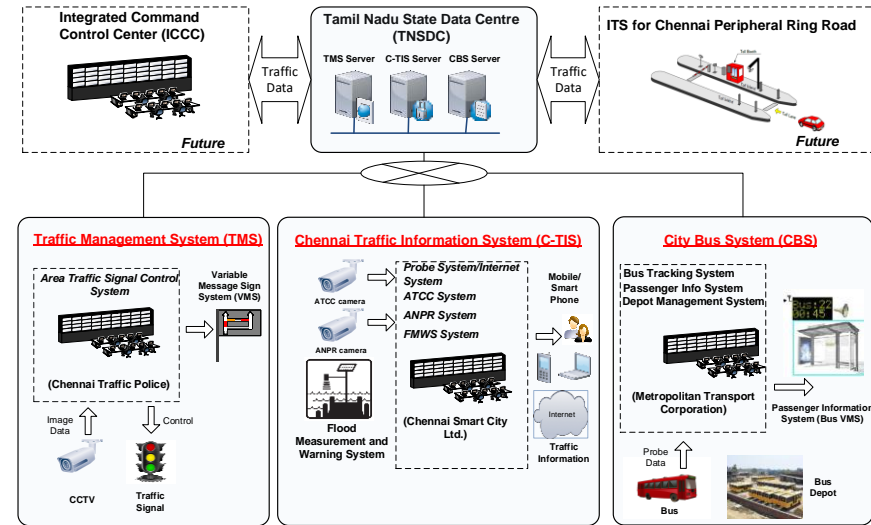
Operating income



Project Case Study / Power Engineering

Project for Installation of Chennai Metropolitan Area Intelligent Transport Systems, India

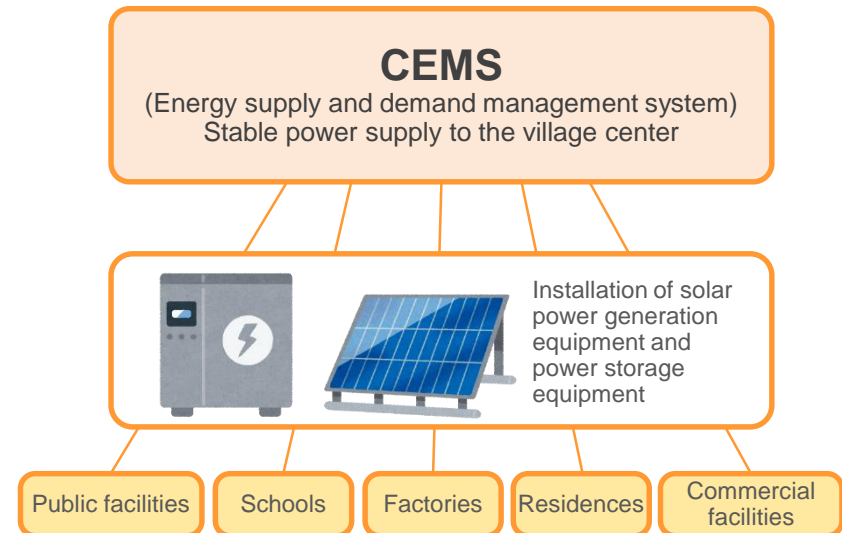
- Client** Chennai Smart City Limited
- Summary of project**
- Project to mitigate traffic congestion through the introduction of traffic information systems using Japanese technology
 - Collaborative project with the International Consulting Business
 - We carry out detailed engineering, bidding support, construction supervision and management, and O&M supervision and management of traffic management, traffic information, and bus management systems.
 - Scheduled to be completed in May 2029



System configuration diagram

Project for building the Katsurao Village smart community

- Client** Sekisui House, Ltd.
- Summary of project**
- Project to build a smart community led by Katsurao Electric Power, which was established as a joint venture between the Village of Katsurao in Fukushima Prefecture and Fukushima Electric Power, a third-sector company in Fukushima Prefecture
 - We proposed the introduction of EMS and a battery energy storage system to Sekisui House, the business owner and EPC provider in this community building project.
 - Our technical specifications were highly evaluated and delivery was decided as we have a business base in this prefecture.
 - Completion is scheduled for November 2020.



Urban & Spatial Development

Progress in 1H

- Orders received were higher than the same period of the previous year despite the impact of the UK election in the private sector.
 - Winning of orders from outside the UK for projects in Asia and the Middle East
- Net sales increased due to steady performance in the refurbishment of the Palace of Westminster and in-hand projects.
- Operating loss turned positive due to the strong performance of the new Canadian consolidated subsidiary consolidated to our group in the third quarter of the previous fiscal year, in addition to the improved profitability of BDP.

Points in 2H

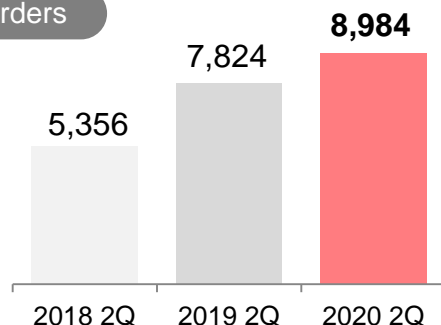
- Orders were withheld until the British general election in late 2019, but now have recovered.
- Maximization of orders in the UK and overseas in preparation for a potential slump in the UK market
- Winning of projects that have synergy between BDP and Quadrangle

(Millions of yen)	FYE19/6 2Q Results		FYE20/6 2Q Results		YoY Change	
	Amount	%	Amount	%	Amount	%
Orders	7,824	(as a percentage of sales)	8,984	(as a percentage of sales)	1,159	114.8%
Net sales	6,761	100.0%	8,963	100.0%	2,201	132.6%
Cost of sales	3,861	57.1%	4,928	55.0%	1,067	127.7%
Gross profit	2,900	42.9%	4,034	45.0%	1,134	139.1%
SG & A	2,922	43.2%	3,529	39.4%	607	120.8%
Operating income	△21	-	504	5.6%	526	-

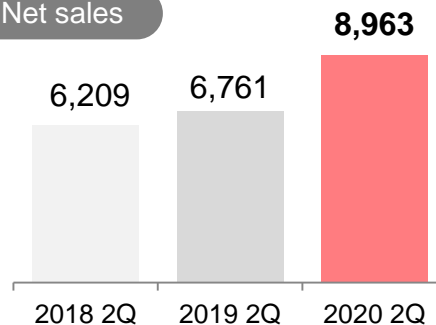
* The fixed exchange rate applied to the results for the 2nd quarter of FYE June 30, 2020: 1 GBP = 136.46 JPY (the rate used in the plan for FYE June 30, 2020 was 1 GBP = 149.17 JPY)

** The amount of amortization expense of Urban & Spatial Development business for FYE June 30, 2020 is approx. 1 billion JPY (goodwill: approx. 400 million JPY; other intangible fixed assets: approx. 500 million JPY).

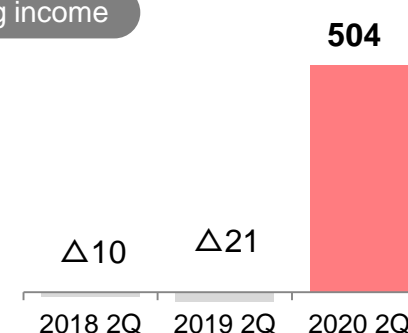
Orders



Net sales



Operating income



Project Case Study / Urban & Spatial Development

University of Birmingham, Teaching and Learning Building, UK

Client	University of Birmingham
Summary of project	<ul style="list-style-type: none">● BDP was responsible for architectural design, structural design, landscape design, lighting, and acoustics.● Completed in December 2019 and officially opened in January 2020● Many small seminar rooms and self-study spaces are available to provide students with a flexible learning environment.



Innovation Hub Launches at Keele University, UK

Client	Keele University
Summary of project	<ul style="list-style-type: none">● BDP was responsible for architectural design, acoustics, and landscape design.● Inside, there are an innovation space, a 200-seat hierarchical lecture theater, a business lounge, social learning, and a cafe space.● Completed in October 2019



Energy

Progress in 1H

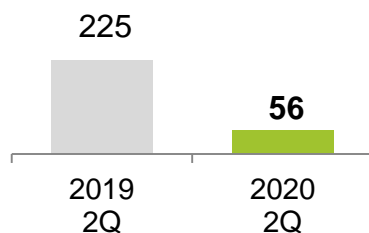
- Orders received were lower than in the same period of the previous year due to the delay in expected orders related to storage batteries in Europe.
 - Though projects related to energy management in Europe are behind schedule by several months, we are developing projects in the UK and Belgium centering on the base in Europe (NKEE), including investment in YUSO.
- Net sales increased due to progress in the construction of power receiving and transforming facilities, installation, etc., for two storage battery projects in the United Kingdom.
- Operating loss widened due to expenses of European bases, an upfront investment.

Points in 2H

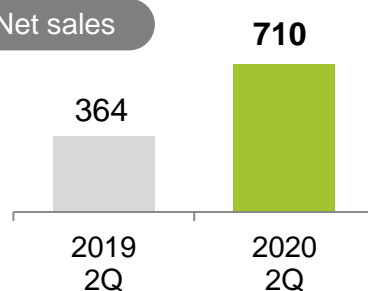
- Formation of individual projects for energy management and accumulation of results
- The power generation business at 7 locations in Japan is performing well, and annual sales of 500 million to 600 million yen are planned.

(Millions of yen)	FYE19/6 2Q Results		FYE20/6 2Q Results		YoY Change	
	Amount	%	Amount	%	Amount	%
Orders	225	(as a percentage of sales)	56	(as a percentage of sales)	Δ169	24.9%
Net sales	364	100.0%	710	100.0%	345	194.7%
Cost of sales	293	80.4%	613	86.4%	320	209.2%
Gross profit	71	19.6%	96	13.6%	25	135.6%
SG & A	184	50.5%	272	38.3%	87	147.4%
Operating income	Δ113	-	Δ175	-	Δ62	-

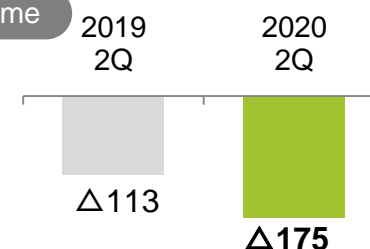
Orders



Net sales



Operating income



Project Case Study / Energy

Participation in the VPP demonstration project

Summary

- We participated in the project in 2016 from the resource side that uses a battery energy storage system.
- We acquired relevant technologies to play a role as a resource aggregator while deepening understanding of VPP mechanisms and systems.
- For the VPP demonstration from January 2020, as a resource aggregator, we will install battery storage at JX Nippon Oil & Energy Kiire Terminal, a JXTG affiliate, and jointly demonstrate the tertiary reserve capacity, etc.

Our efforts to date in the VPP demonstration

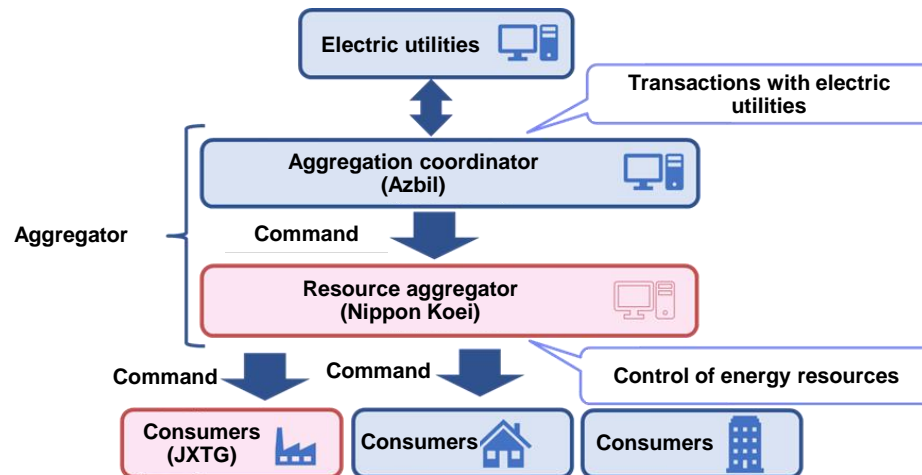
2016~	<ul style="list-style-type: none"> ■ Participated in the VPP demonstration with battery storage at the Fukushima Works
2018	<ul style="list-style-type: none"> ■ Participated in Tohoku Electric Power's demonstration
2019	<ul style="list-style-type: none"> ■ Introduced battery storage at the Research & Development Center ■ Participated in the VPP demonstration as a resource aggregator
2020	<ul style="list-style-type: none"> ■ Introduced battery storage at JX Nippon Oil & Energy Kiire Terminal (i)

Projects in which we participate as a resource aggregator

Project name (FY2019)	<ul style="list-style-type: none"> ■ VPP demonstration project for integrated control of various energy resources with the AutoDR system (AC: Azbil Corporation) (ii) ■ Open platform aggregation business demonstration project (AC: Tokyo Electric Power Company Holdings, Inc.)
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(i) JX Nippon Oil & Energy Kiire Terminal



(ii) Demonstration system diagram (the execution part is in the red frame)

FYE June 2020 Forecast

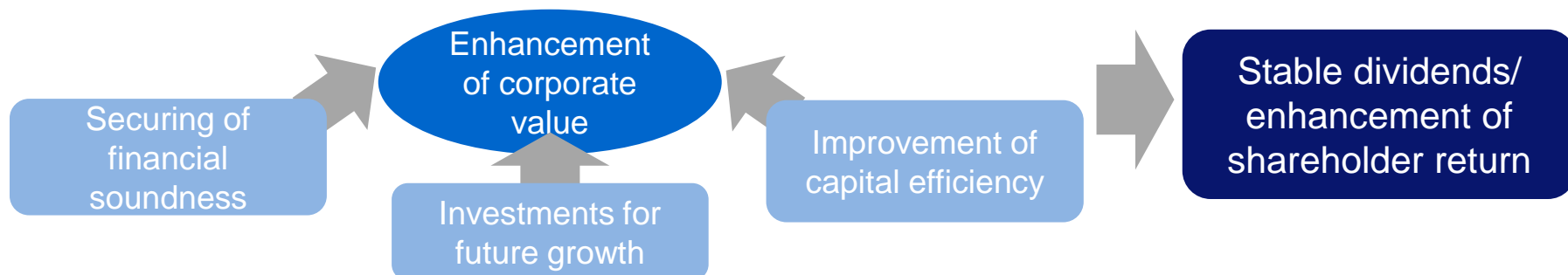
No changes have been made to the forecast for the entire FYE June 2020 period.

(millions of yen)	FYE 19/6 Results	FYE20/6 Forecast (Japanese GAAP)	YoY Change Amount	YoY Change %	FYE20/6 Forecast (IFRS)
Orders	118,085	137,400	19,314	116.4%	137,400
Domestic Consulting	52,855	52,400	-455	99.1%	52,400
International Consulting	28,482	48,100	19,617	168.9%	48,100
Power Engineering	15,411	16,000	588	103.8%	16,000
Urban & Spatial Development	20,510	18,600	-1,910	90.7%	18,600
Energy	723	2,100	1,376	290.1%	2,100
Net sales	108,589	127,700	19,110	117.6%	127,700
Domestic Consulting	49,593	51,300	1,706	103.4%	51,300
International Consulting	24,928	34,500	9,571	138.4%	34,500
Power Engineering	16,531	19,600	3,068	118.6%	19,600
Urban & Spatial Development	15,359	18,800	3,440	122.4%	18,800
Energy	719	2,200	1,480	305.8%	2,200
Real Estate Leasing/Others	1,456	1,300	-156	89.3%	1,300
Operating income	5,110	5,800	689	113.5%	6,700
Domestic Consulting	4,990	4,200	-790	84.2%	4,300
International Consulting	841	2,900	2,058	344.6%	2,900
Power Engineering	2,089	2,200	110	105.3%	2,300
Urban & Spatial Development	151	600	448	395.0%	1,500
Energy	-365	-800	-434	-	-900
Real Estate Leasing/Others	-2,597	-3,300	-702	-	-3,400
Ordinary Income	5,584	6,200	615	111.0%	-
Profit attributable to owners of parent	3,318	3,600	281	108.5%	4,500
Operating margin (%)	4.7	4.5			5.2
ROE (%)	5.7	6.1			7.5

Capital Policy/Dividend Policy

Capital policy

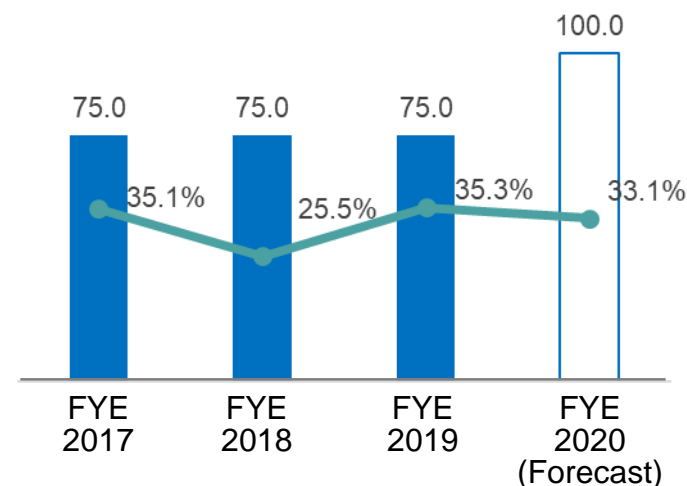
- Conduct appropriate financing in line with the circumstances and improve capital efficiency
- Target equity ratio of 50% and maintain at least 40% even during concentrated investment periods
- Strive to increase corporate value by expanding business through growth investments based on medium- and long-term strategies



Dividend policy

- Aim for a dividend payout ratio of 30% and strive to provide stable dividends and enhance returns to shareholders in line with the rise in the profit level









✓ Plan to pay out dividend of 100.0 yen, an increase of 25 yen, in the fiscal year ending June 2020



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

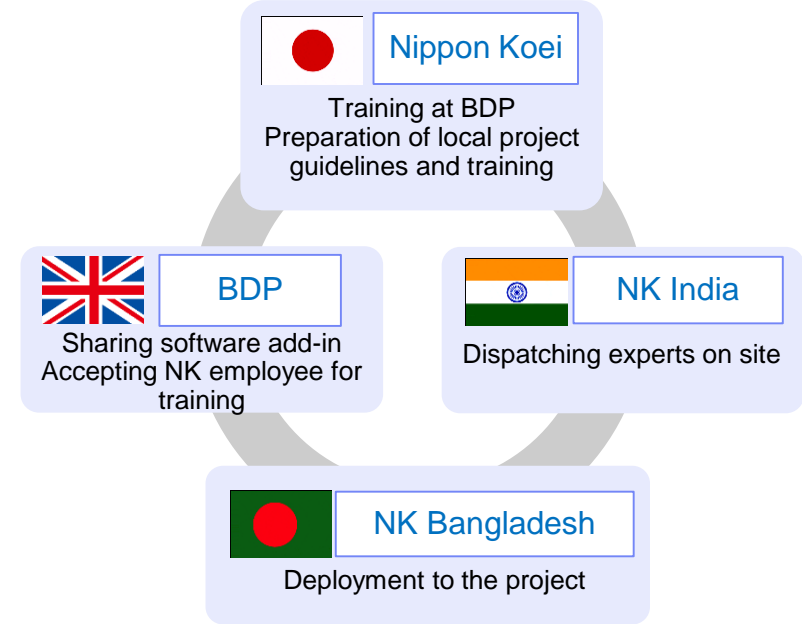
NK-Innovation 2021 — Priority Issues for FYE June 2020 and Progress

Strong performance in the Canadian market and steady progress in business creation in the Consulting Business

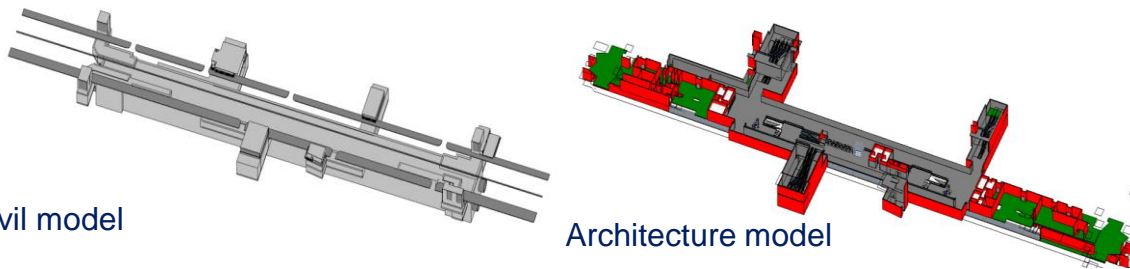
Business strategy	Priority Issues for FYE June 2020	Progress
Enhancement of operating system for Railways Business	<ul style="list-style-type: none"> ➤ Establish local production systems through promoting alliances 	Personnel development at local subsidiaries and utilization of BIM in the Bangladesh railway project 
Overseas expansion of Urban & Spatial Development Business	<ul style="list-style-type: none"> ➤ Expand operations in the Canadian and Asian markets ➤ Develop the Japanese market 	Contracts outside the UK awarded in Asia and the Middle East, strong performance of Quadrangle 
Establishment of Energy Business	<ul style="list-style-type: none"> ➤ Pursue business development and accumulate operating results and know-how in Europe ➤ Acquire the hydropower concession business in Japan 	Investment in Yuso and business formation started Concession bids in Japan 
Creation of businesses and overseas expansion of Consulting Business	<ul style="list-style-type: none"> ➤ Promote alliances and accelerate business creation ➤ Acquire orders in new technology fields by taking advantage of the superiority of domestic technologies 	Alliance with Geoplan and overseas promotion of the domestic disaster prevention sector 
Product development and Overseas expansion of Power Engineering Business	<ul style="list-style-type: none"> ➤ Create new products and services ➤ Build domestic and overseas supply chains 	Development of and order receipt for new standard equipment for substations 
Establishment of one-stop marketing system	<ul style="list-style-type: none"> ➤ Promote cross-segment projects such as smart cities 	Consideration of participation in peripheral development centered on the airport business, and creation of the Maas business 
Investment in technologies and human resources	<ul style="list-style-type: none"> ➤ Maintain and improve superior technologies such as disaster prevention/mitigation and maintenance management using AI ➤ Expand hiring, strengthen education, and promote early demonstration of capabilities 	Promotion of progress in the technology promotion themes and review of the themes 
Enhancement of group governance	<ul style="list-style-type: none"> ➤ Introduce IFRS and establish a global accounting platform 	Progressing steadily 

Utilization of BIM by local staff in Bangladesh

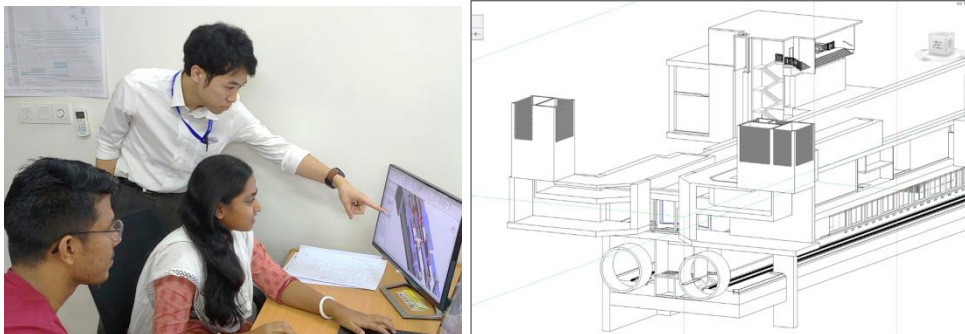
- For the Dhaka Mass Rapid Transit Development Project (Line 1), BIM was introduced for basic design, detailed engineering, and construction supervision and management. BIM is also scheduled to be introduced for Line 5, for which we received orders in the current period.
- Nippon Koei worked with engineers belonging to the local subsidiary in Bangladesh to promote the project in cooperation with BDP, which has advanced BIM technology in Europe, and a local subsidiary in India.



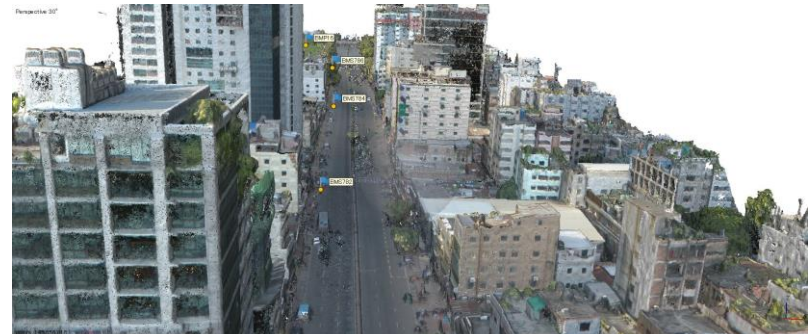
BIM model for the Uttar Badda Station



Utilization in Bangladesh



3D model using drone video



Progress in orders in Asia

- 7 projects in progress as of 2Q of FYE June 2020
- Market strategies are shared with Domestic Consulting and International Consulting.



Conceptual drawing

Progress of orders in Japan

- Architecture CM (construction management) and initiatives in local cities (urban revitalization smart cities and public land utilization) have remained firm.

Projects under way

Design, supervision, and management of the Hydro Informatics Center, the headquarters of the National Water Resources Committee of Myanmar

- Jointly won by NK, BDP, PKII, MKI, Modular Architects, and Artelia Myanmar
- Competitive bid is under evaluation, and construction is scheduled to start in spring 2020.



Ground-breaking ceremony in December 2019 in Yangon

Projects under way

CM business for constructing private investment buildings

- Continuously conducting CM business related to the renovation of tenant buildings owned by private companies
- There is a plan for several orders in the same type of business.

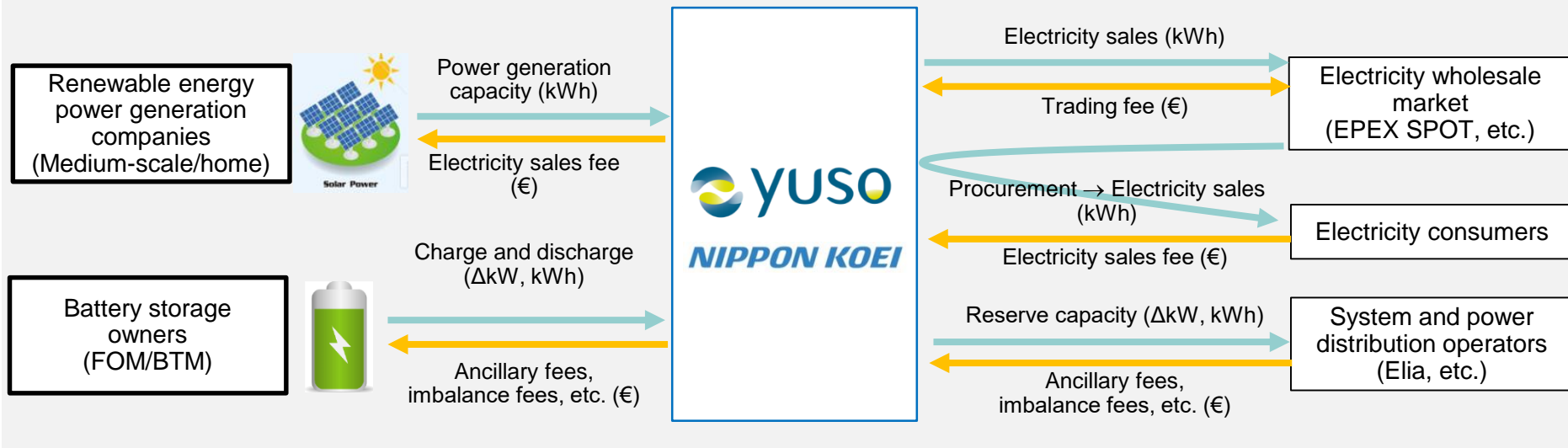
Investment in YUSO in Belgium and business creation

- Investment in YUSO (head office: Belgium), an aggregation business, through our subsidiary NIPPON KOEI ENERGY EUROPE
- YUSO and Nippon Koei have collaborated since 2018. We jointly developed a power storage project in Belgium (25 MW).
- We aim to build a new platform that can be applied to the Japanese market by utilizing know-how in Europe.

Businesses developed by NK x YUSO

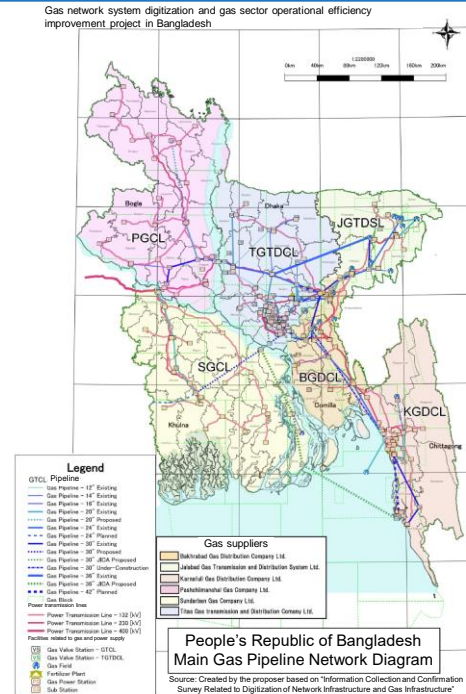
- (i) Renewable energy aggregation business (Sale of renewable energy to wholesale markets)
- (ii) Business of retailing electricity to consumers (Supplying electricity purchased from wholesale markets)
- (iii) Battery storage aggregation business (Providing reserve capacity to adjust frequencies and supply/demand)

Business scheme



Gas network system digitization and gas sector operational efficiency improvement project in Bangladesh

- We plan to utilize the know-how of GeoplanNamtech Inc., which joined the Group in the current period, for a project to digitize gas network systems such as gas power plants.
- System experts participate from Geoplan
- Business is expected to expand into other facilities (electricity and water/sewage), other countries, and non-ODA projects.



Overseas expansion of domestic disaster prevention technology, and domestic disaster response by International Consulting staff

Domestic
Overseas

- Overseas field guidance by the Domestic Consulting segment
- Domestic Consulting staff participate in the disaster prevention project in Sri Lanka

Overseas
Domestic

- Support for emergency disaster response by utilizing a period between large-scale orders in the International Consulting segment

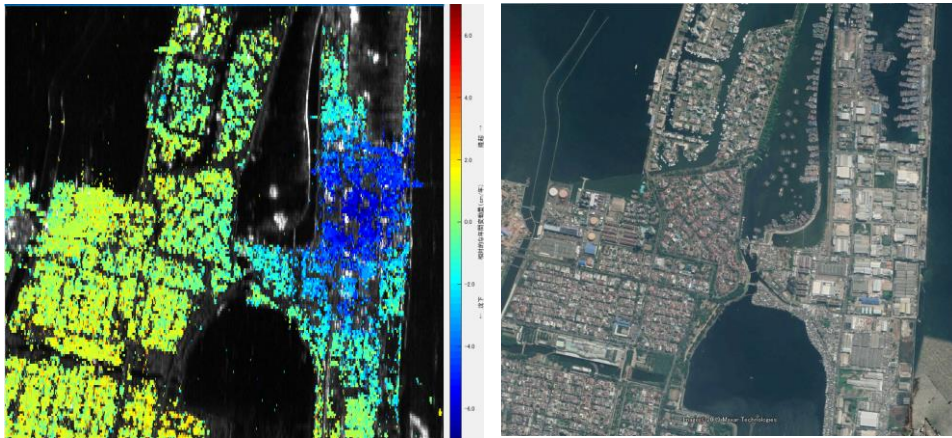


Explanation on the status of a sediment disaster

Application of ground observation technology using a synthetic aperture radar (satellite SAR)

- Promotion of domestic and overseas business development of satellite observation technology that was developed jointly with JAXA
- We formed a business alliance with SKY Perfect JSAT in November 2019, established a business scheme in 2020, and started operations together for business expansion overseas.

Detection of land subsidence in a wide area



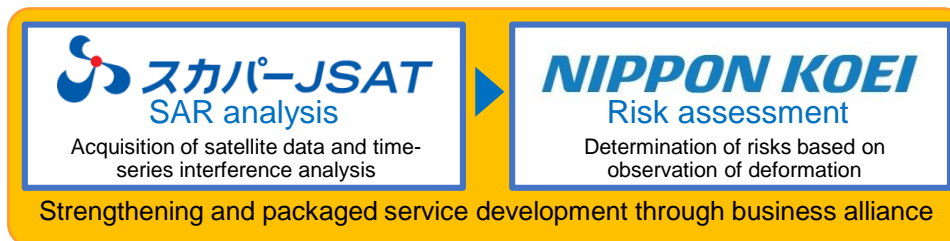
Ground subsidence is monitored and results are utilized for management

Matters for which a project may be formed

- Monitoring of airport deformation
- Monitoring of power generation and transmission facilities
- Monitoring of power transmission routes
- Monitoring of collapsed areas and slopes
- Detection of dam deformation and water levels, etc.

Achieve reduction in labor, cost, and construction time

Scope of collaboration with SKY Perfect JSAT



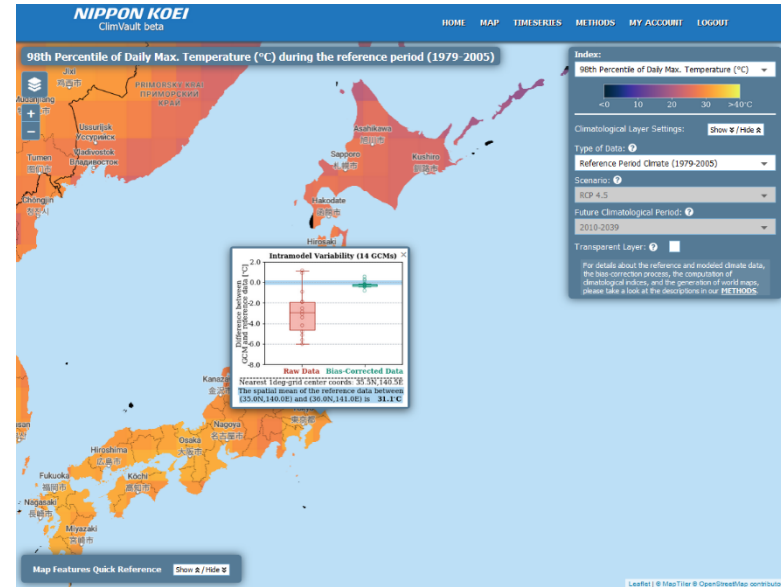
IP/HDLC converter developed and orders received from TEPCO PG

- TEPCO Power Grid promotes digitization of substations, including installation of monitoring equipment that adopts the new standard (IP transmission system) at substations.
- On the other hand, the centralized monitoring and control system at existing substations cannot directly take in IP transmission until TEPCO PG shifts to the next generation system.
- As the manufacturer of the existing system, we proposed equipment for conversion from the new standard (IP) to the conventional transmission system (HDLC), and it was adopted at the Narita control station.



Development of climate change data technology and release of a free portal site

- Development of TR3S, a new bias correction method for climate change prediction
- Release of NK-ClimVault, a portal site to provide free climate prediction information including rainfall and temperature in major cities



Strengthening Group companies' governance

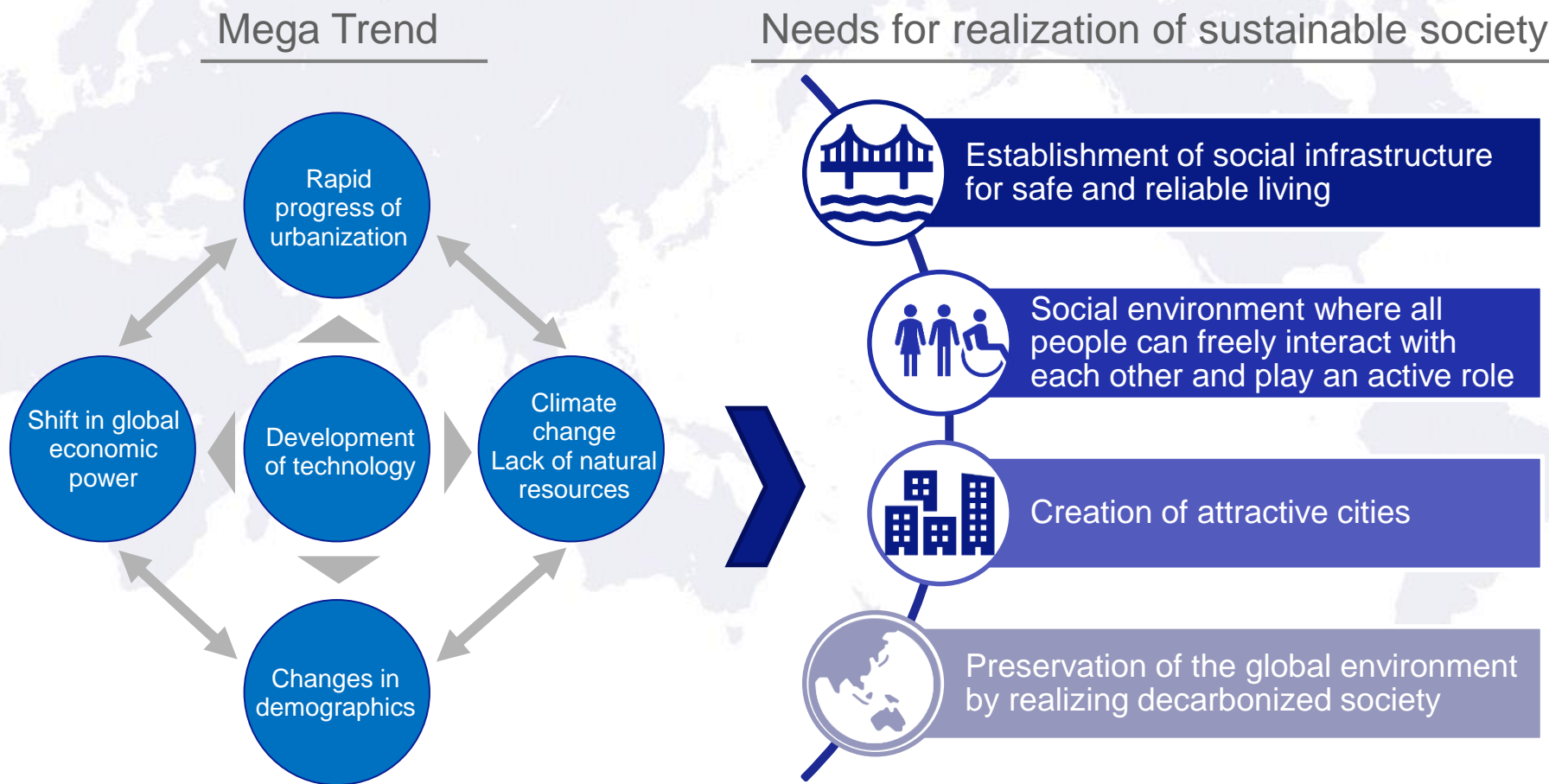
- The Head Office dispatches Directors and Audit & Supervisory Board Members to Group companies. In particular, Audit & Supervisory Board Members exercise the check and balance function because they are dispatched from the Head Office.
- For overseas Group companies, Corporate Governance Directors are appointed from those dispatched Directors.
- Seminars by dispatched Directors and Audit & Supervisory Board Members to strengthen knowledge and awareness of group governance



III: Outline of Long-term Management Strategy

Mega Trend

Social issues such as progress of urbanization and changes in demographics that emerge in the infrastructure areas in which the Nippon Koei Group operates are growth opportunities.



Mission of Nippon Koei Group

Our mission is to globally meet the needs for realization of sustainable society with our accumulated technological capabilities and new knowledge.



NKG Global Strategy 2030

~ Cultivating Sustainability through Exploration, Integration and Innovation ~

Provide new value and realize a sustainable society through exploration of knowledge and innovation and integration of technologies

Innovation and
integration of
technologies

(1) New development of 3 business domains

Promote new businesses by reorganizing business groups that have cultivated much knowledge into 3 domains

(2) Realization of one-stop services and flexible business operations

Create a sales system that integrates and presents services across domains to meet a wide range of social needs

Provision of new
value

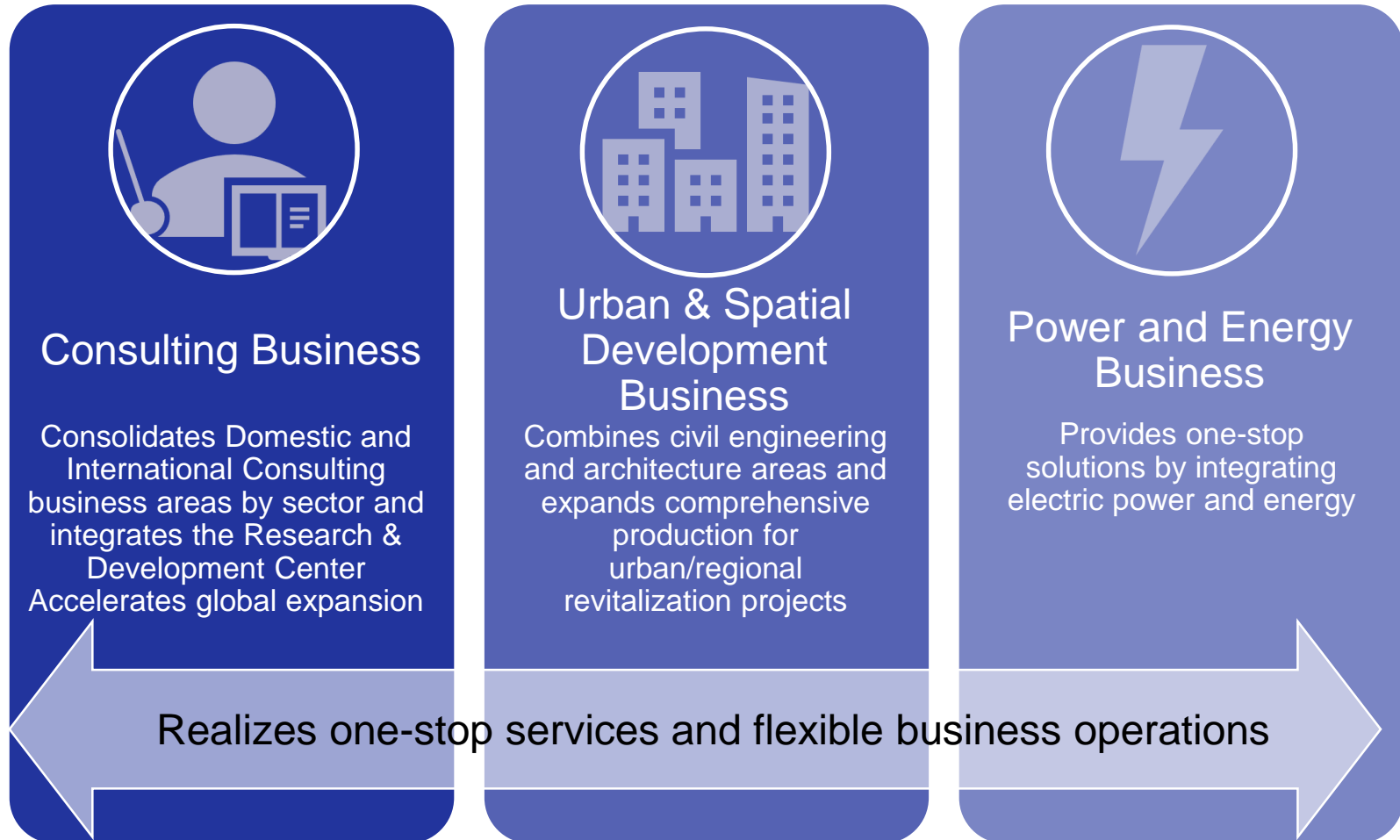
(3) Full expansion into management areas

Expansion into business investment (PPP, PFI), government support, and data management areas

Promotion of technology development, human resource development, and establishment of a governance system








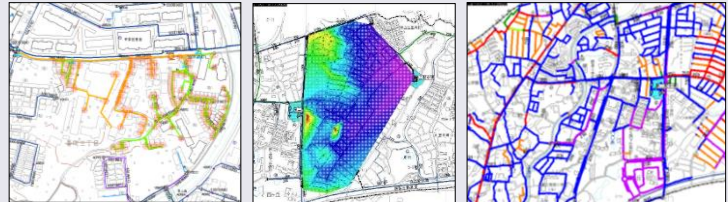
Business Strategy: (1) New Development of 3 Business Domains, (2) Realization of One-Stop Services

- Promote new businesses by reorganizing business groups that have cultivated knowledge into 3 domains
- Construct a sales system ranging across 3 domains to promote provision of one-stop services and flexible business operations



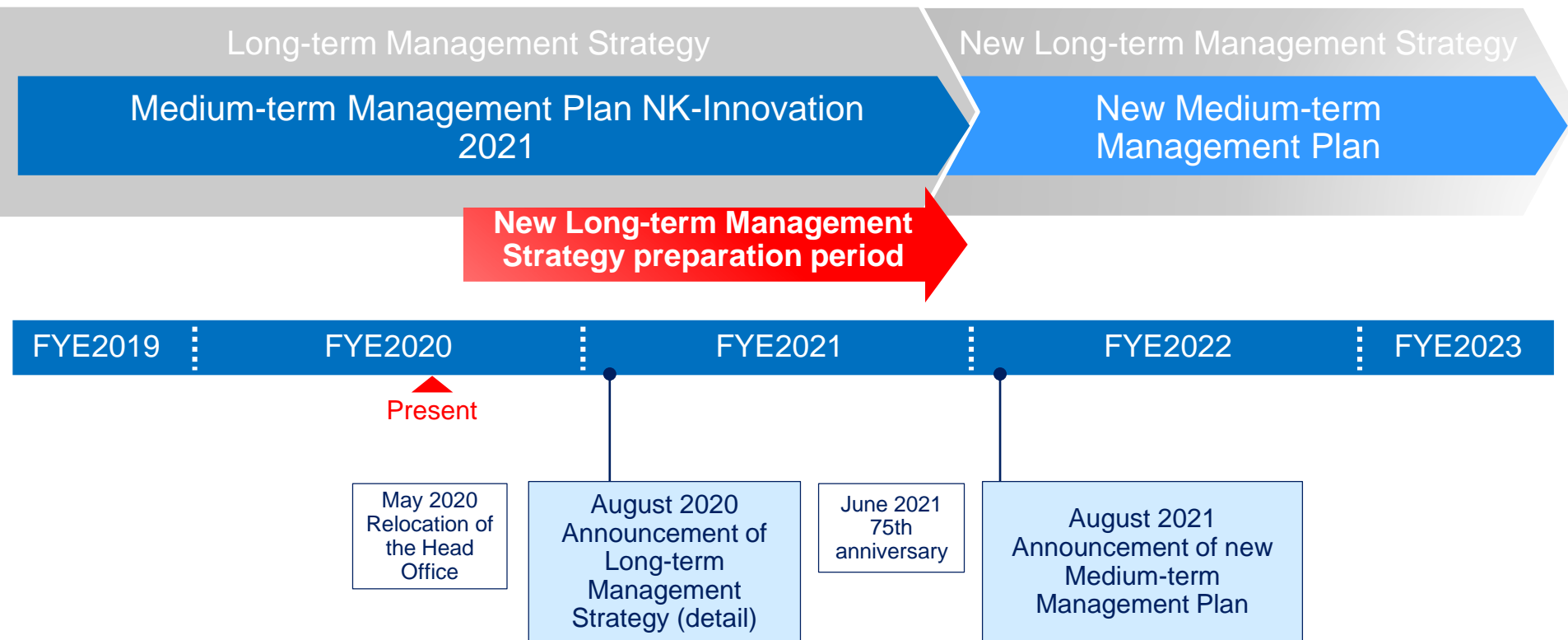
Business Strategy: (3) Full Expansion into Management Areas

- In order to meet the needs for maintenance and operation management of infrastructures due to the maturity of the social infrastructure, we will fully expand into management areas including business investment (PPP PFI), government support, and data management in each domain.

Category	Business overview	Business image		
<p>Business investment area</p>	<p>PPP/PFI (including concession) business</p> <ul style="list-style-type: none"> • Operation business by acquiring ownership and operation rights of social infrastructures • Operations and management as SPC 	 <p>Airports</p>	 <p>Roads</p>	 <p>Water and sewage</p>
<p>Government support and agency area</p>	<p>PM/CM business</p> <ul style="list-style-type: none"> • Seamless support for governments not only in normal times but also in times of disasters (disaster recovery projects, etc.) • Support of business optimization for private infrastructure operators 	 <p>Dhaka MRT Line 6 in Bangladesh</p>	 <p>Supervision and management of the concession project for the Yellow Line ring road in Peru</p>  <p>New Clark City, Philippines</p>  <p>Northern Kyushu heavy rain</p>	
<p>Data management area</p>	<p>Data business</p> <ul style="list-style-type: none"> • Data provision business integrating various internal and external data 			

Future Schedule

- Promote system establishment for the coming one year as a preparation period for the start of the new Long-term Management Strategy in July 2021



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



IV: References

Corporate Profile

- Corporate Name NIPPON KOEI CO., LTD.
- Date of Foundation June 7, 1946
- Capital ¥5,497 million
- Number of Employees 4,923 (consolidated)
- Consolidated Subsidiaries 68
- Businesses Domestic Consulting
International Consulting
Power Engineering
Urban & Spatial Development
Energy
- Management Philosophy
Act with integrity and contribute to society through
technology and engineering.

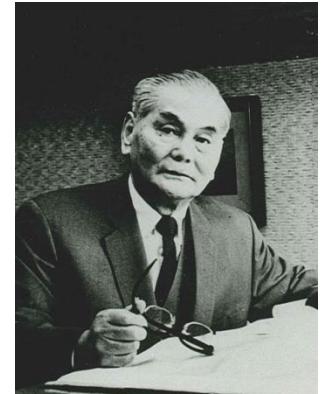
■ Founder Yutaka Kubota (1890-1986)

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).

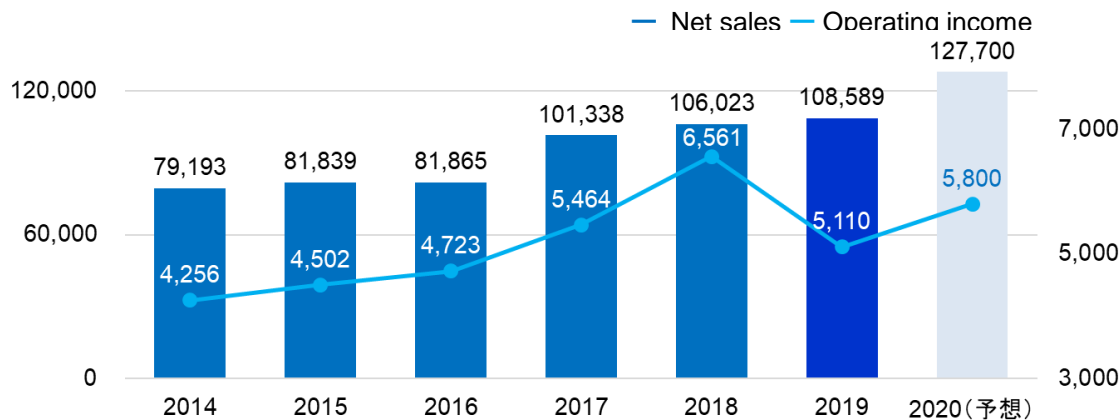
After the War, in a bid to work toward the restoration of Japan and reconstruction of countries damaged by the War, he founded the Company at the age of 56.

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

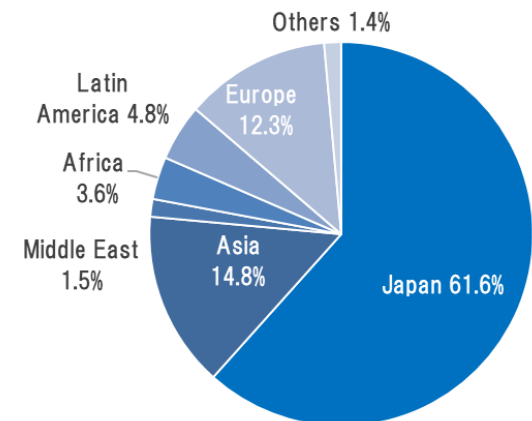
He directed projects in many countries throughout the world until he was 90 years old, contributing to development in developing countries.



Transition of Sales / Operating Income (Millions of yen)



FY19/6 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



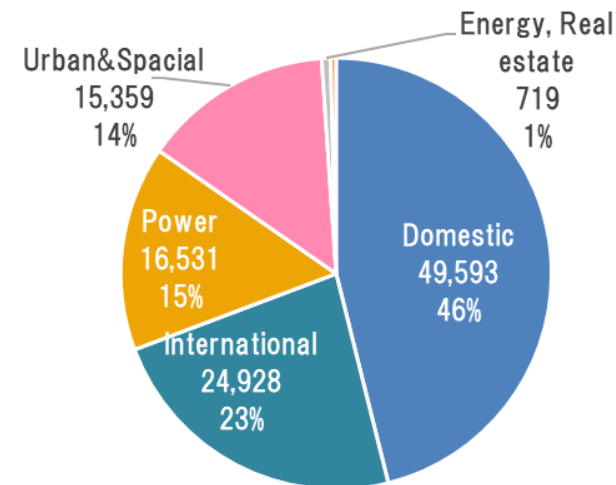
We strive to create multifunctional, well-organized, barrier-free, eco-friendly and beautiful life space in emerging economies in Asia and other developing countries/regions through development projects of social infrastructure design, such as of railway stations, airport buildings, rearrangement of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

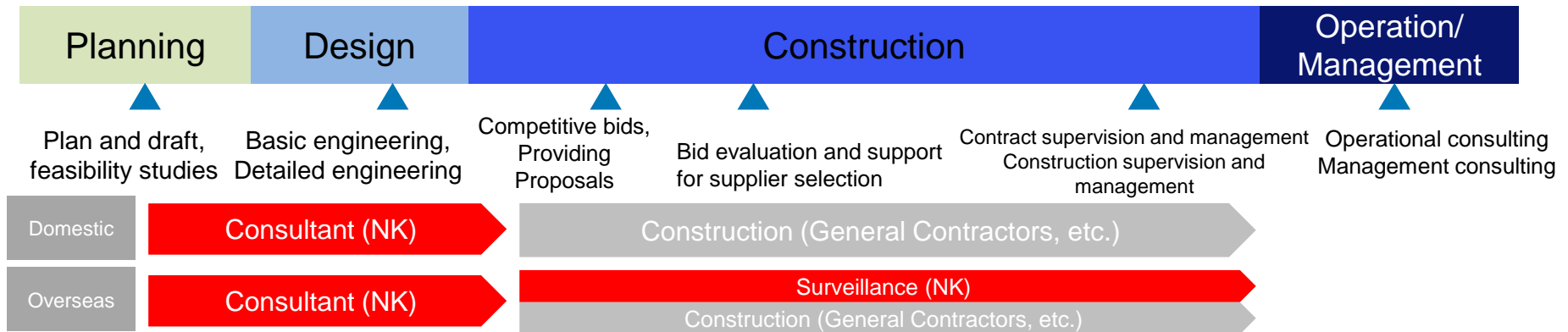
FY19/6 Sales distribution ratio



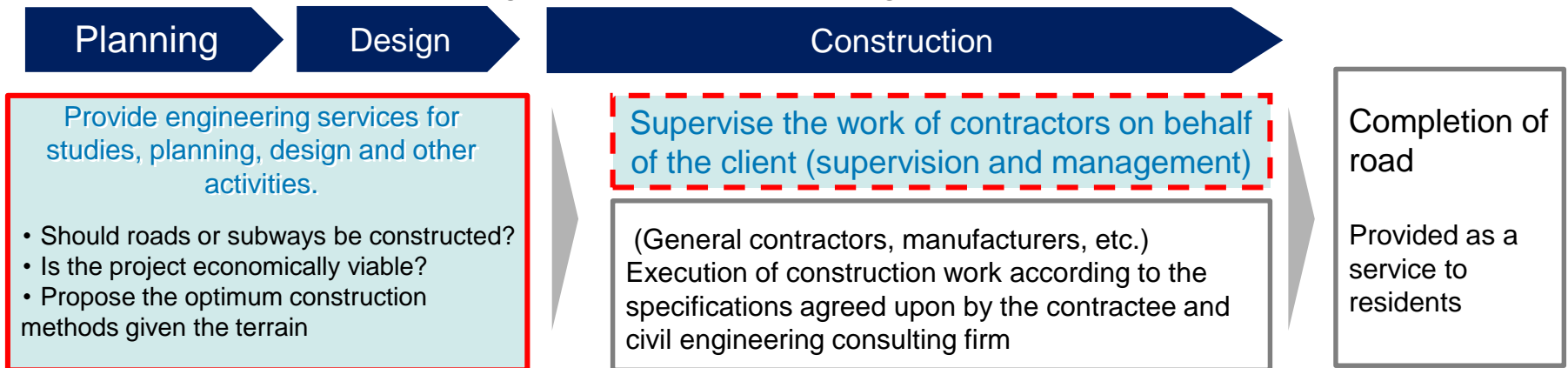
Job Description for Civil Engineering Consultants

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.

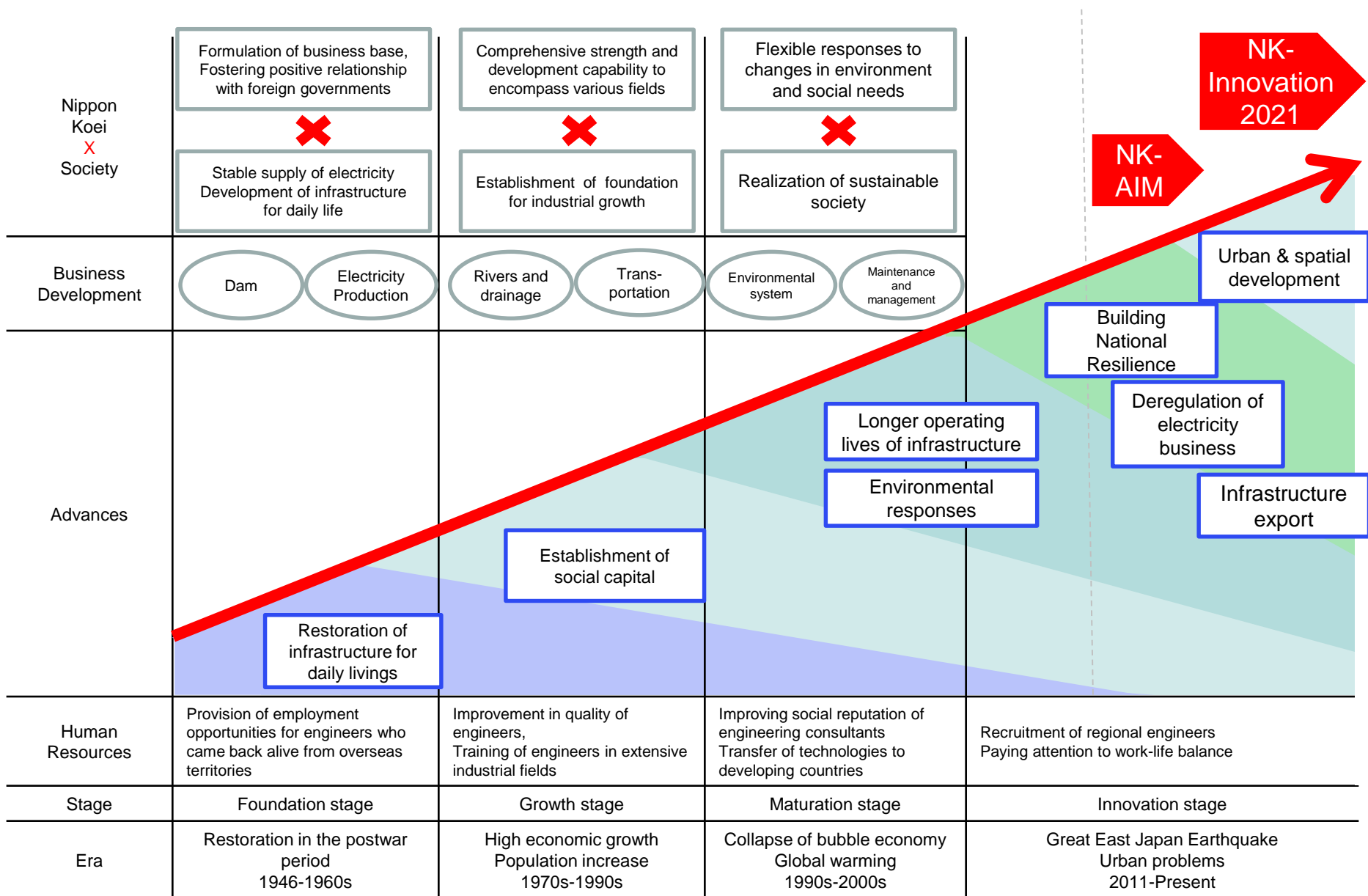
Overseas: Involvement varies by project, and can range from planning and construction to construction supervision and management. Core customers include the Japan International Cooperation Agency (JICA), other governmental agencies, the United Nations and the World Bank.



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: ¥108 billion

No. of countries in which business is undertaken: 160

No. of orders per year: over 5,500

No. of patents acquired: 83

No. of Professional Engineers*: 1,621

*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/Non-consolidated)		Employees(Non-consolidated)	
		Segment of Const. Consultation	Corporate Total	Professional Engineers	Total number of employees
1	Nippon Koei	50,442	64,782	1,337	2,412
2	Pacific Consultants Co.,LTD.	46,359	48,595	1,228	1,891
3	CTI Engineering Co., Ltd.	35,108	36,768	1,265	1,612
4	JR East Consultants Company	21,080	22,779	152	752
5	Oriental Consultants Co., LTD.	21,005	21,088	593	1,062
6	Yachiyo Engineering Co., Ltd.	20,694	20,986	531	1,072
7	OC Global	18,626	18,626	121	481
8	Nihon Suido Consultants Co., Ltd	17,868	18,055	498	748
9	Eight-Japan Engineering Consultants Inc.	17,650	19,747	482	882
10	IDEA Consultants, Inc.	17,306	17,758	462	899
18	Tamano Consultants Co., Ltd. (strong point: urban planning)	10,734	12,580	224	716
89	NIPPON CIVIC CONSULTING ENGINEERS CO.,LTD (strong points: underground spatial planning, tunnels)	2,153	2,177	62	129

※ Source: *Nikkei Construction*, April 22, 2019 edition. Ranking by engineering consultant division sales (according to published financial results)

World Ranking

Ranked as the only Japanese company in the world ranking.

2018 Rank	2017 Rank	Company	Head Office
1	4	JACOBS	U.S.A
2	2	AECOM	U.S.A
3	20	SNC-LAVALIN	Canada
4	1	WSP	Canada
5	3	ARCADIS NV	The Netherlands
6	8	FLUOR CORP	U.S.A
7	6	DAR GROUP	U.A.E
8	7	STANTEC INC	Canada
9	5	WORLEYPARSONS LTD	Australia
10	9	FUGRO NV	The Netherlands
44	53	NIPPON KOEI GROUP	Japan

Source : ENR The Top 225 International Design Firms

Group Vision

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



- 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

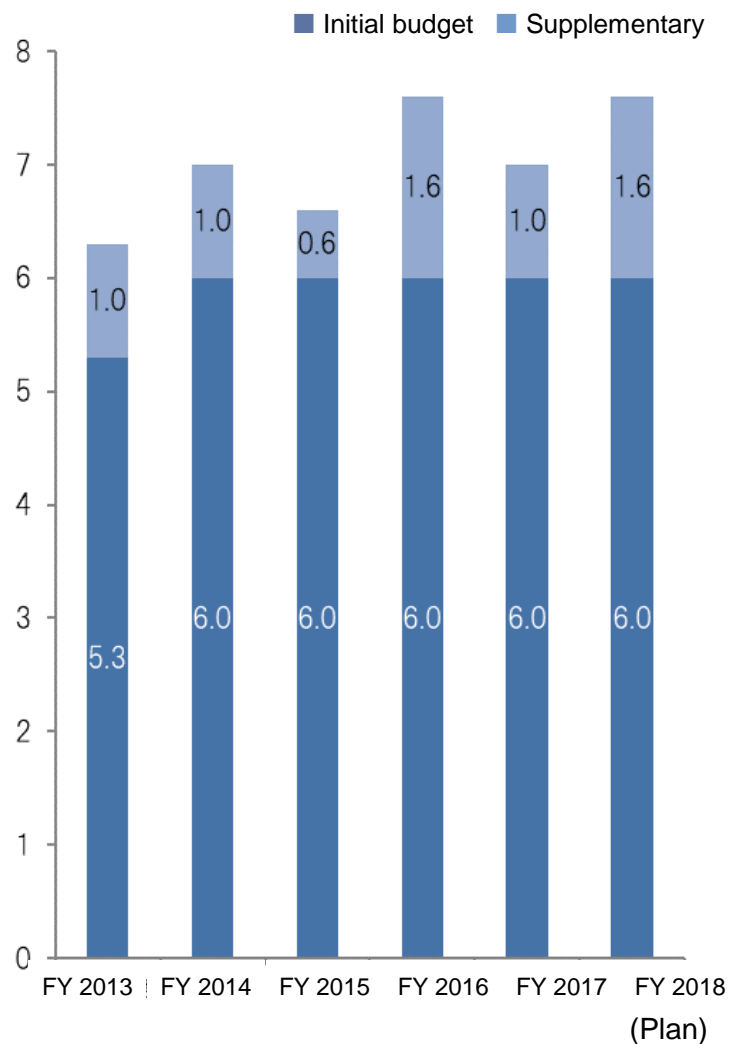
Product development and overseas expansion of Power Engineering Business

Group-wide measures

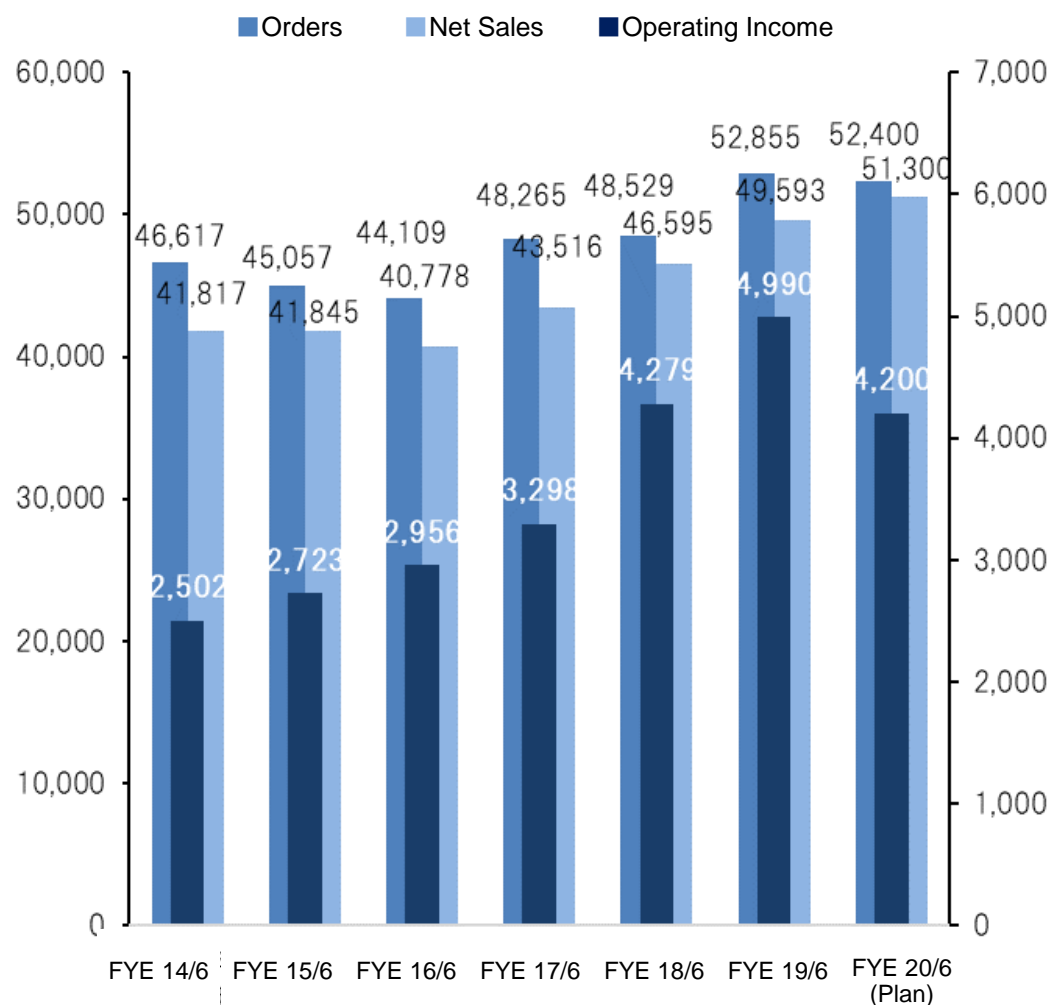
Establishment of one-stop marketing system / Investment in technologies and human resources / Enhancement of group governance

Domestic Consulting

Public Works Expenditures (¥ trillion)



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

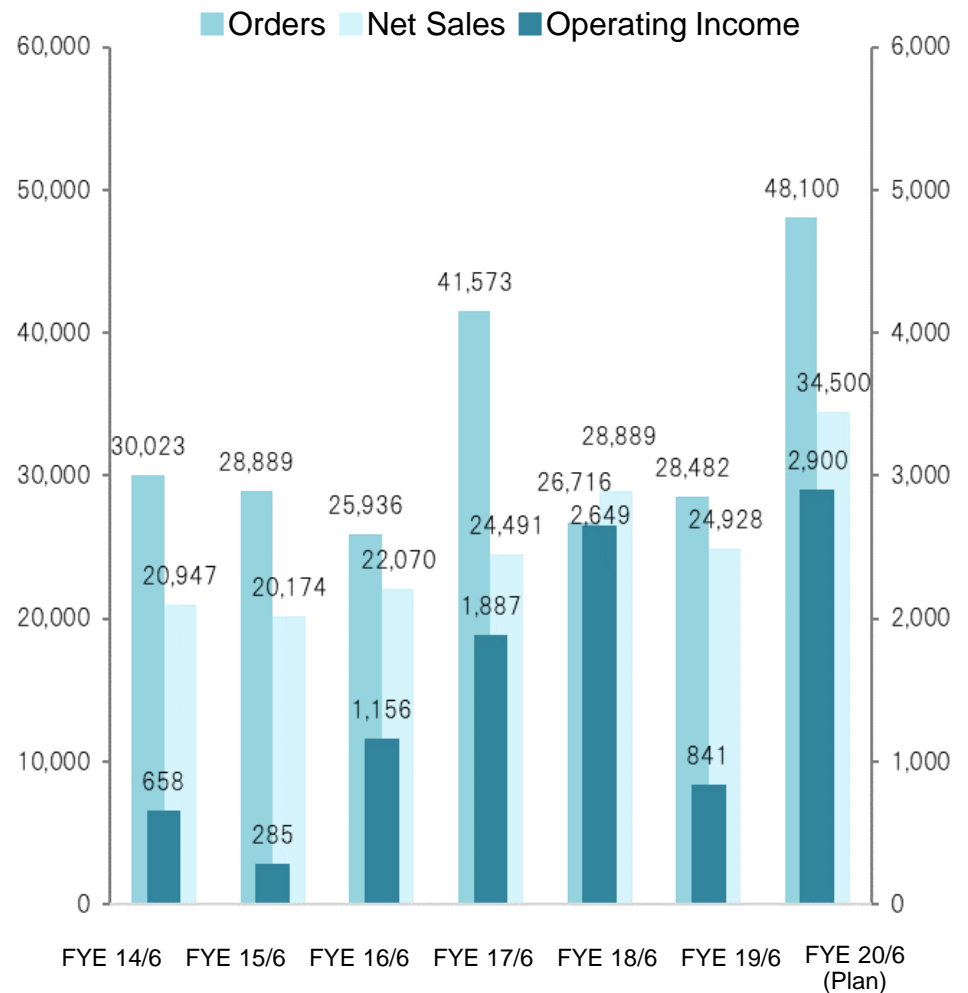


International Consulting

Initial ODA Budget in the General Account
(¥ billion)

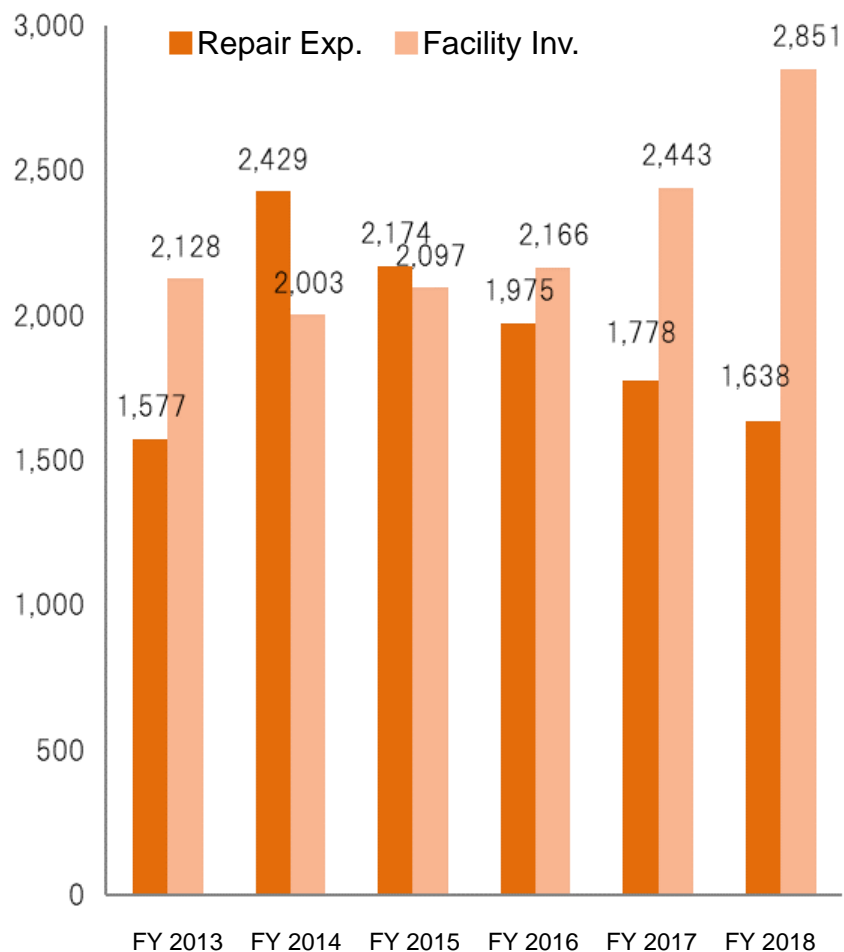


Nippon Koei's Operating Results in International Consulting
(¥ million)

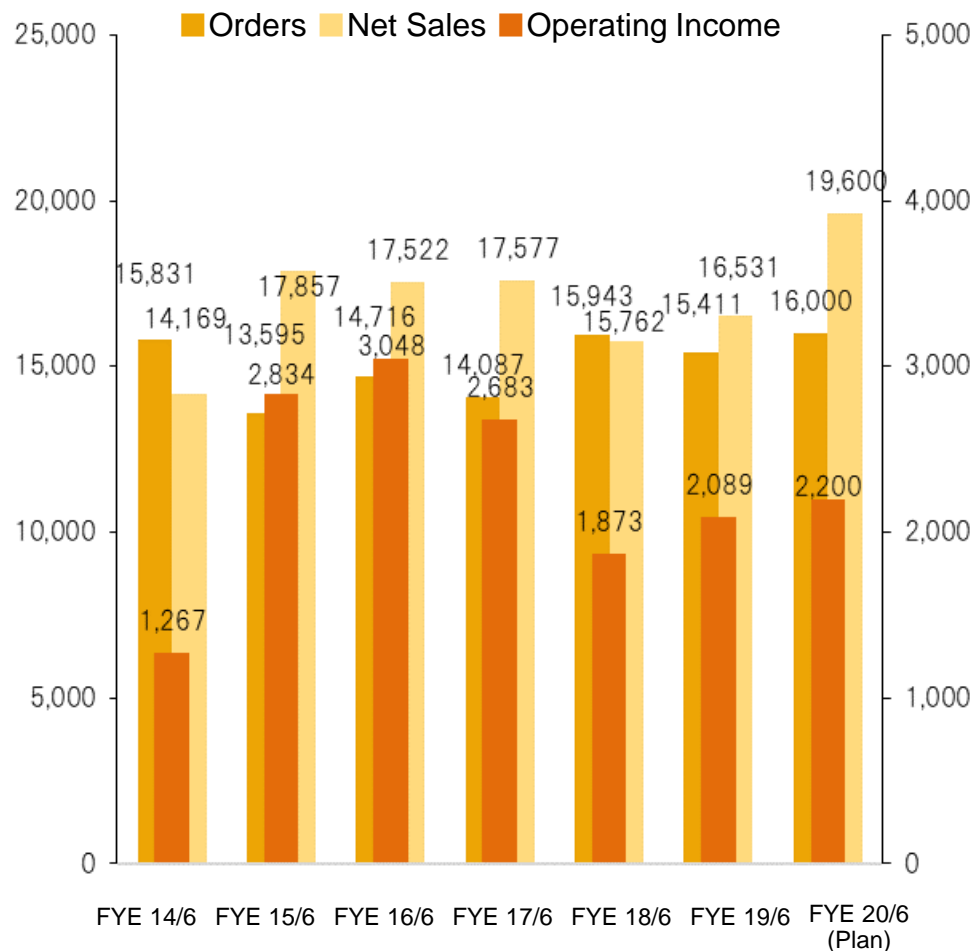


Power Engineering

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

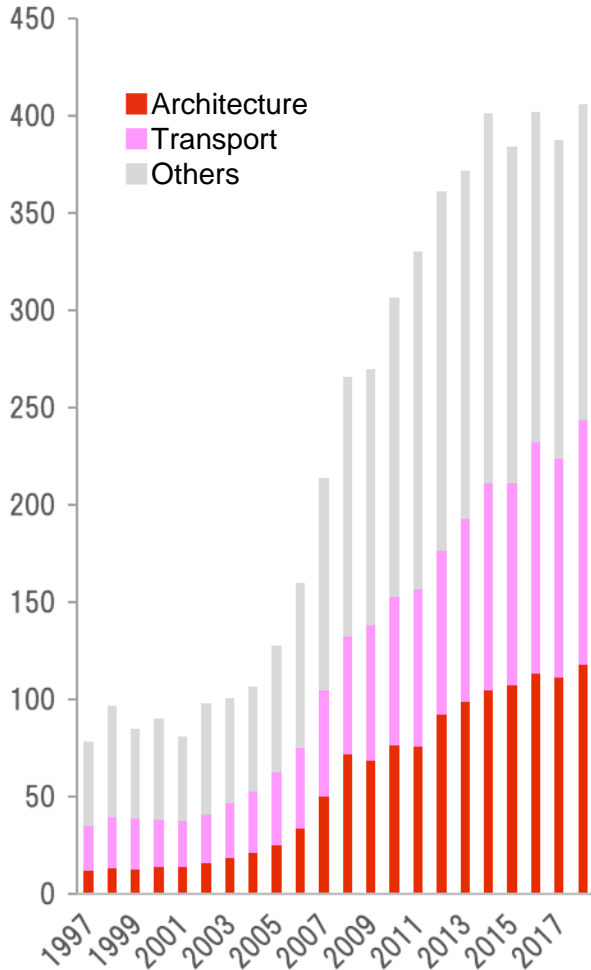


Nippon Koei's Operating Results in Power Engineering Business (¥ million)



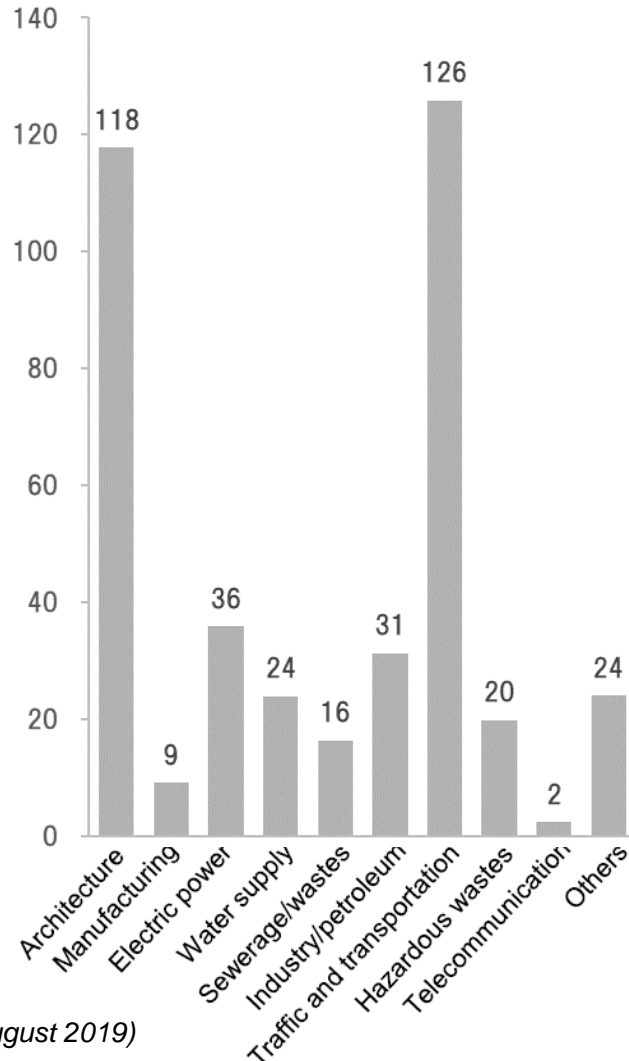
Urban & Spatial Development

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



Source of data: ENR Magazine (issued in August 2019)

Sales of top 164 firms in 2018 by sector (Billions of dollars)



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

