

# Financial Results of FY3/24 & Forecasts for FY3/25

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**May 2024**



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Mr. PENTA

### 【Disclaimer】

This documents contains forward-looking statements .These statements are not guaranteed of future performance and involve risks and uncertainties and actual results may materially differ from those contains in the forward-looking statements as a result of various factors.

# ■ Orders Received(Non-consolidated) of FY3/24 & Forecasts for FY3/25

## ■ Orders Received for FY3/24

### ● Domestic Civil Engineering Business Unit:

JPY273.6 bn (down JPY 36.9 bn YoY)

- Orders for ordinary-scale projects (excluding Mageshima Self- Defense Force (SDF) Project and Hibikinada Offshore Wind Project) increased significantly (up JPY 62.5 bn YoY)

➢ Marine: JPY 159.9 bn (down JPY 77.5 bn YoY)

Although orders decreased significantly due to a reactionary drop reflecting large-scale orders (Mageshima SDF Project and Hibikinada Offshore Wind Project) in the previous term, orders for ordinary-scale projects related to self-defense increased significantly(up JPY 18.8 bn YoY)

➢ Land: JPY 113.7 bn (up JPY 40.6 bn YoY)

Increased significantly thanks to orders for ordinary-scale projects(excluding Mageshima SDF Project)(up JPY 43.7 bn YoY)

### ● Domestic Building Construction Business Unit:

JPY 250.6 bn (up JPY 28.9 bn YoY)

- Orders received for several large-scale projects both in public and private sectors (excluding Tsukishima Redevelopment Project, up JPY 84.7 bn YoY)

➢ Residential: JPY 19.7 bn (down JPY 54.0 bn YoY)

Decreased significantly due to a reactionary drop reflecting the order for Tsukishima Redevelopment Project in the previous term

➢ Non-Residential: JPY 230.9 bn (up JPY 82.9 bn YoY)

Increased significantly thanks to orders in the public sector (for Hiroshima City Central Wholesale Market, self-defense related facilities etc.) and in the private sector (several large-scale logistics facilities, factories and medical facilities etc.)

### ● Overseas Business Unit:

JPY 68.0 bn (down JPY 68.4 bn YoY)

➢ Civil Engineering: JPY 14.4 bn (down JPY 16.2 bn YoY)

Dropped due to allocation timing difference of large-scale port project, lack of large-scale orders

➢ Building Construction: JPY 53.6 bn (down JPY 52.2 bn YoY)

Received multiple orders for large-scale building construction projects in Hong Kong

## ■ Order Forecasts for FY3/25

- We expect to see robust demands both in domestic and overseas markets

➢ Domestic Civil Engineering Business Unit: JPY220.0 bn (down JPY 53.6 bn YoY)

Focuses on national resilience enhancement and national self-defense force related projects as well as recovery from Noto Peninsula Earthquake

➢ Domestic Building Construction Business Unit: JPY250.0 bn (down JPY 0.6 bn YoY)

Striving to secure orders for profit-making projects by front-loading approach

➢ Overseas Business Unit: JPY150.0 bn (up JPY 82.0 bn YoY)

Ensuring profit-oriented approaches (thorough investigation of risks prior to bidding, implementing clear and technology-driven marketing strategies and streamlining strategies to enhance the utilization rate of POC fleet

(JPY bn)

		FY3/23	FY3/24			FY3/25		
		Result	Result	Changes from FY3/23	YoY	Forecast	Changes from FY3/24	YoY
Domestic Civil Engineering	Public Sector	219.8	193.4	-26.4	-12.0%	175.0	-18.4	-9.5%
	Private Sector	90.8	80.2	-10.6	-11.6%	45.0	-35.2	-43.9%
	Total	310.6	273.6	-36.9	-11.9%	220.0	-53.6	-19.6%
	Marine Civil Engineering	237.4	159.9	-77.5	-32.6%	115.0	-44.9	-28.1%
	Land Civil Engineering	73.2	113.7	40.6	55.4%	105.0	-8.7	-7.7%
	Share of Marine Civil	76.4%	58.4%	—	—	52.3%	—	—
Domestic Building Construction	Public Sector	55.9	80.0	24.2	43.2%	20.0	-60.0	-75.0%
	Private Sector	165.8	170.5	4.7	2.8%	230.0	59.5	34.9%
	Total	221.7	250.6	28.9	13.0%	250.0	-0.6	-0.2%
	Residential	73.7	19.7	-54.0	-73.3%	30.0	10.3	52.4%
	Non-Residential	148.0	230.9	82.9	56.0%	220.0	-10.9	-4.7%
	Share of Residential	33.3%	7.9%	—	—	12.0%	—	—
Domestic Construction Total	Public Sector	275.7	273.5	-2.2	-0.8%	195.0	-78.5	-28.7%
	Private Sector	256.6	250.7	-5.9	-2.3%	275.0	24.3	9.7%
		532.3	524.2	-8.1	-1.5%	470.0	-54.2	-10.3%
Overseas	Civil Engineering	30.6	14.4	-16.2	-52.9%	120.0	105.6	732.7%
	Building Const.	105.8	53.6	-52.2	-49.4%	30.0	-23.6	-44.0%
	Overseas Total	136.4	68.0	-68.4	-50.2%	150.0	82.0	120.6%
Construction Total	Civil Engineering	341.2	288.0	-53.1	-15.6%	340.0	52.0	18.0%
	Building Const.	327.5	304.2	-23.4	-7.1%	280.0	-24.2	-7.9%
		668.7	592.2	-76.5	-11.4%	620.0	27.8	4.7%
Others		0.4	0.5	0.1	12.1%	0.5	0.0	4.5%
Total		669.1	592.7	-76.4	-11.4%	620.5	27.8	4.7%

# ■ Business Results of FY3/24

## Record-high sales and significant increase in profits, although short of targets

### ■ Non-Consolidated \*Achievement rate(compared to forecast issued in May 2023)

#### ● Net Sales: JPY 565.9 bn (up JPY 96.8 bn / up 20.6% YoY, achievement rate 99.2%)

#### - Strong sales revenues in all three business units thanks to steady progress of projects at hand

- Domestic Civil Engineering Business Unit: JPY 244.0 bn (up JPY59.0 bn / up 31.9% YoY)
- Domestic Building Construction Business Unit: JPY186.1 bn (up JPY25.9bn / up 16.2% YoY)
- Overseas Business Unit: JPY 135.3 bn (up JPY 11.8 bn / up 9.6% YoY)

#### ● Gross Profit: JPY 48.2 bn (up JPY 25.3 bn / up 111% YoY, achievement rate 90.9%)

- Domestic Civil Engineering Business Unit: JPY 36.8 bn (up JPY 8.9 bn YoY), 15.1 % (remained flat YoY)

Despite substantial increases in sales and profits, targets were not achieved due to slower-than-expected progress of large-scale projects, losses due to inadequate payment for design changes made in a project recorded in the previous term, increased number of loss-making projects

- Domestic Building Construction Business Unit: JPY 12.3 bn (up JPY 3.2 bn YoY), 6.6% (up 1.0 p YoY)

Target achieved thanks to growth both in sales and profits helped by better profit margins

- Overseas Business Unit: JPY -1.1 bn (up JPY 13.1 bn YoY)

Construction losses: (JPY 16.0 bn for the previous term)

Targets were not achieved due to a fall in vessel management income owing to underutilization of dredge vessels and increase in losses in loss-making projects due to the impact of FX

#### ● Operating Profit: JPY 26.3 bn (up JPY 23.6 bn, achievement ratio 83.6%)

Non-operating income or expenses: Dividend distribution of domestic affiliates: JPY 2.4 bn, FX gain: JPY 0.4 bn, increase in interest costs on bank borrowings: JPY0.9 bn

#### ● Ordinary Income: JPY 27.9 bn (up JPY 27.4 bn, achievement ratio 94.6%)

Sales of strategic holding shares: JPY 1.1 bn (8 stocks, of which 2 stocks were sold partially)

impairment losses on affiliates: JPY 4.0 bn (JPY 2.6 bn for UG M&E, JPY 1.3 bn for KBE)

#### ● Net Income: JPY 16.8 bn (up JPY 16.6 bn, achievement ratio 83.8%)

### ■ Consolidated

#### - deterioration of business performance of UG M&E and KBE in Singapore

#### ● Net Sales: JPY 617.7 bn (up JPY 115.5 bn / up 23.0% YoY, achievement ratio 101.3%)

#### ● Gross Profit: JPY 53.3 bn (up JPY 26.9 bn / up 101.8% YoY, achievement ratio 92.3%)

#### ● Operating Profit: JPY 29.2 bn (up JPY 25.0 bn, achievement ratio 85.7%)

#### ● Ordinary Income: JPY 27.2 bn (up JPY 25.8 bn, achievement ratio 85.1%)

#### ● Net Income: JPY 17.9 bn (up JPY 17.2 bn, achievement ratio 81.3%)

\*1UG M&E (M&E, 100% affiliate): Total gross loss: JPY 1.1 bn, Impairment loss: JPY 0.9 bn

\*2KBE (Civil engineering, equity method affiliate, POC holds 28.74% of KBE shares, listed on SGX Catalyst) Loss on investment to companies under the application of equity method (non-operating) : JPY 0.5 bn

(JPY bn)

	Non-Consolidated						Consolidated					
	FY3/24		YoY		FY3/24F (May.2023)		FY3/24		YoY		FY3/24F (May.2023)	
Domestic Civil	244.0		59.0	31.9%	250.0		266.4		69.9	35.5%	265.0	
Domestic Building	186.1		25.9	16.2%	180.0		189.3		26.9	16.5%	185.0	
Overseas	135.3		11.8	9.6%	140.0		150.6		17.4	13.1%	150.0	
Others	0.5		0.1	12.1%	0.5		11.4		1.4	13.7%	10.0	
Net Sales	565.9		96.8	20.6%	570.5		617.7		115.5	23.0%	610.0	
Domestic Civil	36.8	15.1%	8.9	0.0p	40.0	16.0%	40.6	15.2%	11.9	0.6p	41.8	15.8%
Domestic Building	12.3	6.6%	3.2	1.0p	11.0	6.1%	12.8	6.7%	3.2	0.9p	11.5	6.2%
Overseas	-1.1	-0.8%	13.1	10.7p	2.0	1.4%	-1.3	-0.9%	12.1	9.2p	3.0	2.0%
Others	0.2	45.9%	0.0	2.1p	0.0	0.0%	1.3	11.4%	-0.3	-4.8p	1.5	15.0%
Total Gross Profit	48.2	8.5%	25.3	3.6p	53.0	9.3%	53.3	8.6%	26.9	3.4p	57.8	9.5%
SG & A	21.8	3.9%	1.7	-0.4p	21.5	3.8%	24.2	3.9%	1.9	-0.5p	23.8	3.9%
Domestic Civil	24.6	10.1%	7.7	1.0p	28.0	11.2%	27.8	10.4%	10.7	1.7p	29.2	11.0%
Domestic Building	4.6	2.5%	2.8	1.3p	3.5	1.9%	4.9	2.6%	2.8	1.3p	3.8	2.1%
Overseas	-3.1	-2.3%	13.0	10.8p	0.0	0.0%	-4.2	-2.8%	11.9	9.3p	0.2	0.1%
Others	0.2	41.3%	0.0	3.4p	0.0	0.0%	0.6	5.6%	-0.3	-4.0p	0.8	8.0%
Operating Profit	26.3	4.7%	23.6	4.1p	31.5	5.5%	29.2	4.7%	25.0	3.9p	34.0	5.6%
Non-Operating Income or Expenses	1.6		3.8		-2.0		-1.9		0.8		-2.0	
Ordinary Income	27.9	4.9%	27.4	4.8p	29.5	5.2%	27.2	4.4%	25.8	4.1p	32.0	5.2%
Extraordinary Income or Expenses	-2.9		-3.1		-0.5		0.2		-0.1		-0.5	
Income before Taxes	25.0	4.4%	24.2	4.3p	29.0	5.1%	27.4	4.4%	25.7	4.1p	31.5	5.2%
Net Income	16.8	3.0%	16.6	2.9p	20.0	3.5%	17.9	2.9%	17.2	2.8p	22.0	3.6%

	FY3/24		YoY		FY3/24F (May.2023)		FY3/24		YoY		FY3/24F (May.2023)	
Total Assets	527.8		32.3		530.0		566.0		57.8		550.0	
Net Assets	146.4	27.7%	11.3	0.5p	148.2	28.0%	173.1	30.6%	16.1	-0.3p	172.1	31.3%
Interest-bearing Debt	99.2	18.8%	12.9	1.4p	96.0	18.1%	110.3	19.5%	16.6	1.1p	113.5	20.6%
Cash and Deposits	54.7		8.2		49.5		60.1		9.7		56.5	
Net Debt	44.6	8.4%	4.7	0.4p	46.5	8.8%	50.2	8.9%	7.0	0.4p	57.0	10.4%
Net D/E Ratio (Point)	0.3		0.0		0.3		0.3		0.0		0.3	
Return on Equity (ROE)	11.9%		11.8p		14.1%		10.8%		10.4p		13.4%	

# ■ Business Forecasts for FY3/25

## To exceed the record-high sales and review the profit plan

### ■ Consolidated

\*C/T MTP(compared to Mid-term Management Plan issued in May 2023)

- **Sales: JPY 655.0 bn** (up JPY 37.3 bn / up 6.0% YoY, 1.01x C/T MTP)
  - **Domestic Civil Engineering Business Unit: JPY 265.0 bn** (down JPY 1.4 bn / down 0.5% YoY, 1.00x C/T MTP)  
Expected to remain at high level thanks to progress of abundant projects at hand
  - **Domestic Building Construction Business Unit: JPY 225.0 bn** (up JPY 35.7 bn / up 18.9% YoY, 1.05x C/T MTP)  
Significant increase in sales compared to previous term expected thanks to progress of abundant projects at hand
  - **Overseas Business Unit: JPY 155.0 bn** (up JPY 4.4 bn/ up 2.9% YoY, 0.97x C/T MTP)  
Delay in construction start for a large-scale port project expected
  - **Others Business Unit: JPY 10.0 bn** (down JPY 1.4 bn/ down 11.9% YoY, 1.00x C/T MTP)  
Ship building business, environment-related business, etc.
- **Operating Profit: JPY 57.6 bn** (up JPY 4.3 bn / up 8.0% YoY, 0.94x C/T MTP)
  - **Domestic Civil Engineering Business Unit: JPY 38.0 bn** (down 2.6 bn / down 6.4% YoY, 0.88x C/T MTP)  
Conservative forecast factoring delay in a large-scale port project and profitability of Hibikinada Offshore Wind Project etc.
  - **Domestic Building Construction Business Unit: JPY 15.5 bn** (up 2.7 bn / up 21.5% YoY, 1.19x C/T MTP)  
On-par level of profit margin expected, in addition to increase in profits thanks to higher sales
  - **Overseas Business Unit: JPY 2.6 bn** (up 3.9 bn YoY, return to profitability, 0.65x C/T MTP)  
Profitability improvement of UG M&E (affiliate in M&E sector), profit improvement in vessel management
  - **Others Business Unit: JPY 1.5 bn** (up JPY 0.2 bn / up 16.2% YoY, 1.00x C/T MTP)
- **Operating Profit: JPY 32.5 bn** (up JPY 3.3 bn / up 11.5% YoY, 0.88x C/T MTP)  
Increase in bank borrowings associated with business expansion and capital expenditures, increase in interest expenses due to higher interest rates, etc.
- **Ordinary Income: JPY 30.0 bn** (up JPY 2.8 bn / up 10.2% YoY, 0.86x C/T MTP)  
Sales of strategic holding shares: JPY 0.5 bn
- **Net Income: JPY 20.0 bn** (up JPY 2.1 bn / up 11.9% YoY, 0.83x C/T MTP)
- **Major management indices (consolidated)**
  - Interest-bearing debt JPY 127 bn (up JPY 16.7 bn YoY)
  - Net D/E ratio 0.4 (up 0.11 YoY)
  - ROE 11.2% (up 0.4P YoY) ※PBR 1.28(As of end of March 2024))
  - Total payout ratio 40% or higher (dividends: 24 yen, dividend payout ratio: 34.3%) (share buybacks: 10% or higher)

(JPY bn)

	Non-Consolidated						Consolidated					
	FY3/25F (May.2024)		YoY		FY3/25F (May.2023)		FY3/25F (May.2024)		YoY		FY3/25F (May.2023)	
Domestic Civil	250.0		6.0	2.5%	250.0		265.0		-1.4	-0.5%	265.0	
Domestic Building	220.0		33.9	18.2%	210.0		225.0		35.7	18.9%	215.0	
Overseas	140.0		4.7	3.5%	150.0		155.0		4.4	2.9%	160.0	
Others	0.5		0.0	4.5%	0.5		10.0		-1.4	-11.9%	10.0	
Net Sales	610.5		44.6	7.9%	610.5		655.0		37.3	6.0%	650.0	
Domestic Civil	36.0	14.4%	-0.8	0.0p	41.0	16.4%	38.0	14.3%	-2.6	-0.9p	43.0	16.2%
Domestic Building	15.0	6.8%	2.7	0.2p	12.5	6.0%	15.5	6.9%	2.7	0.1p	13.0	6.0%
Overseas	1.0	0.7%	2.1	1.6p	3.0	2.0%	2.6	1.7%	3.9	2.6p	4.0	2.5%
Others	0.0	0.0%	-0.2	-45.9p	0.0	0.0%	1.5	15.0%	0.2	3.6p	1.5	15.0%
Total Gross Profit	52.0	8.5%	3.8	0.0p	56.5	9.3%	57.6	8.8%	4.3	0.2p	61.5	9.5%
SG & A	23.0	3.8%	1.2	-0.1p	22.0	3.6%	25.1	3.8%	0.9	-0.1p	24.5	3.8%
Domestic Civil	23.0	9.2%	-1.6	-0.9p	28.7	11.5%	24.4	9.2%	-3.4	-1.2p	29.9	11.3%
Domestic Building	7.0	3.2%	2.4	0.7p	4.8	2.3%	7.3	3.2%	2.4	0.7p	5.1	2.4%
Overseas	-1.0	-0.7%	2.1	1.6p	1.0	0.7%	0.0	0.0%	4.2	2.8p	1.2	0.8%
Others	0.0	0.0%	-0.2	-41.3p	0.0	0.0%	0.8	8.0%	0.2	2.4p	0.8	8.0%
Operating Profit	29.0	4.8%	2.7	0.1p	34.5	5.7%	32.5	5.0%	3.3	0.2p	37.0	5.7%
Non-Operating Income or Expenses	-2.5		-4.1		-2.0		-2.5		-0.6		-2.0	
Ordinary Income	26.5	4.3%	-1.4	-0.6p	32.5	5.3%	30.0	4.6%	2.8	0.2p	35.0	5.4%
Extraordinary Income or Expenses	-0.5		2.4		-0.5		-1.0		-1.2		-0.5	
Income before Taxes	26.0	4.3%	1.0	-0.2p	32.0	5.2%	29.0	4.4%	1.6	-0.0p	34.5	5.3%
Net Income	18.0	2.9%	1.2	-0.0p	22.0	3.6%	20.0	3.1%	2.1	0.2p	24.0	3.7%

	FY3/25F (May.2024)		YoY		FY3/25F (May.2023)		FY3/25F (May.2024)		YoY		FY3/25F (May.2023)	
Total Assets	580.0		52.2		580.0		620.0		54.0		620.0	
Net Assets	155.5	26.8%	9.1	-0.9p	161.4	27.8%	184.2	29.7%	11.1	-0.9p	187.2	30.2%
Interest-bearing Debt	109.5	18.9%	10.3	0.1p	106.0	18.3%	127.0	20.5%	16.7	1.0p	126.0	20.3%
Cash and Deposits	51.0		-3.7		50.5		53.0		-7.1		56.5	
Net Debt	58.5	10.1%	13.9	1.6p	55.5	9.6%	74.0	11.9%	23.8	3.1p	69.5	11.2%
Net D/E Ratio (Point)	0.4		0.1		0.3		0.4		0.1		0.4	
Return on Equity (ROE)	11.9%		0.0p		14.2%		11.2%		0.4p		13.3%	

# Progress of Medium Term Management Plan (FY3/24-FY3/26)

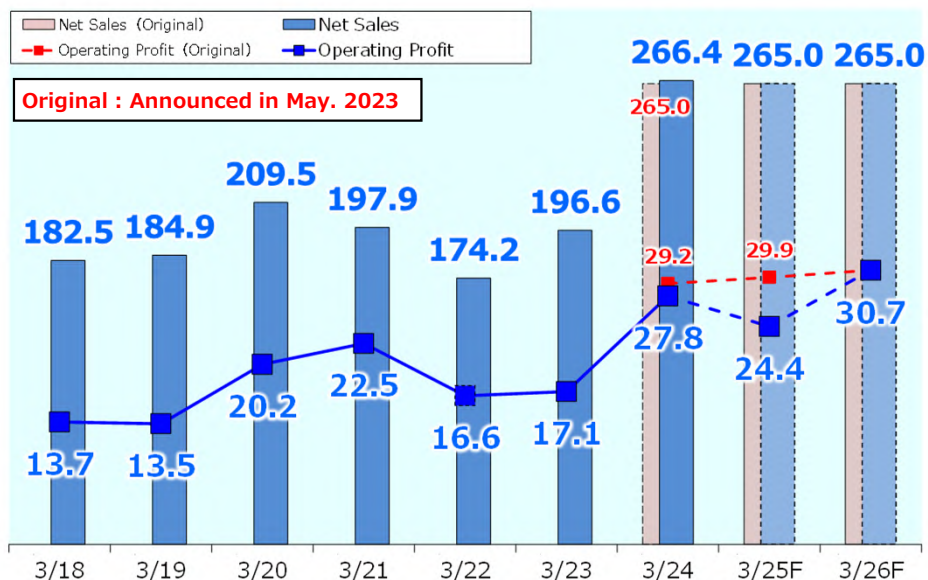
(JPY bn)

	Non-Consolidated									
	FY3/24				FY3/25				FY3/26	
	Forecast		Result		Forecast		Forecast (May.2024)		Forecast	
Domestic Civil Engineering	220.0		273.6		220.0		220.0		220.0	
Domestic Building Construction	220.0		250.6		200.0		250.0		200.0	
Overseas	100.0		68.0		120.0		150.0		120.0	
Construction Total Orders Received	540.0		592.2		540.0		620.0		540.0	
Domestic Civil Engineering	250.0		244.0		250.0		250.0		250.0	
Domestic Building Construction	180.0		186.1		210.0		220.0		210.0	
Overseas	140.0		135.3		150.0		140.0		160.0	
Others	0.5		0.5		0.5		0.5		0.5	
Net Sales	570.5		565.9		610.5		610.5		620.5	
Domestic Civil Engineering	40.0	16.0%	36.8	15.1%	41.0	16.4%	36.0	14.4%	42.0	16.8%
Domestic Building Construction	11.0	6.1%	12.3	6.6%	12.5	6.0%	15.0	6.8%	12.5	6.0%
Overseas	2.0	1.4%	-1.1	-0.8%	3.0	2.0%	1.0	0.7%	4.0	2.5%
Others	0.0	0.0%	0.2	45.9%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Total Gross Profit	53.0	9.3%	48.2	8.5%	56.5	9.3%	52.0	8.5%	58.5	9.4%
SG & A	21.5	3.8%	21.8	3.9%	22.0	3.6%	23.0	3.8%	22.5	3.6%
Domestic Civil Engineering	28.0	11.2%	24.6	10.1%	28.7	11.5%	23.0	9.2%	29.5	11.8%
Domestic Building Construction	3.5	1.9%	4.6	2.5%	4.8	2.3%	7.0	3.2%	4.5	2.1%
Overseas	0.0	0.0%	-3.1	-2.3%	1.0	0.7%	-1.0	-0.7%	2.0	1.3%
Others	0.0	0.0%	0.2	41.3%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Operating Profit	31.5	5.5%	26.3	4.7%	34.5	5.7%	29.0	4.8%	36.0	5.8%
Non-Operating Income or Expenses	-2.0		1.6		-2.0		-2.5		-2.0	
Ordinary Income	29.5	5.2%	27.9	4.9%	32.5	5.3%	26.5	4.3%	34.0	5.5%
Extraordinary Income or Losses	-0.5		-2.9		-0.5		-0.5		-0.5	
Income before Taxes	29.0	5.1%	25.0	4.4%	32.0	5.2%	26.0	4.3%	33.5	5.4%
Net Income	20.0	3.5%	16.8	3.0%	22.0	3.6%	18.0	2.9%	23.0	3.7%
Earning per share (yen)	70.1		58.8		77.5		63.5		82.1	
Total Assets	530.0		527.8		580.0		580.0		600.0	
Net Assets	148.2	28.0%	146.4	27.7%	161.4	27.8%	155.5	26.8%	169.4	28.2%
Interest-bearing Debt	96.0	18.1%	99.2	18.8%	106.0	18.3%	109.5	18.9%	109.5	18.3%
Cash and Deposits	49.5		54.7		50.5		51.0		45.0	
Net Interest-bearing Debt	46.5	8.8%	44.6	8.4%	55.5	9.6%	58.5	10.1%	64.5	10.8%
Net D/E Ratio (Point)	0.3		0.3		0.3		0.4		0.4	
Return On Equity (ROE)	14.1%		11.9%		14.2%		11.9%		14.2%	

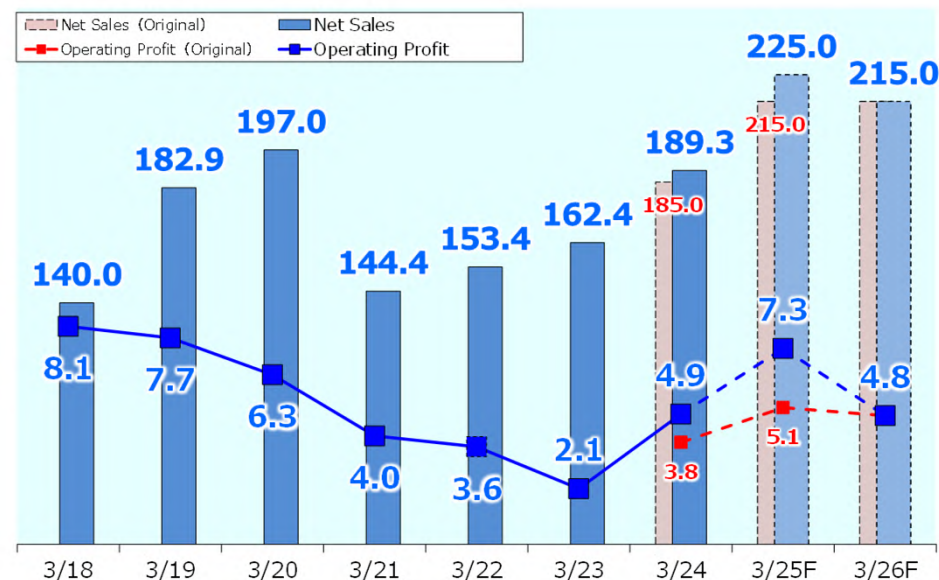
Consolidated									
FY3/24				FY3/25				FY3/26	
Forecast		Result		Forecast		Forecast (May.2024)		Forecast	
265.0		266.4		265.0		265.0		265.0	
185.0		189.3		215.0		225.0		215.0	
150.0		150.6		160.0		155.0		170.0	
10.0		11.4		10.0		10.0		10.0	
610.0		617.7		650.0		655.0		660.0	
41.8	15.8%	40.6	15.2%	43.0	16.2%	38.0	14.3%	44.0	16.6%
11.5	6.2%	12.8	6.7%	13.0	6.0%	15.5	6.9%	13.0	6.0%
3.0	2.0%	-1.3	-0.9%	4.0	2.5%	2.6	1.7%	5.0	2.9%
1.5	15.0%	1.3	11.4%	1.5	15.0%	1.5	15.0%	1.5	15.0%
57.8	9.5%	53.3	8.6%	61.5	9.5%	57.6	8.8%	63.5	9.6%
23.8	3.9%	24.2	3.9%	24.5	3.8%	25.1	3.8%	25.0	3.8%
29.2	11.0%	27.8	10.4%	29.9	11.3%	24.4	9.2%	30.7	11.6%
3.8	2.1%	4.9	2.6%	5.1	2.4%	7.3	3.2%	4.8	2.2%
0.2	0.1%	-4.2	-2.8%	1.2	0.8%	0.0	0.0%	2.2	1.3%
0.8	8.0%	0.6	5.6%	0.8	8.0%	0.8	8.0%	0.8	8.0%
34.0	5.6%	29.2	4.7%	37.0	5.7%	32.5	5.0%	38.5	5.8%
-2.0		-1.9		-2.0		-2.5		-2.0	
32.0	5.2%	27.2	4.4%	35.0	5.4%	30.0	4.6%	36.5	5.5%
-0.5		0.2		-0.5		-1.0		-0.5	
31.5	5.2%	27.4	4.4%	34.5	5.3%	29.0	4.4%	36.0	5.5%
22.0	3.6%	17.9	2.9%	24.0	3.7%	20.0	3.1%	25.0	3.8%
77.2		62.7		84.5		70.6		89.3	
550.0		566.0		620.0		620.0		640.0	
172.1	31.3%	173.1	30.6%	187.2	30.2%	184.2	29.7%	200.1	31.6%
113.5	20.6%	110.3	19.5%	126.0	20.3%	127.0	20.5%	130.0	20.3%
56.5		60.1		56.5		53.0		46.5	
57.0	10.4%	50.2	8.9%	69.5	11.2%	74.0	11.9%	83.5	13.0%
0.3		0.3		0.4		0.4		0.4	
13.4%		10.8%		13.3%		11.2%		13.0%	

# Trends of Sales and Operating Profit by Business Unit (Consolidated)

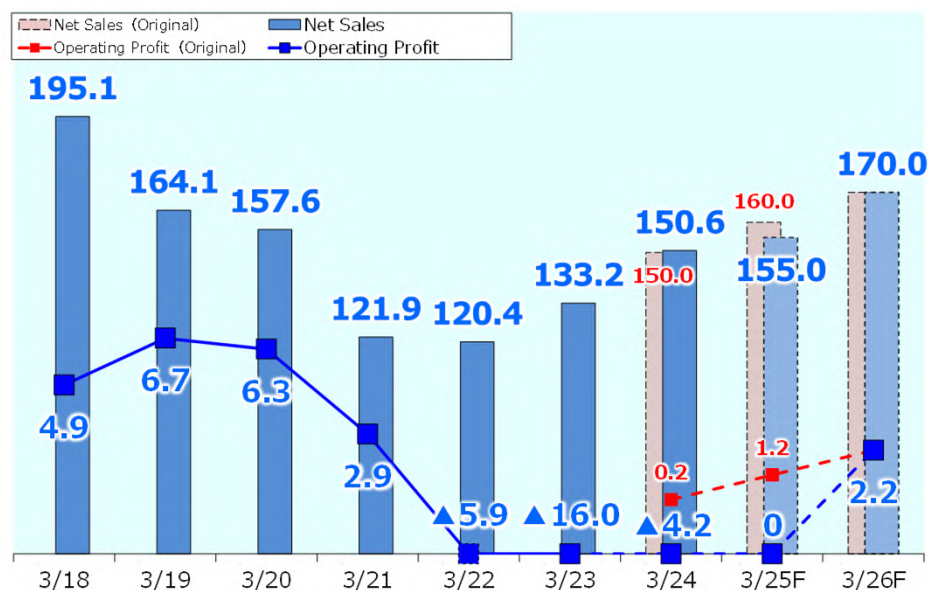
## Domestic Civil Engineering



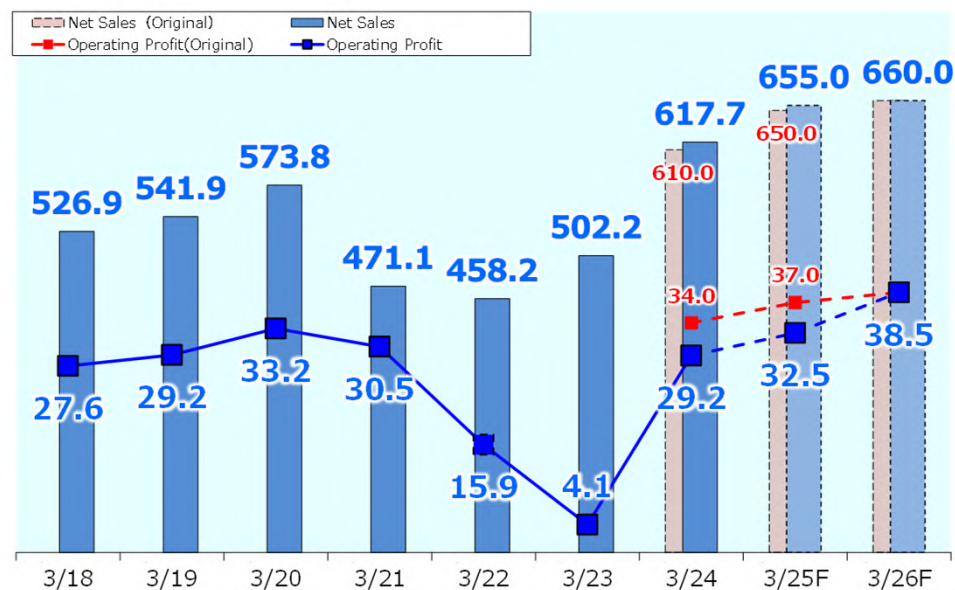
## Domestic Building Construction



## Overseas



## Total ※Including Others



# Financial Planning and Shareholder Returns

## Financial planning - securing operating cash flow and response to strategic investments

### Dealing with abundant business volume – securing flexible financing

Arranging active and flexible financing to match required construction capital  
Ensuring collection of construction payment \* operating cash flow expected to increase year on year

### Dealing with strategic investments: to JPY 30.0bn /year level investment

Capital expenditure for offshore-wind related work vessels will be in full swing  
FY 3/24: Upgrading of the third offshore installation vessel "Sea Challenger"\*1

(completion scheduled for FY 3/26)

New construction of a heavy lift vessel (HLV) and a cable laying vessel (CLV)

(completion scheduled for FY 3/28)

FY 3/25: New construction of a feeder vessel to carry components, and a service operation vessel (SOV), etc.

\*1: To be owned by Japan Offshore Marine (JOM), a JV with DEME Offshore (Belgium)

### Financing –increase of interest-bearing debt

Construction capital: flexible financing by bank borrowings, issuance of CP etc.

Capital expenditures: will be financed by operating cash flow and bank borrowings

Large-scale vessels will be jointly owned with strategic partners

## Shareholder returns

### Basic profit distribution policy

Making strategic investments for future growth including capital enhancement and capital expenditures while providing steady and continuous dividends to shareholders, and improving shareholder returns and capital efficiency by carrying out share buybacks

### Shareholder returns total payout ratio (consolidated): 40% or higher (dividend payout ratio: 30% or higher)

From FY 3/25 onwards, the payment of interim dividends is scheduled (upon approval at the General Meeting of Shareholders in June)

FY 3/23

-Ordinary Dividend **JPY 24** (dividend payout ratio 1,002%)(Total payout ratio 1,002%)

FY 3/24

-Ordinary dividend **JPY 24** (dividend payout ratio 38.4%) } (Total payout ratio 49.6%)

-Share buyback **JPY 2.0 bn** (payout ratio 11.2%) }

FY 3/25

-Ordinary dividend **JPY 24** (dividend payout ratio 34.3%) } (Total payout ratio 40% or higher)

-share buyback **payout ratio 10% or higher** }

## Balance of interest-bearing debt

(JPY bn)

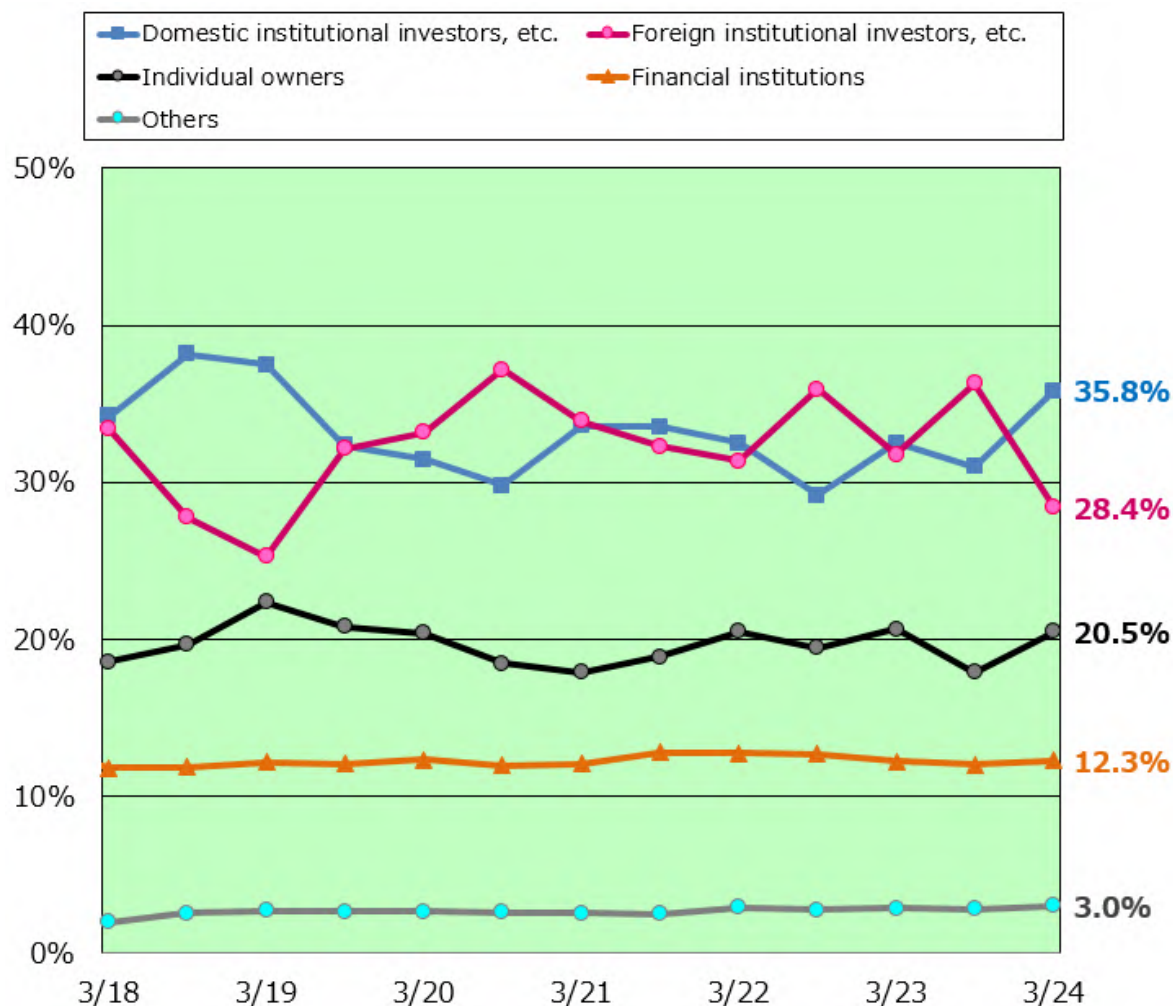
	3/23	3/24	3/25F	3/23F
<b>Consolidated</b>				
Cash flow from operations	19.7	9.1	23.0	27.0
Cash flow from investment	-11.7	-6.4	-37.5	-26.5
Cash flow from financing	-7.0	6.7	7.5	-7.0
Balance of cash and deposit	50.5	60.1	53.0	46.5
Balance of debt with interest	93.7	110.3	127.0	130.0
(Change from the previous year)	1.1	16.6	16.7	3.0
Interest-bearing Debt	43.2	50.2	74.0	83.5
<b>Non-Consolidated</b>				
Balance of cash and deposit	46.5	54.7	51.0	45.0
Balance of debt with interest	86.3	99.2	109.5	109.5
(Change from the previous year)	0.5	12.9	10.3	0.0

## Dividend per share, Dividends payout ratio, Total payout ratio on a consolidated basis

	3/22	3/23	3/24		3/24
	Result	Result	Forecast	Result	Forecast
Dividend per share (Yen)	23	24	24	24	24
Dividend payout ratio (%)	61.1	1002	31.2	38.4	34.3
Share buyback (Billion Yen)	—	—	—	20	—
payout ratio (%)	—	—	10.0	11.2	about 10
Total payout ratio (%)		1002	40	49.6	Over 40

# ■ Shareholder Composition

- Issued common stock: 286,013,910, including 211,761 of the treasury stocks
- Number of shareholders: 47,559 (up 754 over the previous term)
- Shareholder composition: Domestic Institutional investors, etc. 35.8% (up 3.3p), Foreign institutional investors, etc. 28.4% (down 3.4p), Individual owners 20.5% (down 0.1p), Financial institutions 12.3% (flat), Other domestic corporations 3.0% (up 0.2p) → Institutional investors in and out of Japan 64.2% (flat)



## Top 10 shareholders

As of 31 Mar. 2024

Name of shareholders	Shares held (in thousands)	Voting right ratio(%)
The Master Trust Bank of Japan, Ltd. (Trust account)	48,470	17.0
Custody Bank of Japan, Ltd. (Trust account)	31,467	11.0
Mizuho Bank, Ltd.	7,059	2.5
Meiji Yasuda Life Insurance Company	5,990	2.1
SSBTC CLIENT OMNIBUS ACCOUNT	5,935	2.1
STATE STREET BANK AND TRUST COMPANY 505001	5,205	1.8
Tokio Marine & Nichido Fire Insurance Co., Ltd.	4,763	1.7
JUNIPER	4,454	1.6
JP Morgan Securities Japan CO.,Ltd	4,346	1.5
Sompo Japan Insurance Inc.	4,280	1.5
Total held by top 10 shareholders	121,973	42.7

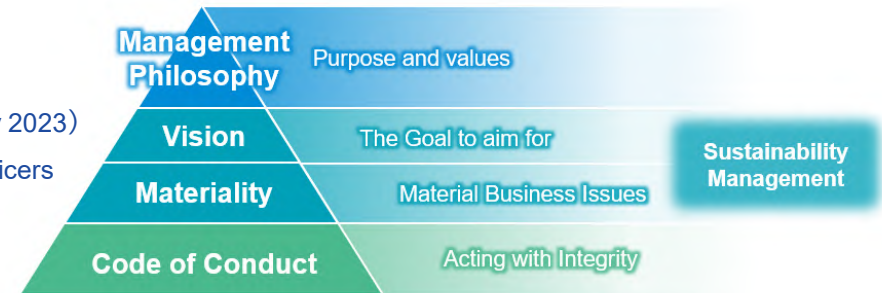
**TOPIX**

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# ■ Practicing Sustainability Management

## ○ Creating a framework to deepen sustainability management

- Signing the United Nations Global Compact(December 2022)
- Identifying Vision and Materiality in sustainability management and disclosure of KPIs(May 2023)
- Establishment and disclosure of POC Code of Conduct (a set of behavior guidelines for officers and employees) (May 2023)
- Establishment and disclosure of the Corporate Philosophy Structure(October 2023)
- Providing sustainability training across the entire company(from October 2023)



Penta-Ocean Construction Corporate Philosophy Structure  
(revised in October 2023)

## ○ Initiatives to tackle material issues

### ■ Respect for humanity

Guiding Principles on Business and Human Rights		POC's initiatives
<b>Policy commitment</b>		<ul style="list-style-type: none"> <li>➢ Establishment of the Human Rights Committee (May 2023)</li> <li>➢ Establishment and disclosure of the Human Rights Policy (June 2023)</li> </ul>
<b>Implementation of Human rights DD</b>	<b>Identification of negative impact on human rights</b>	<ul style="list-style-type: none"> <li>➢ Analysis of human rights risks (October 2022 -)</li> <li>➢ Dialogue with human rights specialists (March 2024)</li> </ul>
	<b>Implementation of remedial / corrective actions</b>	<ul style="list-style-type: none"> <li>➢ Enhancement of human rights training (October 2023 -)</li> <li>➢ Improving initiatives in line with the monitoring results</li> </ul>
	<b>Implementation of monitoring</b>	<ul style="list-style-type: none"> <li>➢ Implementation of Human Rights Risk Monitoring within POC Group(September 2023 -)</li> <li>➢ Increasing the number of target companies for Human Rights Monitoring (for subcontractors + suppliers)(scheduled for FY 3/25)</li> </ul>
	<b>Information disclosure</b>	<ul style="list-style-type: none"> <li>➢ Information disclosure by Integrated Reports, etc. (November 2023 -)</li> <li>➢ Disclosure of Human Rights DD Implementation Progress(scheduled for FY 3/25)</li> </ul>
<b>Development of remedial actions</b>		<ul style="list-style-type: none"> <li>➢ Establishment of the Human Rights Consultation Desk(August 2023)</li> </ul>

### ■ Establishment of a Sustainable Supply Chain (SSC)

- Establishment and disclosure of POC Group SSC Policy and Guidelines (November 2023)
- Holding explanatory and opinion exchange sessions on SSC(February and March 2024)
- Scheduled distribution of SSC Self Assessment Questionnaire (SAQ) (July 2024 - )
  - Scheduled increase of the number of business partners subject to SAQ
- Scheduled rounds of face-to-face interviews with business partners(FY 3/25 -)

## ○ Evaluations from external entities

- Selected as a constituent of the FTSE Blossom Japan Sector Relatives Index
- Received level 2 “Eruboshi” certification (women’s empowerment promotion) in July 2023
- Certified as outstanding “Health and Productivity Management 2024” organization under the “large enterprise category”



**FTSE Blossom  
Japan Sector  
Relative Index**



**健康経営優良法人  
2024**  
Health and productivity

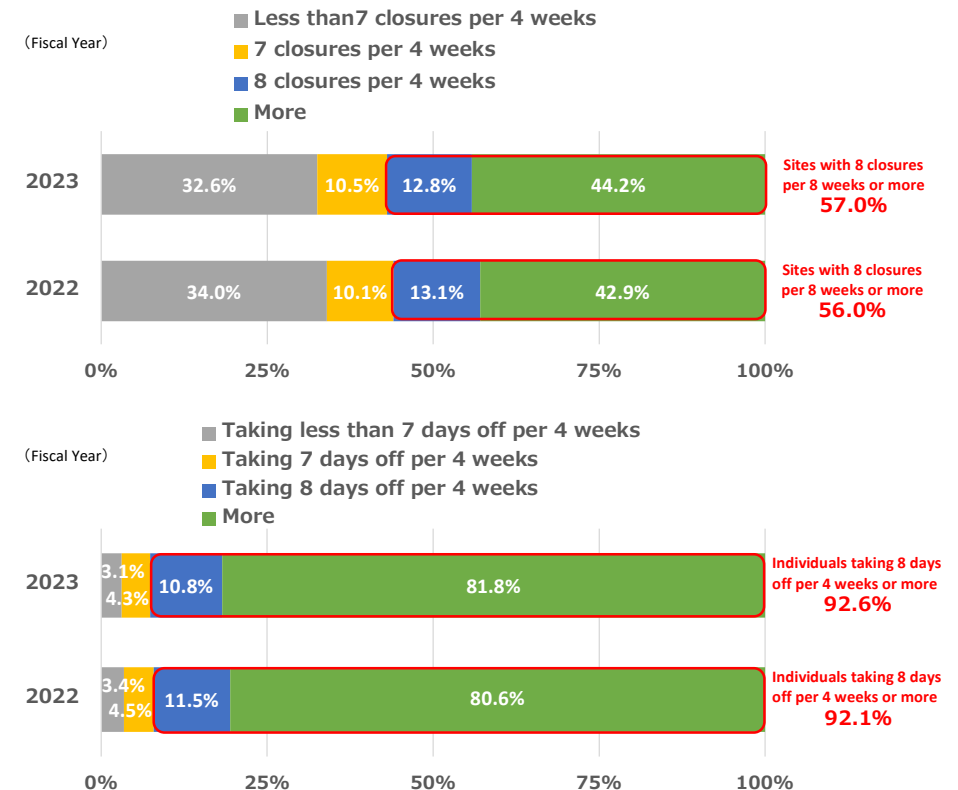
# Work Style Reform and Initiatives for Securing Future Employees

**Promoting productivity improvement backed by technologies, providing comfortable workplace environment and securing future employees**

## ○ Details of initiatives

1. **Ensuring 8 site closures per 4 weeks, strict adherence to compulsory cap on overtime hours** —————→
  - Initiatives to achieve 8 closures per 4 weeks and closures on weekends  
Establishment of 8 site closures per 4 weeks and closures on weekends  
Creating and managing construction schedules which incorporate site closures on weekends
  - Initiatives to achieve acquisition target of 8 days off per 4 weeks  
Encouraging holiday schedule planning for the next three months, introduction of a “buddy unit” system, and ensuring the acquisition of make-up holidays if scheduled holidays are missed
  - Initiatives for reducing overtime hours and ensuring strict adherence to compulsory cap on overtime hours  
Keeping overtime work **within 45 hours per month bimonthly**(for other months, within 60 hours per month)  
Introduction of a new overtime management system → to visualize annual overtime planning for busy and slow months
2. **Promotion of labor-saving and productivity-improvement initiatives**  
- **Full-scale roll-out of i-Construction**
  - Enhancement and sophistication of construction management through digitalization  
Use of construction apps, fixed onsite cameras, and Robotic Process Automation (RPA) technologies
  - Productivity improvement by utilizing BIM/CIM, ICT and AI-powered technologies  
Utilization of digital twin technologies, automatic and autonomous operation of construction machinery
  - Productivity improvement by manpower- and labor-saving technologies  
Promotion of productivity improvement by concrete pre-casting
  - Providing more comprehensive remote-support for onsite works: onsite support by headquarters and branch offices and outsourcing some functions
3. **Promotion of flexible work style**
  - Introduction of rotational flex-time system by the unit of onsite team
  - Promotion of half-day and by-the-hour leaves (flexible work hours)
  - Continuous implementation of working from home and the job-return system
  - Promotion of female empowerment (25% or higher hiring ratio of female career-track employees, 15% or higher female employees in management positions)
  - Entrenching the Global HR systems
  - Salary increase above the national inflation rate
4. **Keeping the turnover ratio of young employees within three years from joining the company at 5% or lower**
  - Enhancement of training programs tailored for young employees
  - Providing communication training to their superiors
  - Promoting use of support plans for self professional development
5. **For skilled workers: Work Style Reform and improving working conditions**
  - Accumulating their records of previous works in the CCUS platform, providing incentives for achieving 2 days off week acquisition target, etc.
  - Ensuring proper shifting of costs and appropriate contract pricing when dealing with subcontracting companies

## ○ Progress towards achieving 2 days off week acquisition target



## ○ Adherence ratio to compulsory cap on overtime hours

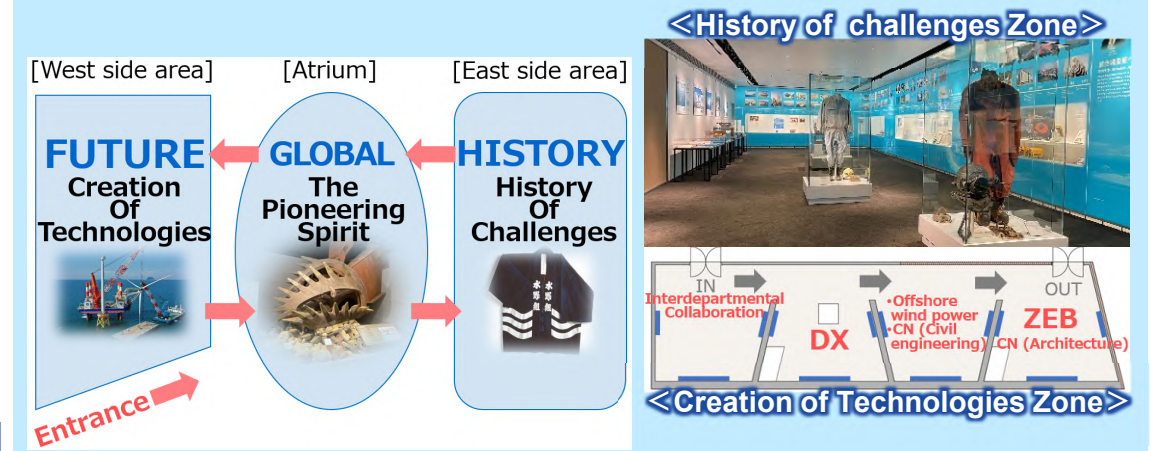
	Individuals taking 8 days off per 4 weeks or more	Sites with 8 closures per 4 weeks or more	Compliance to overtime cap (clerical work employees)		
	Employees on outdoor duties	Sites	Employees on outdoor duties	Employees on office duties	Total
FY2022	92.1%	56.0%	61.3%	95.4%	74.5%
FY2023	92.6%	57.0%	81.3%	99.1%	89.7%

# Penta-Ocean Museum – Public Opening Scheduled for July 2024

- Established to commemorate the 125th founding anniversary, the museum serves as “a hub to communicate POC’s CSR activities and the history of overcoming challenges by practicing pioneering spirit”
- Showcasing POC’s latest initiatives by themes towards the goal of becoming a genuine global general contractor



- Exhibition areas: divided into three zones: “History of overcoming challenges” “Global (practicing pioneering spirit)” and “Future (development of technology)”



## ○Purposes of the establishment

- To communicate enterprise values <demonstrating POC’s strengths and expertise>
- To transmit corporate philosophy <offering visitors first-hand knowledge of pioneering spirit>
- To provide innovative experiences <providing opportunities to share technological innovations>



**Cutterhead of the pump dredger “SUEZ” is the symbol of POC’s pioneering spirit, showcasing the starting point of the company’s past journey**



Scan the above QR code to view the video of the talk session (24m)



**Fireside chat session with actress Ms. Misako Konno (featured in the Bungei Shunju Magazine, March edition)**  
<In front of the cutter head of a dredger used for the Suez Canal Expansion Project>

# ■ Commendations from Outside Parties

- “Northland Energy Conservation and New Energy Awards” “Infrastructure Maintenance Awards” etc.

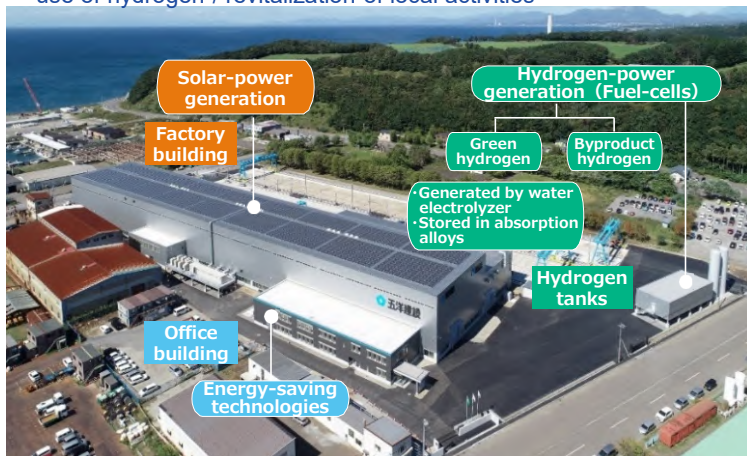
- POC's new Muroran Factory received the Grand Prize at the **Northland Energy Conservation and New Energy Awards** from the Hokkaido Bureau of Economy, Trade and Industry
- “Total System for Maintenance and Management of Port Structures Using 3D Image Processing and AI” received the **Minister of Internal Affairs and Communication Award** on excellent utilization of information and communication technologies (Technology Development Category), at the **Seventh Infrastructure Maintenance Awards**

## Northland Energy Conservation and New Energy Awards

- The aim is to promote energy saving and utilization of renewable energies by awarding exemplary organizations or individuals who have achieved outstanding results in effective use, development, and wider implementation related to energy conservation and new energies in Hokkaido.

### ○ Reasons for the award

- 100% renewable energy from solar and hydrogen generation systems covers the entire power required for factory operation and all electric lights
- The BEMS<sup>\*1</sup> System monitors the hydrogen use and promotes more effective use of the System
- The factory accepts visitors from companies and schools and contributes to wide-spread use of hydrogen / revitalization of local activities



\*1: Acronym for “Building Energy Management System”  
• An energy management system which measures and visualizes electricity use, while controlling other devices such as air conditioning and lighting, etc.

## Infrastructure Maintenance Awards

- The Awards are presented for outstanding initiatives and technological developments related to infrastructure maintenance in Japan to promote the efforts of infrastructure maintenance companies, associations, and researchers to revitalize the industry and spread the philosophy of infrastructure maintenance more widely.

### ○ Outline of the System

- The System enables creation of 3D models of a pier by the SfM/MVS technology using photographs and videos. The incorporated AI extracts and displays cracks and rust juice and automatically determines the degree of deterioration, followed by AI-assessment of pier residual performance and display of deterioration areas of superstructure
- The prediction function assesses the deterioration level / residual performances and provides the estimated remaining service life of the pier, allowing facility managers to draw a detailed maintenance and rehabilitation plan.



※At the award ceremony held at the Prime Minister's office residence  
Left: Mr. Mizuno/POC, right: Mr. Uno/POC  
Middle: Mr. Fujino, Director General at the Ministry of Internal Affairs and Communication

**[Special feature] Momoiro Infra Z (TV variety show featuring infrastructure projects) received the Excellent Award at the JSCE's Doboku (civil engineering) Communications and Public Relations Award 2023 (the show is aired on TOKYO MX, followed by streaming on YouTube)**

- Japan's first variety show featuring the history of the nation's infrastructure and latest technologies, with Professor Satoshi Fujii of Kyoto University, Graduate School of Engineering in the role of an instructor and an idol group “Momoiro Clover Z” as his students. •Momoiro Infra Z Public Relations Association<sup>\*2</sup> (chaired by President Shimizu/POC) acts as the sponsor and producer of the show



Award ceremony in Feb. 2024  
President Shimizu accepting a trophy, as chairman of the Momoiro Infra Z Public Relations Association

\*2: Comprises of 21 member companies of the Nikkenren Civil Engineering Management Committee who expressed support or Professor Fujii's ambition to share proper recognition of infrastructure across the nation

### ○ New Muroran Factory (completed in October 2020) -100 Renewable Energy Factory/ ZEB Office

- ▽670kw by solar power generation, 30kw by hydrogen power generation to power the entire factory
- ▽ZEB conversion of offices :65% Energy saving rate, with BELS certificate (425% when including energy creation)
  - Improved thermal insulation, use of resin sashes (Low-E double glazing)
  - Use of high efficiency air conditioning systems, various sensors and natural ventilation systems
  - Diffusing daylight through window films, installation of light sensors

# Promotion of GX

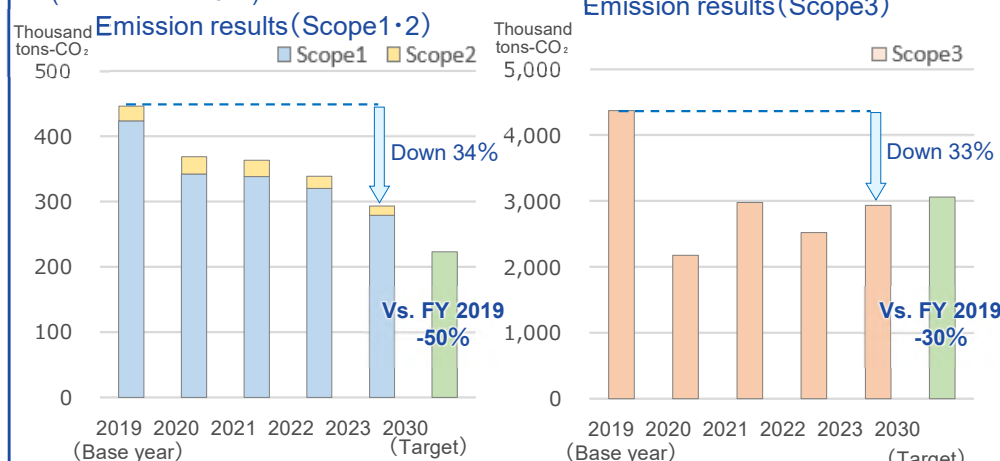
## – Towards Carbon Neutrality of Construction Business Activities

### Organizational rollout of initiatives to tackle climate change issues - towards achievement of carbon neutrality

✓ In addition to progressive disclosure of related information following the expression of support for TCFD Final Recommendations, we will strive to promote CO<sub>2</sub> reduction initiatives towards achievement of SBT-certified reduction targets

### CO<sub>2</sub> emission reduction targets

• FY 2030 targets: received certification from SBTi as in line with a “1.5 °C trajectory” (in December 2022)



\*Results for FY 2023 are preliminary figures before receiving the third-party assurance

### Initiatives towards carbon neutrality of construction business activities

- (Short-term) Productivity improvement by ICT etc. (promotion of DX)
  - ZEB conversion of site offices [Initiative details①](#)
  - Further introduction of fuel economy enhancers: construction machinery and work vessels [Initiative details②](#)
- (Mid-term) Further introduction of alternative fuels (bio diesel fuels(BDF), GTL etc.)
- Active use of renewable energy (including land-based electricity supply and rechargeable batteries), exploring automatic and autonomous operation by electrification of work vessels
- (Long-term) Introduction and utilization of next-gen energy sources such as hydrogen and ammonia

### Initiative details① ZEB conversion of site offices (Scope2)

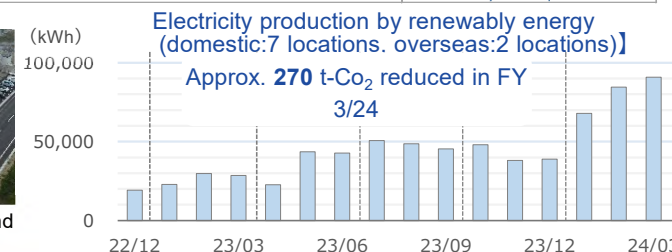
• To achieve energy-use reduction by promoting energy-saving/creation initiatives and contribute to reduction in CO<sub>2</sub> emissions

#### POC's construction record of ZEB site offices

Project name	Received in	Certificate type
New construction of Hokkaido Police Academy 21 ( phase 4)	Apr.2022	Nearly ZEB
Kitakyushu Hibikinada Offshore Wind Farm Construction	Sep.2023	ZEB
New Construction of Dazaifu General Technology Center(tentative name)	Apr.2023	ZEB
New construction of Onoken Shizuoka Center (tentative name)	Apr.2023	ZEB
Tsukishima 3-chome North District Type 1 Urban Redevelopment Project	May.2023	ZEB
Hiroshima South Factory Reconstruction	To be certified (Nearly ZEBequivalent)	



Hibikinada Offshore Wind Farm Site Office



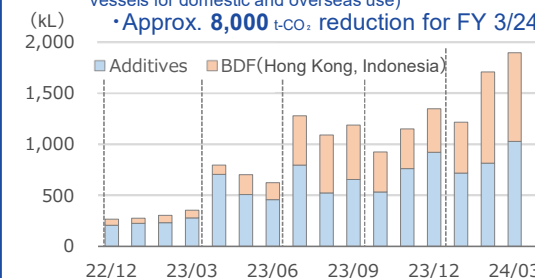
### Initiative details ② Promoting use of fuel economy enhancers\*1 and BDF\*2 (Scope 1)

- \*1: Additives which are expected to improve combustion efficiency when added to fuel
- \*2: Biofuels are considered carbon-neutral because the plants that are used to make biofuels absorb CO<sub>2</sub> while they grow and offset the CO<sub>2</sub> emissions from burning biofuels

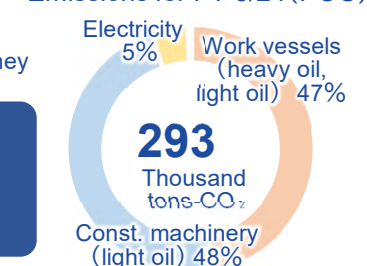
**Introduction of fuel economy enhancers for domestic work vessels**

- [Step1] For POC fleet (from April 2023)
- [Step2] For fleet owned by main subcontractors (from Oct. 2023)
- [Step3] For fleet owned by all subcontractors (from FY 3/25)

Use of additives and BDF (construction machinery and work vessels for domestic and overseas use)  
• Approx. 8,000 t-CO<sub>2</sub> reduction for FY 3/24



#### Emissions for FY 3/24 (POC)



Emissions from work vessels account for 47%



Addition of fuel economy enhancers

# Promotion of GX

## – Tackling Offshore Wind Farm Construction Projects

- Start of full swing construction of Kitakyushu Hibikinada Offshore Wind Farm
- Acceleration of capital expenditures in the offshore wind field (including new construction of offshore wind-related work vessels ) as a front runner in offshore wind construction

### ● Construction of Kitakyushu Hibikinada Offshore Wind Farm

A large-scale OWF project involving the installation of 25 wind turbines(9.6 MW class) to generate approximately 220 MW of electricity on approximately 2,700 ha within the port area of Hibikinada district of Kitakyushu Port

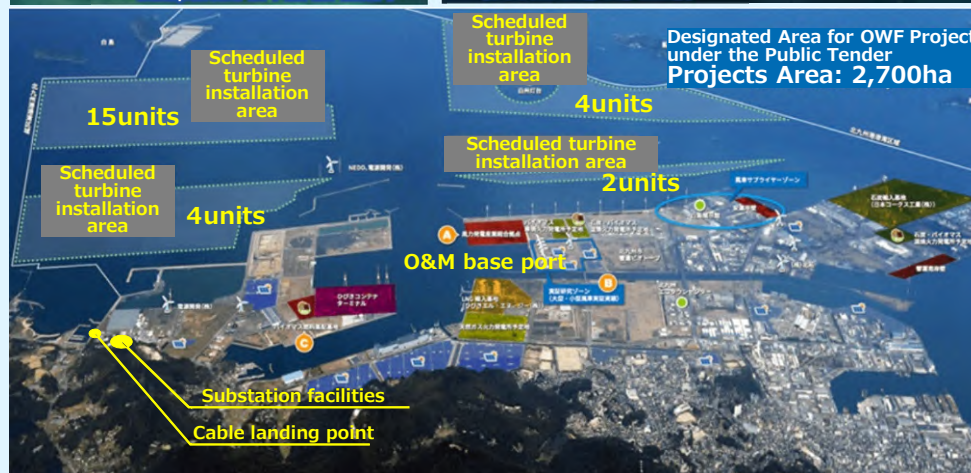
#### ① Wind turbine foundation and marine works

- In charge of marine civil works, including installation of jacket-type foundations and turbines for 25 bottom-fixed-type OWF units

#### ② Construction of O&M<sup>\*1</sup> Base Port

- Development of the base port for operation and maintenance of the wind farm

<sup>\*1</sup>: O&M: Operation & Maintenance



### ● Construction of offshore-wind related work vessels, etc.

▷ Wind turbine installation vessels (for bottom-fixed type turbines) POC owns three offshore installation vessels

- CP-8001 (800t lifting capacity) owned by POC

\*Started operation in March 2019

- CP-16001 (1,600t lifting capacity) owned by PKY Marine

\*Started operation in November 2023

PKY Marine (Joint venture of POC, Kajima Corporation and Yorigami Maritime Construction: POC holds 65% ownership)

- Sea Challenger (1,600t lifting capacity) owned by JOM

\*Operation start scheduled for 2026

Japan Offshore Marine (JOM) (joint venture between POC and DEME Offshore: POC holds 51% ownership), in charge of upgrading overall features and crane capacity of Sea Challenger, held previously by DEME Offshore

▷ Other offshore-wind related work vessels

- Heavy Lift Vessel (HLV) (self-propelling, 5,000t lifting capacity)

※ completion scheduled for 2027

- Cable Laying Vessel (CLV) (self-propelling, 9,000t cable capacity)

※ completion scheduled for 2027

- Wind turbine material carrier, Service Operation Vessel (under consideration)

▷ Building collaboration structure with KWS<sup>\*2</sup> for operation management of self-propelling vessels and crewing

- Reflagging Sea Challenge to Japanese register and subsequent management of vessel operation, maintenance works, and crewing

- Operation management of offshore support vessel “Kaiko”, aiming for its more flexible use

- Construction and operation management of Service Operation Vessel (SOV) (under consideration)

<sup>\*2</sup>: A joint venture between Kawasaki Kisen Kaisha, Ltd. and Kawasaki Kinkai Kisen Kaisha, Ltd.

▷ Efforts to tackle construction of floating-type OWF

- New establishment of the Floating Project Division (April 2023) for contemplating rational and effective construction methods

- Proposal of an offshore platform (an offshore wind turbine assembly terminal) (Japan Dredging and Reclamation Engineering Association)

### ● Future projects

▷ 2<sup>nd</sup> Round (plan)

- Oga Katagami OWF, Akita Pref.: wind turbine installation (construction scheduled for FY 3/28)

- Other areas: foundation and wind turbine installation (construction scheduled for FY 3/29 – FY 3/30)

▷ 3<sup>rd</sup> Round and beyond

- Eyeing the operation start of new vessels (HLV, CLV etc.) in FY 3/29, we will explore sales promotion strategies by leveraging our versatile fleet (including offshore installation vessels) and comprehensive engineering capabilities

# Promotion of DX

## – Total System for Maintenance and Management of Port Structures

- Development of “Total System for Maintenance and Management of Port Structures Using 3D Image Processing and AI”
- Providing DX-enabled solutions to the aging port structures and contributing to the creation of sustainable, attractive, and resilient infrastructure through technical capabilities

### ● Outline of the System: Received the Reiwa 4 (2022) Infrastructure Technology Development Award (excellent award)

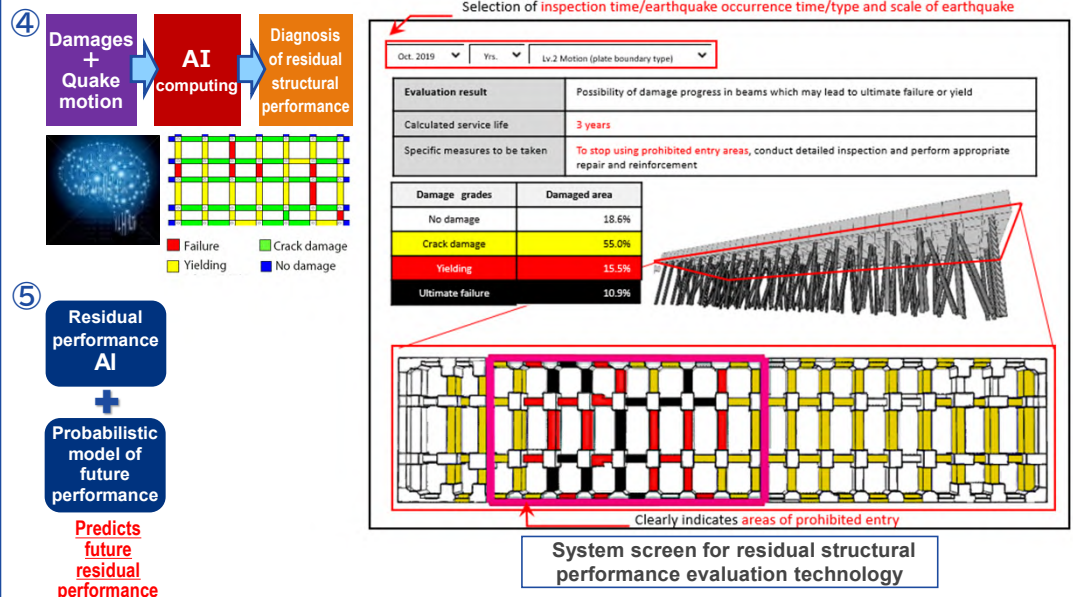
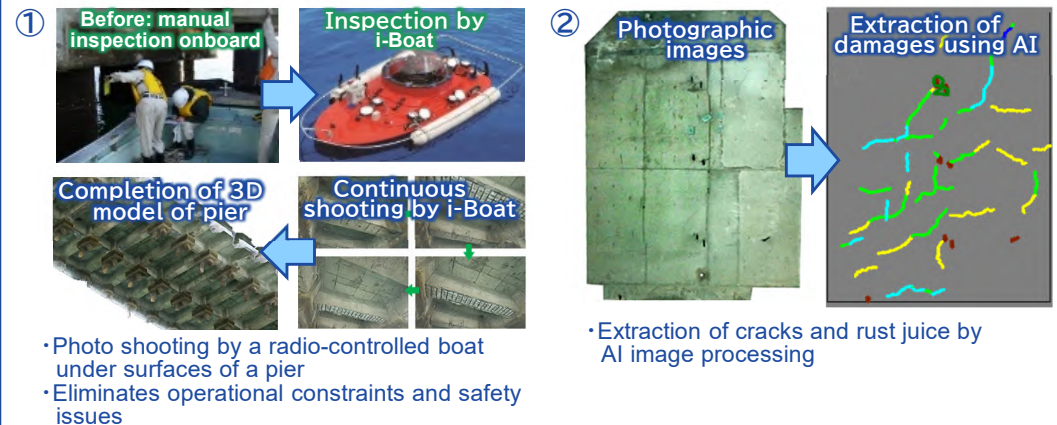
- Joint development of POC and Tokyo Institute of Technology
- ○ **Five core technologies of the “Total System for Maintenance and Management”**
  - ① Technology that precisely models the geometry of the target structure in 3D using a series of photographs of the underside concrete of the pier structure
  - ② Image processing technology that automatically extracts and displays cracks and rust juice in photographic images
  - ③ Technology that uses AI to automatically determine the degree of deterioration for each component in accordance with the “Guidelines for Inspection and Diagnosis of Port Facilities” of the Ministry of Land, Infrastructure and Tourism (MLIT)
  - ④ AI-powered technology that predicts how and where the pier structure’s deteriorating concrete will be damaged during an earthquake and displays the results on a 3D model
  - ⑤ Technology to predict age-related deterioration level after 5 years, 10 years, etc.
- **Combination use with i-Boat (a wireless LAN boat)**
  - ⇒ Automated and labor-saving during the entire process, from inspection survey to evaluation of residual structural capacity
- **Development of AI-based Technology to Evaluate Residual Structural Performance of Piers (world’s first technology)**
  - Received the Reiwa 3 (2021) Distinguished Paper Award of The Ports & Harbours Association of Japan
  - ⇒ Reduces time and cost by approx. 90 % compared to conventional method
- **Provides rational benchmarks for determining the extent of pier’s damage in the event of earthquake and optimal level and timing of rehabilitation and reinforcement, etc.**
  - ⇒ helps facility managers to draw up a more systematic maintenance program

### ● Future development

- **Participation in the 3rd phase of the Cross-ministerial Strategic innovation Promotion Program (SIP) (The third Phase SIP: Development of a Smart Infrastructure Management System)**
  - Sophistication of AI model for evaluating bearing capacity, expanding the scope of application
    - ⇒ Promoting widespread application of the System as a maintenance management technology for port managers across the nation in the future
  - \*2: Cross-ministerial Strategic Innovation Promotion Program
    - A national project led by the Cabinet Office, established by the Council for Science, Technology and Innovation (CSTI) to realize science and technology innovation by exercising a command post function and transcending the boundaries of ministries agencies, and traditional fields

### ▽Details of constituent technologies of the System

Numbers correspond to descriptions under “Five core technologies” on left column: technology  
③ is omitted



# ■ Productivity Improvement – Promotion of Pre-casting in Port Projects

- Active promotion of pre-casting to improve productivity, quality, shorten construction period and improve safety

## ● Niigata Airport Approach Light (10 side) Bridge Construction

### ○ Pre-casting improved workability, productivity and safety

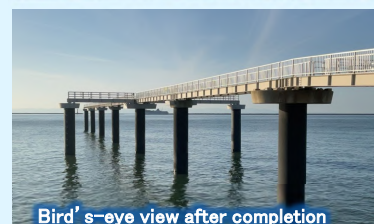
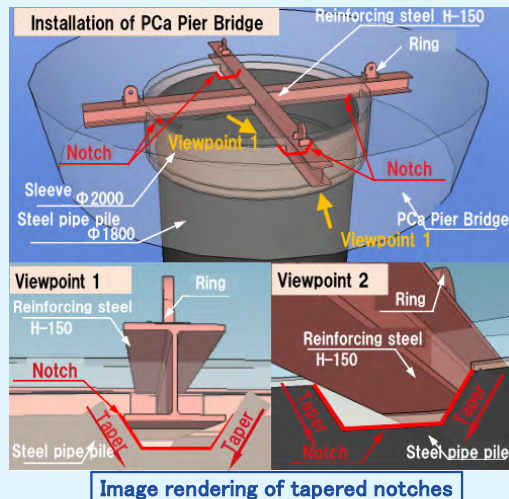
- Issues in terms of workability and productivity due to work constraint in the airport and nighttime work at sea led to pre-casting of the pier concrete upon the client's consent

⇒ Improved productivity by 1.6 times

(Reduction of 46% in total number of workers and 47% in offshore work)

### ○ Devising new innovations in pier pre-cast members achieved highly installation accuracy

- Since both pre-cast bridge piers and steel pipes are cylindrical, nighttime installation was expected to be difficult in achieving high-accuracy installation. The team examined the precast members from the 3D models and changed their shape to have **guiding members (tapered notches)** which allowed installation in the target position without human guidance while surveying



## ● Berth for Mitsukojima Pier

### ○ Rapid construction comparable to jacket-type pier while reducing construction costs

- Construction of a new 240m-long pier for receiving cargo to replace the existing aging pier over 50 years of service life
- Rapid construction was necessary while using the existing facilities  
⇒ Light-weight superstructure by adopting the EPS Void Slab System • Use of the Sleeve Connection Method to join the pre-cast block to pile head • Use of pre-cast beams with double square joints for joining blocks
- Combination use of the above technologies helped to achieve high-quality construction and enhanced safety
- Construction time was comparable to the time required for a jacket-type pier, with reduced costs

### ○ Reduced risks of disasters and process delays

- Adopted large formwork shoring to reduce the time required for installation and removal  
Reduced construction time from 7 days (conventional method) to 4 days (large formwork shoring and construction method)  
Reduced days of operation at sea → Reduced impact of weather and sea conditions on construction schedule



### ○ Received the Reiwa 5 (2023) Infrastructure DX Grand Prix Award for Excellence from MLIT

- On top of improvement in workability, productivity and safety through pre-casting, the originality of the system which eliminates land surveying and ensures high-accuracy by providing guide materials has been highly evaluated

### ○ Received the Reiwa 5 (2023) Innovative Technology Award from the JSCE

- The technology is highly recognized for its ability to reduce construction cost, a challenge for precast construction, and its ability to meet the growing national demand for pier renewal, particularly considering aging port facilities and increasing size of incoming vessels

# Domestic Civil Engineering – Major Completions in FY 3/24



Ishikari Hachinosawa Wind Farm Turbine Installation Work, etc.  
(Hokkaido, completed in March 2024)



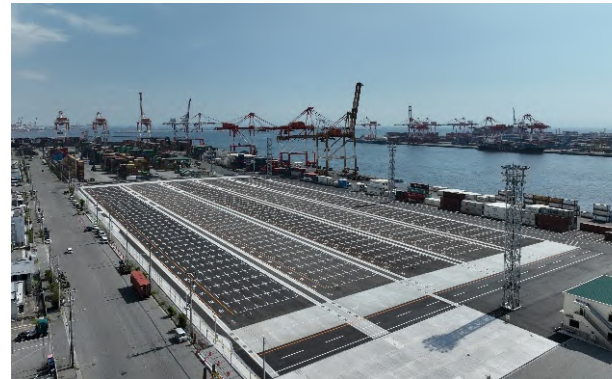
Reiwa 3 Construction of East Side of Seawall  
(breakwater) in Shin-honmoku Area, Yokohama Port  
(Kanagawa, completed in May 2023)



Branch Sewer Construction in Ota-ku, in the proximity of  
Naka-Ikegami 2-chome and Higashi Yukigaya 4-chome  
(Tokyo, completed March 2024)



Reiwa 2 Construction of Detached Breakwater in Fujimori,  
Suruga Coast  
(Shizuoka, completed in March 2024)



Pavement Work etc. in the Cargo Handling Area (extended  
portion) in the Port Island area, Kobe Port (Phase 2)  
(Hyogo, completed in September 2023 )



(Tentative name) New Construction of the Third Pier  
(Hiroshima, completed in August 2023)



Construction of O&M Base Port,  
Kitakyushu Hibikinada Offshore Wind Farm Project  
(Fukuoka, completed in March 2024))



New Construction of Kumamoto Route 57 Sasawara Tunnel  
(Kumamoto, completed in July 2023)



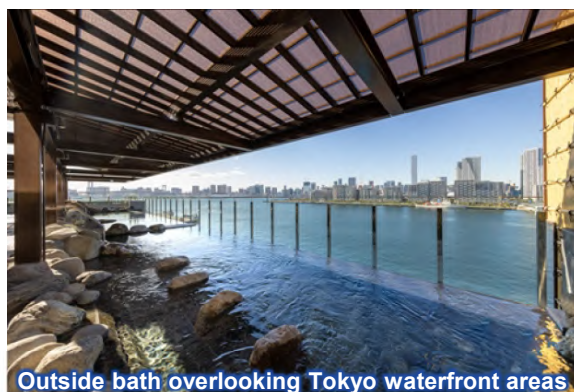
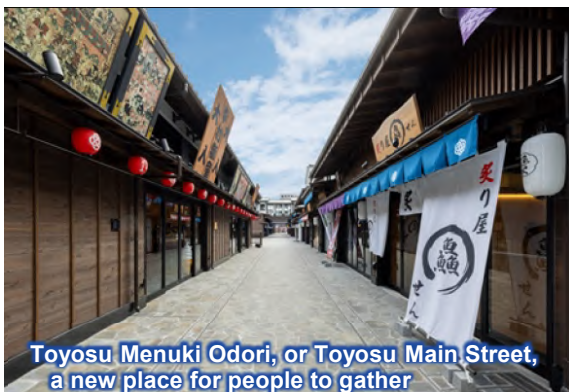
Construction of Hitoyoshi Solar Power Plant for Kyushu  
Ohisama Power K.K.  
(Kumamoto, completed in June 2023)

# Domestic Building Construction

## – Completion of Toyosu Senkyaku Banrai

- Creating a “hot spring resort in the heart of Tokyo” overlooking the cityscape reminiscent of Edo(erstwhile Tokyo) and waterfront areas
- Inheriting and developing the bustle of Tsukiji Market and contributing to local town revitalization as a new tourist attraction in Tokyo

▽Project name : New Construction of Senkyaku Banrai Buildings (6 sections)  
 ▽Client : Manyo Club Co., Ltd.  
 ▽Construction period : October 2021 – January 2024  
 ▽Architect, supervision : Manyo Club Co, Ltd., Penta-Ocean Construction, Shelter Inc. (for wooden fireproof structure)  
 ▽Contractors : Penta-Ocean Construction, Ishii Koumuten (for wooden fireproof structure)  
 ▽Structure, stories : SRC, S and wooden structure, 9 stories, 1 basement floor  
 ▽TFA : 33,786.36m<sup>2</sup>



- Comprises of a high-rise hot-spring bath building “Tokyo Toyosu Manyo Club” and a low-rise dining and entertainment building “Toyosu Jogai Edomae Ichiba” (Edomae Market)

### ● Shorter construction period thanks to labor-saving measures, promotion of DX initiatives

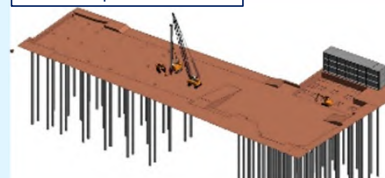
- Construction start was amid the Tokyo Olympics and Paralympics Games 2020: sticking to original construction schedule was a primary issue

⇒ Partial pre-casting of structures, drastic reduction of residual soil amount thanks to change in soil transport plan by using excavated soil for onsite backfilling ahead of other processes

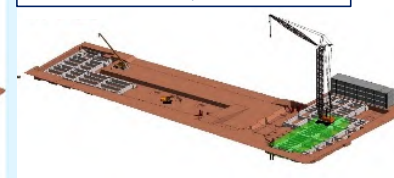
- Due to complex building structure and simultaneous construction of each floor, smooth sharing of work orders was the key to keeping the construction schedule

⇒ Utilization of BIM for construction planning: Visualization of each process contributed to effective and productive meetings with subcontractors

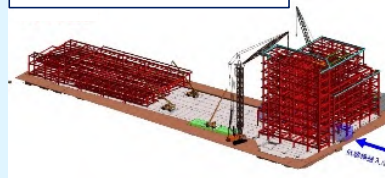
Phase ①  
High-rise: earth works  
Low-rise: pile work



Phase ②  
High-rise: foundation work  
Low-rise: earth work, foundation work



Phase ③  
High-rise: steel framework erection, platform disassembly  
Low-rise: steel framework erection



Phase ④  
High-rise: completion of framework erection, installation of tower cranes  
Low-rise: platform disassembly, steel framework erection



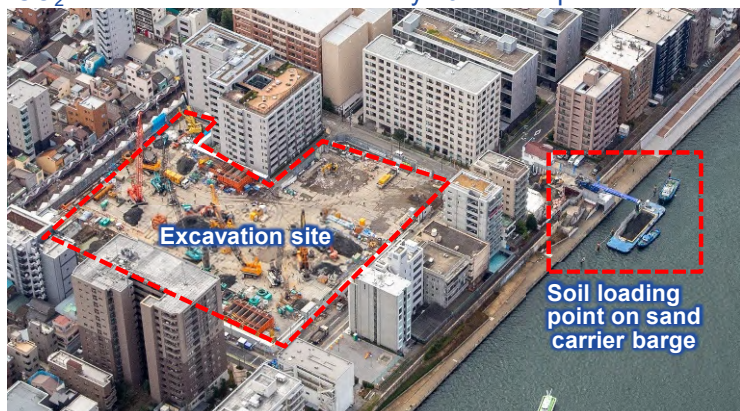
# Domestic Building Construction

## – Progress of Tsukishima 3-chome Redevelopment Project

- Front-loading initiatives and interdepartmental collaboration helped to shorten underground construction by two months compared to conventional method
- Improving efficiency by utilizing DX and collaborating with POC Institute of Technology to achieve a 4-days per floor construction cycle in high-rise building construction
- Driving company-wide work style reform and productivity improvement by challenging initiatives including DX, GX and D&I

### ○ Interdepartmental collaboration reduced both construction period and CO<sub>2</sub> emission

- Peripheral roads have restrictions on dump truck entry: to ensure smooth construction of basement floors, rapid removal of excavated soil was paramount
- ⇒ Issue resolved by sea transportation of excavated soil on sand carrier barge (reduced construction time by 2 months compared to land transport)
- ⇒ CO<sub>2</sub> emission was also reduced by 40+% compared to land transport



### ○ Front-loading initiatives to achieve a 4-days per floor construction cycle in high-rise buildings

- Adoption of the Semi-topdown method\*1 to secure a work yard in a narrow site: concrete was poured on the first floor of the low-rise in advance
- ⇒ The pre-constructed work yard was used for site PCa to improve construction efficiency

\*1: Semi-topdown method: The building itself is not constructed in the top-down method. Only the necessary portions are cast as pre-constructed floor frame, which serve as the construction platform and the strut beams. The lower floors are excavated to floor level and the frames are then constructed.



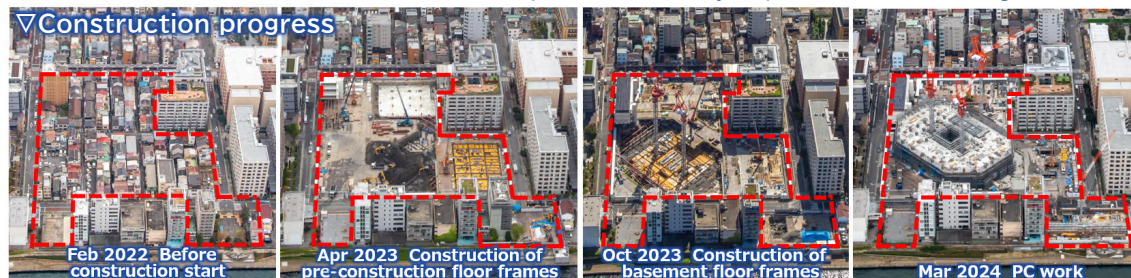
- Adopted the SQRIM/LVR method\*2

\*2: SQRIM/LVR method: patented construction technology of Obayashi Corporation and Sumitomo Mitsui Construction

⇒ All-precast construction method, without the need for cast-in-place concrete at the joints. Construction speed can achieve equivalent to that of steel structures.

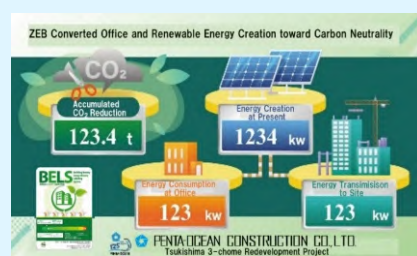
- Real time sharing of pre-cast fabrication status and progress to completion of installation using PiCOMS ⇒ Sophistication and improved efficiency of pre-cast work management

### ▽ Construction progress



### ○ ZEB conversion of site office to promote GX initiatives

- Installation of solar panels on the roof of the site office (obtained a ZEB certificate)
- ⇒ Raising employee awareness towards achievement of Carbon Neutrality through visualization of energy consumption and energy creation



### ○ Challenging initiatives such as D&I → Construction of the entire B-1 block by a female-only team

- Promotion of flexible work style (half-day leaves, rotational participation in morning meetings, flexible working hours, working from home, etc.)
- Placing seasoned female engineers as role models for young female engineers to provide them with visions for future career development
- Further improvement and ingenuity in creating an environment to achieve a work-life balance based on life events
- ⇒ Taking more aggressive initiatives as a model construction site by implementing challenging initiatives in company-wide work style reform and productivity improvement

# Domestic Building Construction Major Completions in FY 3/24



Toyosu Senkyaku Banrai  
(Tokyo, completed in January 2024)



JA Gifu Koseiren, Gifu Seino Medical Center, Seino Kosei Hospital  
(Gifu, completed in September 2023)



Kanagawa Dental University Campus Center  
(Kanagawa, completed in December 2023)



Crest Prime Residence Park 5th Avenue  
(Kanagawa, completed in January 2024)



Hirogin Career Cocreation Center  
(Hiroshima, completed in February 2024)



Warabeya Delica Iruma Factory  
(Saitama, completed in January 2024)



Hulics Logistics Kashiwa  
(Chiba, completed in December 2023)



Landport Fukuoka Hisayama I  
(Fukuoka, completed in August 2023)

# Overseas

## – Completion of Singapore Deep Tunnel Sewerage System (DTSS)

### ●Contract T-08, Deep Tunnel Sewerage System Phase 2

\*1: Koh Brothers Eco Engineering Limited: POC acquired 28.74% of its shares in May 2021 and KBE became an equity method affiliate

\*2: Koh Brothers Building & Civil Engineering Contractor (Pte) Ltd.: 100% subsidiary of KBE

- Construction of 10-km high-quality sewer tunnels (shield method) and sewerage facilities (10 locations) without injuries or accidents
- By joint venture with KBCE, an affiliate of KBE in Singapore, which is an equity method of POC

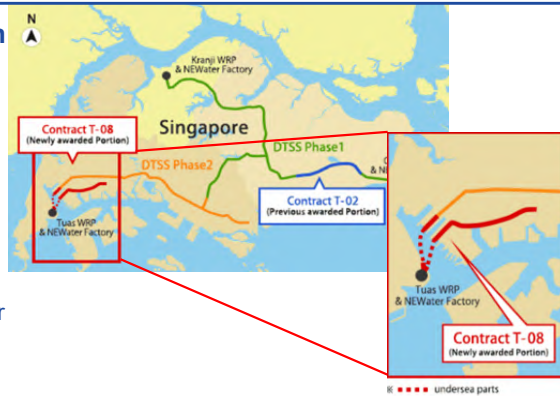


Inside the DTSS tunnel at completion, after application of MIC anti-sulfide concrete

\*3: Developed jointly with G&W Ready Mix, a group company of Koh Brothers Group Limited, which is the parent company of KBCE, the concrete has a 100-year service life with resistant properties against sulfide gas, which is generated in sewerage tunnels

### ●Project outline & site location

- Project period: September 2017-April 2024
- Client: Singaporean Public Utilities Board (PUB)
- Contractor: Penta-Ocean /Koh Brothers JV
- Tunnel section: Shield method
- Extension: Approx. 10km of runs, of which, approx. 3.5km are underwater
- Sewerage facilities: 10 nos.
- Construction depth: 45m - 58m



### ○Achieved 10 millions accident-free man hours<sup>\*4</sup>

⇒ The project received high praise from PUB (client) for its exemplary progress and safety management, and was awarded the “2002 PUB Construction Safety Award”, which represents PUB’s highest honor, whose recipients are selected from all PUB construction sites.

\*4: The accident-free man hours as of end of April 2024 were approx. 11.9 million hours

### ○Use of Microbiological Influenced Corrosion (MIC) Concrete (100-year service life), resistant to sulfide gas (first application in Singapore), developed in collaboration with G&W Ready-Mix

⇒ Contributes to enhancement of quality of sewerage pipes in Singapore and extends their service life

### ○Demonstrates synergetic effects of capital alliance with KBE

- Start of human resources exchanges including KBE employees’ training in Japan
- ⇒ Enhancing business foundation by leveraging strengths of both companies



Celebration of 10 millions Accident-free Manhours in May 2023

# Overseas

## – Projects at hand (Singapore & Hong Kong)

### ●Singapore (Projects at hand)

No	Project Title	Outline	Period	Value (JPY bn)	Progress rate
①	Construction of Polder at Area A & C of Pulau Tekong	-Area of Reclamation Works by Polder Method: 810ha -Length of Sea Dike: 10km	Apr 2018 to Feb 2025	55.4	78.3%
②	Tuas Terminal Reclamation, Wharf Construction and Dredging Phase 2	-Land reclamation area: 387ha -Total water depth: 8.6 km	Mar 2018 to Mar 2027	55.7	65.5%
③	North-South Corridor (NSC) N105 Section	-ERSS and Earth Works : 693,000m3 -Box Culvert: 180,000m3	Aug 2018 to Jul 2027	46.0	43.9%
④	A new annex to ICA Building and Retrofitting of ICA Building	addition to a building - Total Floor : 46,200m2 - 10 Storey RC building Existing building renovation - Total Floor : 36,300m2 - 10 Storey RC building	not disclosed	28.7	56.2%
⑤	Contract T232 - Construction of Station, Tunnels and CIQ Building for Rapid Transit System (RTS) Link	Immigration facilities and railroad station buildings -Total Floor : 180,000m2 -3 Storey with 3 basement Storey building	not disclosed	98.7	47.8%
⑥	Contract CR117 - Design and Construction of Bright Hill Interchange Station and Tunnels	- Station by Open Cut Method - Shield Tunnel with 2 Shield Tunnelling Machines - Open Cut Tunnel	not disclosed	54.5	16.5%
⑦	MOH Elective Care Centre and National Dental Centre	Medical facilities, liaison bridges, etc. -Total Floor : 150,000m2 -20 Storey with 4 basement Storey building	not disclosed	108.4	8.0%



### ●Hong Kong (Projects at hand)

No	Project Title	Outline	Period	Value (JPY bn)	Progress rate
①	Kai Tak development - Stage 4 infrastructure at the former runway and south apron	- Carriageway(Bridge & Underpass) - Salt Water Pumping station & Sewage Pumping station	May 2019 to Aug 2024	20.2	79.1%
②	Redevelopment of No.2 University Drive and IT Building for The University of Hong Kong	Research Laboratory Building A - 9 Storey with 4 basement Storey RC building Research Laboratory Building B - 9 Storey RC building IT Building - 8 Storey RC building - Total Floor : 45,000m2	not disclosed	41.5	29.6%
③	Main Contract for Proposed Research Building 2: Life and Chemical Science and Technologies for The Hong Kong University of Science & Technology	University Facilities - 8 Storey RC building - Total Floor : 11,245m2	Oct 2023 to Mar 2026	9.4	3.0%
④	Main Contract Works for Main Stable Precinct Refurbishment at Shatin Racecourse ("STRC") for The Hong Kong Jockey Club	- Total Floor : 41,710m2 Demolition work, retrofitting work, interior/facade finishing work, exterior work, M&E work	Feb 2024 to Sep 2029	not disclosed	0.0%

