

Financial Results for FY2021

May 12, 2022

Hitachi Zosen Corporation

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Financial Information

Senior Managing Executive Officer Corporate Planning HQ Satoshi Kimura



Overview of FY2021 Financial Results



Orders intake exceeded JPY 670 billion and Order backlog exceeded JPY 1 trillion with large-scale overseas projects and long-term O&M orders.



(Billions of JPY)

	FY2020	FY2	021	Differ	ence		
	Results	Initial Forecast	Results				
	(a)	(b)	(c)	(c)-(a)	(c)-(b)		
Order intake	429.4	450.0	677.9	248.5	227.9		
Net sales	408.5	400.0	441.7	33.2	41.7		
Operating income (% to net sales)	15.3 (3.8%)	14.0 (3.5%)	15.5 (3.5%)	0.2	1.5		
Ordinary income (% to net sales)	11.7 (2.9%)	9.0 (2.3%)	11.7 (2.7%)	-0.0	2.7		
Net income (% to net sales)	4.2 (1.0%)	5.0 (1.3%)	7.8 (1.8%)	3.6	2.8		
ROE	3.5%	-	6.1%	-	-		

FY2021 Results-Order intake, Net sales, Operating income



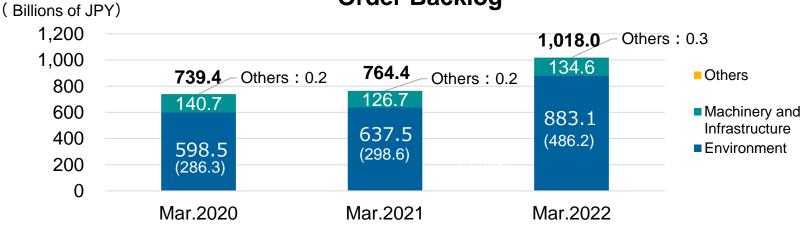
		FY2020	FY2	021	Differ	rence	(Billions of JPY)
		Results	Initial Forecast	Results			
		(a)	(b)	(C)	(c)-(a)	(c)-(b)	
	Environment	303.7	315.0	529.4	225.7	214.4	
Order	Machinery & Infrastructure	117.3	125.0	140.1	22.8	15.1	
intake	Other	8.4	10.0	8.4	-0.0	-1.6	
	Total	429.4	450.0	677.9	248.5	227.9	
	Environment	269.4	265.0	307.2	37.8	42.2	
Net sales	Machinery & Infrastructure	130.8	125.0	126.2	- 4.6	1.2	
	Other	8.3	10.0	8.3	0.0	-1.7	
	Total	408.5	400.0	441.7	33.2	41.7	
	Environment	12.6	13.0	12.4	- 0.2	-0.6	
Operating	Machinery & Infrastructure	2.6	1.0	2.6	-0.0	1.6	
income	Other	0.1	0.0	0.5	0.4	0.5	
	Total	15.3	14.0	15.5	0.2	1.5	

FY2021 Results-Order backlog

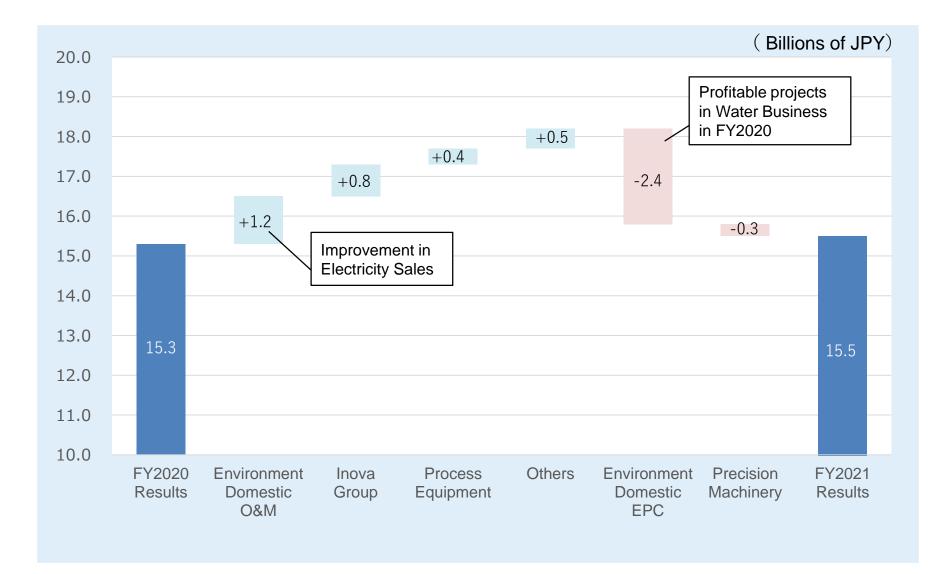


	End of Mar. 2020	End of Mar. 2021 (a)	End of Mar. 2022 (b)	Difference (b)-(a)	(Billions of JPY
Environment	598.5	637.5	883.1	245.6	
Of which, long- term operation	286.3	298.6	486.2	187.6	
Machinery and Infrastructure	140.7	126.7	134.6	7.9	
Others	0.2	0.2	0.3	0.1	
Total	739.4	764.4	1,018.0	253.6	









FY2021 Results-Non-Operating Profit and Loss and Extraordinary Profit and Loss



			(Billi	ons of JPY)
		FY2020 (a)	FY2021 (b)	Difference (b)-(a)
	Interest income/ expense	-0.3	-0.7	-0.4
Non-operating profit and loss	Gain and loss on investment by equity method	-0.6	0.2	0.8
-oper it and	Foreign exchange gain and loss	0.3	-0.9	-1.2
Non profi	Others	-3.0	-2.4	0.6
	Total	-3.6	-3.8	-0.2

(Billions of JPY)

			`	
		FY2020 (a)	FY2021 (b)	Difference (b)-(a)
lary loss	Gain on negative goodwill (*1)	0.0	3.8	3.8
Extraordinary profit and loss	Impairment loss (*2)	-4.9	-3.7	1.2
Extra profit	Total	-4.9	0.1	5.0

(*1) Gain on negative goodwill: Due to the consolidation of Steinmüller Babcock Environment GmbH(*2)Impairment loss: Impairment of Ibaraki Works and Natural Energy Japan Co., Ltd. (consolidated subsidiary)

FY2021 Results-Balance Sheet

			(Billions of JPY)
	End of Mar. 2021	End of Mar. 2022	Difference
Cash and deposits (a)	47.3	67.2	19.9
Operating assets	193.2	204.3	11.1
Trade notes and accounts receivable	169.3	189.8	20.5
Inventories	23.9	14.5	- 9.4
Tangible & intangible fixed assets	122.8	122.0	- 0.8
Others	66.0	67.6	1.6
Total Assets	429.3	461.1	31.8
Operating liabilities	88.3	100.9	12.6
Notes and accounts payable, Electronically recorded obligations - operating	63.4	71.8	8.4
Advances received/ Contract assets	24.9	29.1	4.2
Interest bearing debt (b)	98.1	91.9	- 6.2
Bank borrowings (incl. lease obligations)	73.1	61.9	- 11.2
Bonds payable	25.0	30.0	5.0
Others	114.7	135.4	20.7
Total Liabilities	301.1	328.2	27.1
Shareholders' equity	126.4	131.3	4.9
Non-controlling interests	1.8	1.6	- 0.2
Total Net Assets	128.2	132.9	4.7
Total Liabilities and Net Assets	429.3	461.1	31.8
Shareholders' equity ratio	29.4%	28.5%	- 0.9%
Net interest bearing debt (b) – (a)	50.8	24.7	-26.1

FY2021 Results-Cash Flows and Investments



Consolidated Cash Flows		(Bil	lions of JPY)
	FY2020	FY2021	Difference
Cash flows from operating activities	22.6	26.8	4.2
Cash flows from investing activities	-13.8	0.9	14.7
Cash flows from financing activities	-5.2	-8.7	-3.5
Increase in cash and cash equivalents*	4.3	20.1	15.8
Cash and cash equivalents at beginning	41.5	45.8	4.3
Cash and cash equivalents at end	45.8	65.9	20.1

R&D expenses/Capital Expenditures/Depreciation

(Billions of JPY)

	FY2020	FY2021	Difference
Research and Development expenses	6.6	6.1	-0.5
Capital expenditures	10.8	8.0	-2.8
Depreciation	10.2	10.7	0.5

* Including Foreign Currency translation differences (FY2020 : JPY 0.7 Billion, FY2021 : JPY 1.1 Billion)



Forecast of FY2022

FY2022 Forecast-Overview



	(Billions of JPY)			
	FY2020	FY2021	FY2022	Difference
	Results	Results	Forecast	
		(a)	(b)	(b)-(a)
Order intake	429.4	677.9	500.0	-177.9
Net sales	408.5	441.7	440.0	-1.7
Operating income (% to net sales)	15.3 (3.8%)	15.5 (3.5%)	20.0 (4.5%)	4.5
Ordinary income (% to net sales)	11.7 (2.9%)	11.7 (2.7%)	16.0 (3.6%)	4.3
Net income (% to net sales)	4.2 (1.0%)	7.8 (1.8%)	10.0 (2.3%)	2.2
ROE	3.5%	6.1%	7.4%	-

FY2022 Forecast-Order intake, Net sales, Operating income



		FY2019	FY2020	FY2021	FY2022	Difference	(Billions of JPY)
		Results	Results	Results	Forecast		
				(a)	(b)	(b)-(a)	
	Environment	289.4	303.7	529.4	350.0	- 179.4	
	Machinery & Infrastructure	99.9	80.4	97.1	90.0	- 7.1	
Order intake	Carbon Neutral Solution	54.1	36.9	43.0	52.0	9.0	
	Other	10.7	8.4	8.4	8.0	- 0.4	
	Total	454.1	429.4	677.9	500.0	- 177.9	
	Environment	254.3	269.4	307.2	300.0	- 7.2	
	Machinery & Infrastructure	94.3	83.8	86.3	87.0	0.7	
Net sales	Carbon Neutral Solution	42.4	47.0	39.9	45.0	5.1	
	Other	11.4	8.3	8.3	8.0	- 0.3	
	Total	402.4	408.5	441.7	440.0	- 1.7	
	Environment	15.8	12.6	12.4	16.5	4.1	
	Machinery & Infrastructure	0.5	2.4	2.2	2.8	0.6	
	Carbon Neutral Solution	- 3.3	0.2	0.4	0.3	- 0.1	
	Other	0.8	0.1	0.5	0.4	- 0.1	
	Total	13.8	15.3	15.5	20.0	4.5	

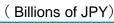


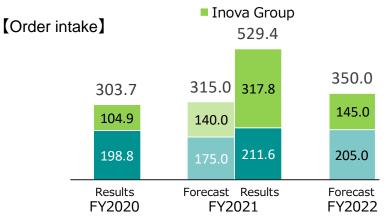




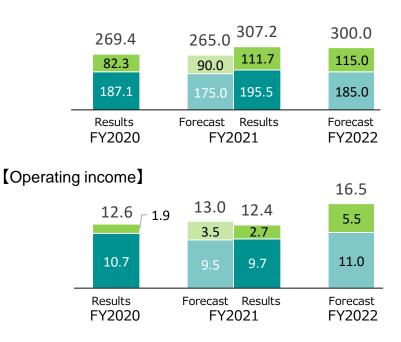
Details by Segments

Environment





[Net sales]



Order intake

- FY2021 results (vs. FY2020) 529.4 (+225.7)
- Large order intake (EPC, Long-term O&M) in UAE, UK
- **FY2022** forecast (vs. FY2021)

350.0 (-179.4)

- Increase EPC in Japan
- Inova's high level order intake keeps mainly UK

Net sales

- FY2021 results (vs. FY2020) 307.2 (+37.8)
- · Steady progresses in Inova's EPC construction
- ■FY2022 forecast (vs. FY2021)

300.0 (-7.2)

Progresses in Hitachi Zosen's projects in Japan, abroad

Operating income

■ FY2021 results (vs. FY2020)

12.4 (-0.2)

- Water business: decrease from previous year with highly profitable project in the previous year
- · Electricity sales: recover from the previous year
- **FY2022** forecast (vs. FY2021)

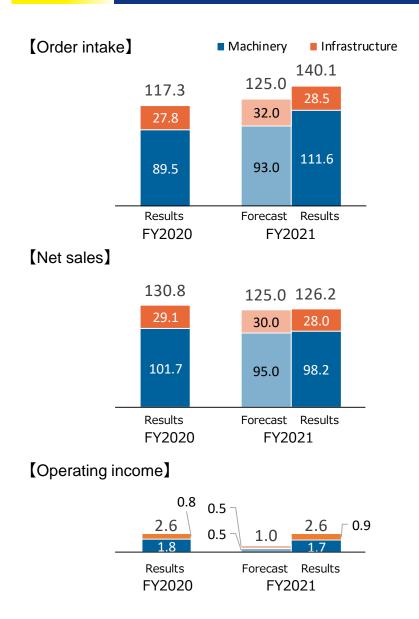
16.5 (+4.1)

EPC in Japan: recovers

· Inova: Increased profit from increased sales

[Previous Segment] Machinery and Infrastructure





Billions of JPY) **Order intake** ■ FY2021 results (vs. FY2020) 140.1 (+22.8) Press Machine, Process Equipment recovering Increase in Precision Machinery Marine Diesel Engine: large order in FY2020 Decrease but still high level in FY2021 **Net sales** ■ FY2021 results (vs. FY2020) 126.2 (-4.6) Press Machine and Process Equipment decrease due to low level of order intake in the previous year Increase in Precision Machinery **Operating income** ■ FY2021 results (vs. FY2020) 2.6 (± 0) Increase in Process Equipment for spent nuclear fuel-related products Increase in Precision Machinery and Infrastructure

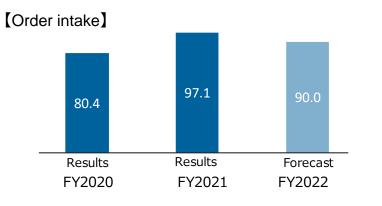
- Decrease in Marine Desel Engine
- Improved from the initial forecast
 in Press Machine

Machinery and Infrastructure Segment Comparison table

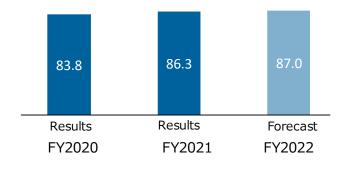


		New Segment			
Macl	Machinery and Infrastructure			Small segment	
Marine Diesel	Hitachi Zosen's Marine Diesel Engine		0	Engine	
Engine	IMEX's Marine Diesel Engine	0		Other Machinery	
Press Machine	H&F	0		Press Machine	
Process Equipment	Process Equipment Nuclear Fuel Cycling-Related Equipment (including NAC)		0	Process Equipment	
Precision Machinery	System Machinery (including VTEX), Electronic control, GPS Remote Monitoring Systems	0		Precision Machinery	
	SCR (Selective Catalytic Reduction) NOx Removal System		0	Engine	
Other Machinery	Systematic Machinery (Filter Presses)	0		Precision Machinery	
	Systematic Machinery (Electro-chlorination Systems)		0	Electrolysis and PtG	
	Other subsidiaries (※)	0		Other Machinery	
	Steel Structure and Disaster Prevention	0		Infrastructure	
Infrastructure	Shield Machine	0		Infrastructure	
	Wind Power		0	Wind power	

X IMEX CO., LTD., ESCO SERVICE CO., LTD., Tokaiseiki Co, Ltd., NIPPON PUSNES CO., LTD., SETOZAKI IRON WORKS CO., LTD.



[Net sales]



[Operating income]

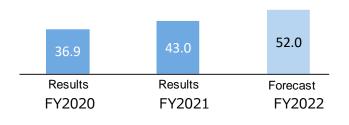
2.4	2.2	2.8
Results	Results	Forecast
FY2020	FY2021	FY2022

(Billions of JPY)

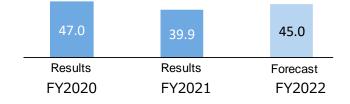
Order intake
■FY2022 forecast (vs. FY2021)
90.0 (-7.1)
Orders bottomed out in FY2020 and now recovering
Decrease in FY2022
from the previous year's large orders
Net sales
■FY2022 forecast (vs. FY2021)
87.0 (+0.7)
Increase in Press Machine
due to high order intake in the previous year
Operating income
■FY2022 forecast (vs. FY2021)
2.8 (+0.6)
Increase in Press Machine
following recovery of press market



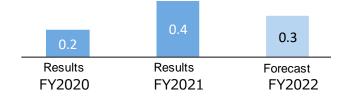
[Order intake]



[Net sales]



[Operating income]



(Billions of JPY)

Order intake

- FY2022 forecast (vs FY2021)
- 52.0 (+9.0)
- Decrease in Engine
- Wind Power aims to win offshore projects

Net sales

- FY2022 forecast (vs FY2021) 45.0 (+5.1)
- Process Equipment increase due to increased orders in the previous year

Operating income

- FY2022 forecast (vs FY2021)
 - 0.3 (-0.1)
- Increase in Process Equipment
- Decrease in Engine



Supplementary Information (Breakdown by Small Segments)

Small Segment : Environment (Full Year Results and Forecast)



ec	(Billions of JPY)							
			FY2019	FY2020	FY2	021	FY2022	Difference
			Results Results Forecast		Results	Forecast		
						(a)	(b)	(b)-(a)
	Onden	EPC	132.9	168.7	195.0	224.7	210.0	- 14.7
	Order intake	O&M	156.5	135.0	120.0	304.7	140.0	- 164.7
	Intake	Total	289.4	303.7	315.0	529.4	350.0	- 179.4
		EPC	125.8	136.6	140.0	165.3	168.0	2.7
	Net sales	O&M	128.5	132.8	125.0	141.9	132.0	- 9.9
		Total	254.3	269.4	265.0	307.2	300.0	- 7.2
	Operating income	EPC	1.7	1.1	1.5	0.2	5.0	4.8
		O&M	14.1	11.5	11.5	12.2	11.5	- 0.7
		Total	15.8	12.6	13.0	12.4	16.5	4.1

[Consolidated]

[Of which, Inova Group (Consolidated)]

 $(\ \text{Billions of JPY}) \\$

		FY2019	FY2020	FY2	021	FY2022	Difference
		Results	Results	Initial Forecast	Results	Forecast	
					(a)	(b)	(b)-(a)
Onden	EPC	62.5	97.7	124.0	155.9	130.0	- 25.9
Order intake	O&M	24.4	7.2	16.0	161.9	15.0	- 146.9
Intake	Total	86.9	104.9	140.0	317.8	145.0	- 172.8
	EPC	47.2	70.8	77.0	100.7	103.0	2.3
Net sales	O&M	9.0	11.5	13.0	11.0	12.0	1.0
	Total	56.2	82.3	90.0	111.7	115.0	3.3
	EPC	0.3	1.8	3.0	3.1	5.0	1.9
Operating income	O&M	0.3	0.1	0.5	- 0.4	0.5	0.9
income	Total	0.6	1.9	3.5	2.7	5.5	2.8

Small Segment : [Previous Segment] Machinery and Infrastructure (Full Year Results)



	(Billions of JPY)					
		FY2019	FY2020	FY2	021	Difference
		Results	Results	Initial Forecast	Results	
			(a)		(b)	(b)-(a)
	Marine Diesel Engine	26.7	28.4	19.5	26.7	- 1.7
	Press Machine	21.3	12.7	15.0	17.6	4.9
Order	Process Equipment	22.1	4.9	18.0	15.2	10.3
intake	Precision Machinery	23.4	24.3	25.5	31.8	7.5
	Other Machinery	20.8	19.2	15.0	20.3	1.1
	Infrastructure	39.7	27.8	32.0	28.5	0.7
	Total	154.0	117.3	125.0	140.1	22.8
	Marine Diesel Engine	22.7	24.0	24.5	24.8	0.8
	Press Machine	23.1	16.6	14.0	14.5	- 2.1
Net sales	Process Equipment	14.3	18.4	14.0	13.4	- 5.0
Net sales	Precision Machinery	23.5	23.9	25.5	27.4	3.5
	Other Machinery	19.6	18.8	17.0	18.1	- 0.7
	Infrastructure	33.5	29.1	30.0	28.0	- 1.1
	Total	136.7	130.8	125.0	126.2	- 4.6
	Marine Diesel Engine	- 0.4	0.0	0.1	- 0.1	- 0.1
	Press Machine	0.6	0.3	- 0.5	-0.0	- 0.3
Operating income	Process Equipment	- 2.9	- 0.5	- 0.3	- 0.1	0.4
	Precision Machinery	0.7	1.0	0.8	1.2	0.2
	Other Machinery	0.8	1.0	0.4	0.7	- 0.3
	Infrastructure	- 1.6	0.8	0.5	0.9	0.1
	Total	- 2.8	2.6	1.0	2.6	0.0

Small Segment : [New Segment] Machinery and Infrastructure (Full Year Results and Forecast)



 (D)

					Billior	ns of JPY)
		FY2019	FY2020	FY2021	FY2022	Difference
		Results	Results	Results	Forecast	
				(a)	(b)	(b)-(a)
	Press Machine	21.3	12.7	17.6	17.0	- 0.6
Order	Precision Machinery	27.1	29.8	35.1	32.0	- 3.1
intake	Other Machinery	13.5	10.8	16.9	15.0	- 1.9
	Infrastructure	38.0	27.1	27.5	26.0	- 1.5
	Total	99.9	80.4	97.1	90.0	- 7.1
	Press Machine	23.1	16.6	14.5	15.0	0.5
Neteolog	Precision Machinery	27.5	28.0	31.5	32.0	0.5
Net sales	Other Machinery	12.0	11.7	13.9	14.0	0.1
	Infrastructure	31.7	27.5	26.4	26.0	- 0.4
	Total	94.3	83.8	86.3	87.0	0.7
	Press Machine	0.6	0.3	-0.0	0.3	0.3
Operating	Precision Machinery	0.9	1.3	1.4	1.5	0.1
income	Other Machinery	0.4	0.4	- 0.1	0.5	0.6
	Infrastructure	- 1.4	0.4	0.9	0.5	- 0.4
	Total	0.5	2.4	2.2	2.8	0.6

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Small Segment : [New Segment] Carbon Neutral Solution (Full Year Results and Forecast)



					(Billio	ns of JPY)
		FY2019	FY2020	FY2021	FY2022	Difference
		Results	Results	Results	Forecast	
				(a)	(b)	(b)-(a)
	Engine	28.2	29.8	25.6	20.0	- 5.6
Order	Process Equipment	22.1	4.9	15.2	15.0	- 0.2
intake	PtG	2.1	1.5	1.2	3.0	1.8
	Wind Power	1.7	0.7	1.0	14.0	13.0
	Total	54.1	36.9	43.0	52.0	9.0
	Engine	24.3	25.3	23.0	24.0	1.0
	Process Equipment	14.3	18.4	13.4	18.0	4.6
Net sales	PtG	2.0	1.7	1.9	2.0	0.1
	Wind Power	1.8	1.6	1.6	1.0	- 0.6
	Total	42.4	47.0	39.9	45.0	5.1
	Engine	- 0.4	0.2	0.1	0.0	- 0.1
Operating income	Process Equipment	- 2.9	- 0.5	- 0.1	0.2	0.3
	PtG	0.1	0.1	0.3	0.1	- 0.2
	Wind Power	- 0.1	0.4	0.1	0.0	- 0.1
	Total	- 3.3	0.2	0.4	0.3	- 0.1



Management and Business Information

President and CEO Sadao Mino



Progress of Medium-Term Management Plan "Forward 22"



Basic policies of Forward 22:

- Contribute to realization of sustainable, safe, and secure society thru corporate activities
- Boost profitability and aim to be a group achieving sustainable growth

Order intake, Net sales : Will exceed JPY 400 billion level, target for FY 2022, for three consecutive years Operating income : Not reach 5% OP margin targeted for FY2022, but continuing steady improvement ROE : Exceeded 5% in FY2021, and continuing further improvement.

Forward 22: Targe	ets and Results		(Billions of JPY)	
	FY2020 Results	FY2021 Results	FY2022 Forecast	FY2022 targets
Order intake	429.4	677.9	500.0	
Net sales	408.5	441.7	440.0	
Operating income	15.3	15.5	20.0	Order intake and net sales:
OP margin	3.8%	3.5%	4.5%	400 billion yen level
Ordinary income	11.7	11.7	16.0	
Net income	4.2	7.8	10.0	
Interest-bearing debt	98.1	91.9	88.0	Operating income margin 5%
Equity ratio	29.4%	28.5%	30.0%	Operating income margin 5%
Return on equity	3.5%	6.1%	7.4%	
Investment			(Billions of JPY)	
	FY2020	FY2021	FY2022	FY2022 targets
R&D expenses	6.6	6.1	8.0	
Capital expenditure	10.8	8.0	10.0	Shift the investment
Total	17.5	14.1	18.0	to growth areas



Enhance the added value of products and services

Progress	FY2020	FY2021
AI and IoT utilization	 Achieved 2-week fully automated operation of Energy-from- Waste (EfW) plant Inspection system for food manufacturing utilizing artificial intelligence(AI) Our ultrasonic phased array inspection system using AI won Grand Prize in "2nd Deep Learning Business Utilization Award" 	 Remote Supervisor (Utilizing smart glasses, etc.) Remote support for overseas construction work while unable to travel overseas due to spread of COVID-19 (e.g. EfW plant project in Thailand) Started a secure IoT platform operation Strengthening collection and utilization of company-wide data
New products and new business models	 Demonstration project of methanation using CO₂ emitted from EfW plant Joint R&D for carbon capture and recycle in overseas 	 Established PtG SQUARE, facility for PtG technology development and demonstration "NEDO's Green Innovation Fund" projects Larger PEM-type electrolyzer (hydrogen) Methane slip reduction technology for LNG fuelled vessels Lower cost offshore wind power
The Group's comprehensive strengths	 Increased collaboration with Inova Joint R&D roadmap Develop new business partners/suppliers in Asia, share their information 	 Increased collaboration with group companies in overseas projects UAE (Inova), Iraq (Osmoflo) Established newly "Global Headquarters"

Achieve workstyle reform by improving operational efficiency and productivity

Progress	FY2020	FY2021
Human resources Development	 Global talent development AI and ICT training courses in-house Promoting diversity (gender, nationality) 	 Next-generation management resources development DX business leaders development
Workstyle reform	Telework, Web conferenceSupport to take a paternity leave	 Employee awareness surveys (including Engagement)



Promote business selection and concentration and allocate resources to growth areas

Progress	FY2020	FY2021
Sustainability	Expressed support for TCFD recommendations	 Scenario analysis conducted Established Sustainability Promotion Department, Review the internal systems
Business Portfolio Management	 Review of production sites due to business transformation Sold Kashiwa Works premises and transferred PtG department to Osaka 	 Screening businesses requiring to improve profitability or others, deliberating action plan Inova businesses diversification : EfW, renewable gas, O&M Integrated shield machine business with Kawasaki Heavy Industries, Ltd.
Management-by- Objective System	 Systematic management of KSFs and KPIs for each business 	 Regularly review business strategies and departmental KSF/KPIs while implementing PDCA cycle Evaluate businesses from a sustainability perspective

Expansion of Operation & Maintenance Business

Progress	FY2020	FY2021
Expansion of O&M business globally	 Participation in project development from early stage Stabilized income by expanding O&M businesses overseas ⇒ Received order of EPC + long-term O&M in Australia Expansion of maintenance business in Europe Built a service providing network through M&A (Germany, France, and U.K.) 	 Received order for EPC + long-term O&M in UAE and UK Acquisition of Steinmüller (Germany)

- Support for TCFD recommendations (March 2021)
- Support for TCFD recommendations (March 2021) Three temperature rise scenarios analysed (4 2 1.5°C) for EfW, renewable gas and wind power businesses
- Results show that resilient management is possible in all scenarios
- Reinforce internal systems for sustainability and climate change
- Established Sustainability Promotion Office under President's direct control (Oct. 2021)
- Promote carbon neutrality, ESG and other initiatives and report regularly to the board of • directors meeting

Reinforce governance system to promote sustainability

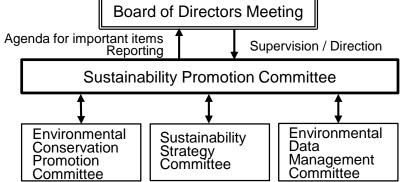
- Review of the internal structure ٠
- Review of the sustainability-related rules ٠

Sustainability Promotion Committee

Chairman: President

- Meeting: Quarterly review
- Activities : Deliberate on basic policies, plans, and strategies, etc.

Report progress to the board meeting





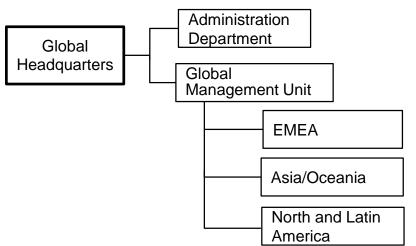


Establishment of Global Headquarters (July 2021)

Centralisation of management operations of ٠ overseas group companies and bases in line with growth of overseas business

Aim of the new organization

- Expand the Group's overseas business and further synergies
- Strengthen governance and risk management globally



- Establish Carbon Neutral Solution Business Headquarters (April 2022)
- Reorganization for agile and interactive development of decarbonisation technologies owned by the various business units in Japan and overseas group companies
- Contribute to early social implementation and the resolution of key societal issues of combating climate change



Wind Power

Process Equipment



Order Intake in Second Half of FY2021 and Status of Each Business

Orders Received during 2nd Half of FY2021 (Japan)



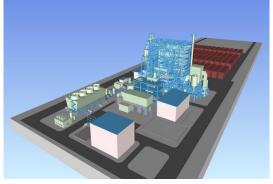
Order received	Project	Outline	Capacity /Output	Schedule	
	Energy-from-waste plant	Design Ruild Operate	80t/day	Completion Mar. 2026	
Nov.	Noshiro-Yamamoto for 20 years after completion Akita		(2 lines)	Completion Mar. 2026 Operation 2026 to 2046	
	Energy-from-waste plant		197t/day		
Dec.	Kita Shiribe City Hokkaido	O&M services for 15 years	(2 lines) 1,990kW	2022 to 2037	
	Energy-from-waste plant	Design Ruild Operate	168t/day	Completion Mar. 2026	
Feb.	Hirakata Kyotanabe Kyoto	Design-Build-Operate for 20 years after completion	4,870kW	Operation 2026 to 2046	
	Biomass power plant			Completion	
Feb.	Fukuyama City Hiroshima	Main equipment	52,700kW	April 2025 Operation 2025 to 2044	



Noshiro-Yamamoto, Akita



Hirakata Kyotanabe, Kyoto



Woody biomass plant, Hiroshima

Orders Received during 2nd Half of FY2021 (Global)



Order received	Project	Outline	Capacity /Output	Schedule	
	Water treatment				
Nov.	Roy Hill Australia (Osmoflo)	Design and main equipment Customer: Aerison Pty Ltd Site: Roy Hill mine, West/Australia	40,400m ³ /day	Completion 2022	
	Energy-from-waste		0.04	Completion	
Dec.	Scotland, UK (Inova)	EPC and O&M (25 years) Customer: Westfield Energy Recovery Site: Fife, Scotland, UK	0.24 mil.t/year 23MW	March, 2025 Operation 2025 to 2050	



Water treatment plant, Australia (Rendering)

Orders Received in FY2022 April (Global)



Energy-from-waste plant, Scotland (Rendering)

Order received	Project	Outline	Capacity /Output	Schedule
	Energy-from-waste	••••••••••••••••		•
Apr. 2022	North London, UK (Inova)	Main equipment (grate, boilers, etc.) Customer: Acciona Industrial UK Site: Enfield, North London, UK	0.7 mil. t/year	Completion Sep. 2026

Orders Received during 1st Half of FY2021 (Japan)



Order received	Project		Outline	Capacity /Output	Schedule	
April	Methanation Methanation equipment Tokyo Gas	t for	Installed in Tokyo Gas's Yokohama Techno Station. Demonstration to begin in 2022	12.5Nm ³ /h	Feb. 2022	
June	Water business Construction of sludge recycling treatment centre in Koga City		New sludge reclamation center to be built next to existing ageing manure treatment facility	52kL/day	Dec. 2023	
July	PPS Supplying renewable electricity to Government Buildings of Itami City		Switch to renewable electricity is expected to reduce greenhouse gas emissions by approx. 712 tonnes per	2.2mil.kWh	Main office : Sep.21-Dec.22 Water bureau : Sep.21-Sep.24	



Methanation equipment



HiMethz (Methanation catalist)

Orders Received during 1st Half of FY2021 (Global)



Order received	Project	Outline	Capacity /Output	Schedule
May	Water treatment : Osmoflo Water treatment plants in Iraq	Scope : Water filtration and treatment equipment for water from rivers, RO water treatment plants, etc. Customer : JGC Place : Iraq	12,500m ³ /day	Aug. 2022
June	Energy-from-waste plant : Inova EfW plant in Dubai, UAE	Scope:EPC, O&M Place:Warsan, Dubai, UAE	1.9 mil.t/yr (5 lines) 200MW	Jul. 2024
June	Energy-from-waste plant EfW plant in Taiwan	Scope : Design of plant, grates and other major equipment and SV Customer : FengYu Resources Co., Ltd. Place : Changhua Coastal Industrial Park	350t/day 15.5MW	Jun. 2024
July	Energy-from-waste plant : Inova EfW plant in Skelton Grange, U.K.	Scope : EPC Customer : enfinium Skelton Grange Limited Place : Leeds, West Yorkshire	0.41mil.t/yr 49MW	
Sep.	Energy-from-waste plant :HZ India EfW plant in India	Scope : Design of plant, grates and other major equipment Supply SV dispatch Customer : Antony Lara Renewable Energy Pvt. Ltd Place : Pune, Maharashtra	700t/day 14MW	May 2023
	ai, UAE (Rendering)	Skelton Grange, U.K. (Rendering)	Pune, India (Rer	

	Construction O&M										D&M	
	Place	Order	completion	Formation	Scope			С	alender ye	ar		
	1 1000	Cruci	completion		CCOPC	2019	2020	2021	2022	2023	2024	2025
ŀ	Shiga	Mar.2017	Mar.2023 💥	JV	DBO					I		
	Shiga	Mar.2017	Jun,2022	JV	DBO							
	Gunma	Jun.2018	Jan.2025	Solo	EPC							I I
	Hokkaido	Nov.2019	Jul.2024	JV	EPC							
	Chiba	Feb.2020	Mar.2023	JV	DBO							
Japan	Niigata	Mar.2020	Mar.2024	JV	BTO							
Jap	Kumamoto	Jul.2020	Mar.2024	JV	DBO							
	Saga	Aug.2020	Mar.2024	Solo	DBO							
	Tokyo	Sep.2020	May.2027	JV	EPC							
	Kagoshima	Feb.2021	Aug.2024	JV	DBO							
	Akita	Nov.2021	Mar.2026	JV	DBO							
	Osaka	Feb.2022	Mar.2026	JV	DBO							
	Chansha(China)	Dec.2018	Mar.2022	Solo	EP+SV				[Co	mpleted		
	Zuzhou(China)	Jan.2019	Dec.2021	Solo	EP+SV				[Com	pleted]		
al	Rayong(Thailand)	May.2019	Jul.2021	Consortium	EP+SV				Complet	ed]		
ation	Shanghai(China)	Jul.2019	Jan.2023	Solo	EP+SV				[
International	Shanghai(China)	Aug.2020	Jan.2022	Solo	EP				[Com	pleted]		
<u> </u>	Bidadi(India)	Dec.2020	Oct.2022	Consortium	EP+SV							
	Changhua(Taiwan)	Jul.2021	Jun.2024	Solo	EP+SV							
	Moshi(India)	Sep.2021	May.2023	Consortium	EP+SV							





Execution O&M

	Order Completion		Inevela Seena	Calendar year							
Project (country)	Order	Completion	Formation	Inova's Scope	2019	2020	2021	2022	2023	2024	2025
lstanbul(Turkey)	Sep.2017	Oct.2021	JV	EP+O&M(1-year)							
lvery(France)	Nov.2018	Apr.2024	Consortium	EP+SV		l I					
Rookery(UK)	Mar.2019	Jan.2022	Solo	EPC							
Moscow1-4(Russia)*1	Nov.2019	Jun.2023	Consortium	EP+SV							
Rockingham(Australia)*2	Jan.2020	Dec.2022	Consortium	EP+SV+O&M(long term)							
Newhurst(UK)	Feb.2020	-	Solo	EPC							
Emmenspitz(Swiss)	Feb.2020	Oct.2025	Solo	EP+SV							
Slough(UK)	Dec.2020	Nov.2024	Solo	EPC							
Dubai(UAE)	Jun.2021	Jul.2024	Consortium	EP+SV+O&M(35-years)							
Skelton Grange(UK)	Jul.2021	Jul.2025	Solo	EPC							
Westfield(UK)	Dec.2021	Apr.2025	Solo	EPC+O&M(25-years)							
North London(UK)	Apr.2022	Sep.2026	Solo	Equipment supply							

*1 Order received for Moscow 1 in 2019, Moscow 2-4 in 2020
 *2 Delay expected



Environment Business (Hitachi Zosen, group companies other than Inova)

- Energy from waste EPC (FY2022)
- Recovery in orders for EfW expected
- Aims to improve profit and loss

[Domestic market scale (※)and Orders received]



Energy from waste - O&M (not incl. power sales)

- Order intake slight increase for FY2022
- Operating income decrease due to decreased sales

- Electricity sales
- Wholesale: Steady demand as auxiliary power source
 Will consider the future use, following sharp price fall in the capacity market for FY2025
 Detail. Supplying clean power of lead
- Retail: Supplying clean power of local production and consumption
- Water business (EPC, O&M)
- Increasing private sector outsourcing of O&M expected in the future.
- Collaboration with local companies for growing demand in China and S.E. Asia

Risks and actions for changes in the external environment

- Impact of Covid-19
- Limited travel for overseas projects, but handled by remote supervisors, etc.
- Increase in steel prices, etc.
- Impact of rapid cost increases are beginning to be seen.
- Escalation clauses are common in public projects, material cost can be passed on to the price



Environment Business (Inova Group)

- Energy from waste (EfW)
- Continued dominance in European market
- Continued high level of EPC orders in excess of 100 billion expected
- Renewable gas
- Diversification of EU energy procurement targeting to double biomethane production to 35 billion m³ by 2030
- Potential growth also in North America
- Continue to consider not only EPC, but also BOO and project participation

- O&M services
 - Hitachi Zosen Inova Steinmüller Completed acquisition in February 2022 Resumed receiving orders
- Focus on small projects and after-sales service and return to profitability asap
- Target sales of CHF250 million (JPY30 bn) for Inova Group as a whole in FY2025
- Development of next-generation technology
- Joint R&D on capture and reuse of CO₂
- Clean hydrogen production using power generated by EfW facility, etc.

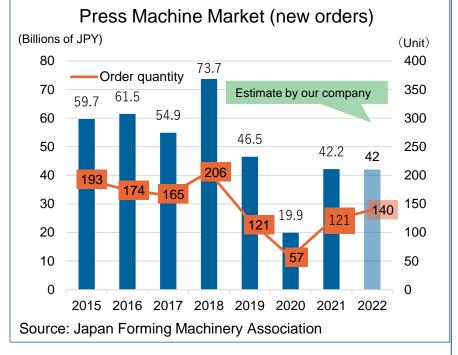
Risks and actions for changes in the external environment

- Impact of Covid-19
- Prolonged spread of infection affected some projects (e.g. Australia)
 Watch for impact on project processes and financial performance
- Increase in steel prices, etc.
- More conservative management than before to cope with rapid inflation



Machinery & Infrastructure Business

- Press Machine
- Investment in automotive industry recovering, uncertain in current international situation
- 30% target for after-sales service business
 Over 3,400 units delivered
- IoT solution service "HFMAPS" for operational data analysis, recovery support, preventive maintenance
- Precision Machinery
- Orders for equipment for semiconductors remain strong
- Established local production and maintenance bases to meet strong demand (China, Korea)
- Infrastructure
- Bridge orders same level as previous years



· Redevelopment demand in water gate market

Risks and actions for changes in the external environment

- Increase in steel prices, etc.
- Secure long lead-time materials by taking orders early and securing lead time
- Escalation clauses are common in public projects, material cost can be passed on to the price



Carbon Neutral Solution Business

- Engine (formerly, Marine Diesel Engine)
- Maintained high level of orders in FY2021
- Severe profit for material price increase, etc.
- Improve profitability thru after-sales service, env. friendly products (SCR systems), etc.
- Process Equipment
- Investment in LNG, petrochemical recovering
- Active Indian market, local production of general products
- Develop products for ammonia and other alternative fuels.

(Nuclear equipment)

- Agreed with TEPCO on JV manufacturing of decommissioning-related products (April 2022)
- Canister demand increase for decommissioning etc. in US (Expected to grow 15% by 2030)

Wind Power

- Onshore wind: Aims order in Aomori in FY2022 Undertakes from EPC to O&M
- Offshore wind: Focuse on foundation structures Aims for sales of approx. JPY 50 bn in 2030

Power to Gas (PtG)

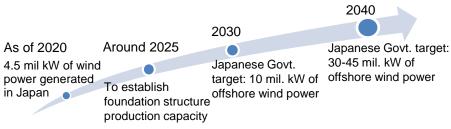
- Strengh based on many demonstration projects, catalyst developed in-house
- Commercial-scale product order expected late 2020s (Challenge: larger size and lower cost)
- Launched MW-class PEM electrolyser.

Domestic energy equipment and systems market forecast for a decarbonized society

(Billions of JPY)

Segment	FY2021 (Forecast)	FY2030 (Forecast)	FY2050 (Forecast)	
Hydrogen	96	820	1,740	
CO ₂ -free ammonia	2	43	235	
CCUS· Carbon recycling	2	160	480	

X New and renewal demand for each year Source : Yano Research Institute Ltd.





Topics

Hitachi Zosen Inova Progress of Major EfW Projects



Istanbul (Turkey)

Completed and started operation in Oct. 2021, continuing stable operation

Project Outline

- Order intake: September 2017
- Scope: EPC+O&M (1 year)
- Capacity: 3,000t/day (3 lines)

Dubai (UAE)

Construction progressing smoothly

- One of the world's largest EfW plants
- Finance supported by JBIC and NEXI
- BESIX, with proven track record in Middle East, is in charge of civil work
 (JBIC: Japan Bank for International Cooperation NEXI: Nippon Export and Investment Insurance)

Project Outline

- Order intake: June 2021
- Scope: EP+SV+O&M (35-years)
- Capacity: 1,900,000t/year (5 lines)
- Completion : July 2024



Istanbul EfW facility, Turkey



Dubai construction site

Acquisition of Steinmüller Babcock Environment (Germany)



Completed Share Purchase (Feb. 2022)

Before acquisition,

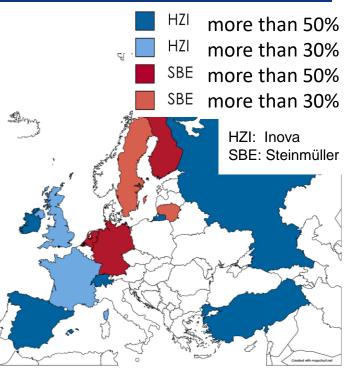
- Large loss-making projects all finalized
- Capital injection by the seller for elimination of insolvency After completion of share purchase,
- Renamed to Hitachi Zosen Inova Steinmüller GmbH
- Post-merger due diligence on business processes done
- Resumed order-taking activities

Aims of Acquisition

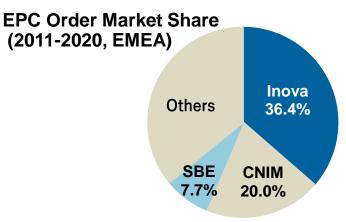
- Expansion of O&M service business in Europe
- Target O&M sales of Inova CHF 250 million (ca. JPY 30 billion) by 2025

Expected Synergy

- Market complement Germany, Scandinavia
- Technology complement Boiler, Mid-sized projects
- Focus on small to medium project and O&M services



 $\$ According to our research

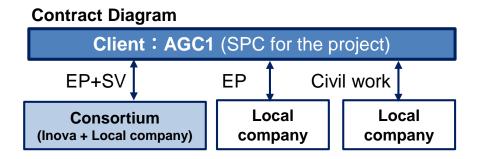


Source: A. Vaccani & Partner AG research



Energy from waste (EfW) Projects in Moscow

- Inova undertakes basic design and key equipment for 4 EfW plants in Moscow's suburbs
- Share in our business in FY2021 : Less than 3% in consolidated net sales
- Progress rate as of March 2022 : 66% by all 4 plants (Scope for Inova)
- Mile stone payment in accordance with progress of construction : Total 57% received already (for all 4 plants)
- Completion schedule (1st plant in Dec. 22/final one in June 23) will be delayed.
 ⇒"Force Majeure" declared to the customer.
- Swiss public credit agency (SERV)
 - → Covers political risks including war and sanctions.



- E: Engineering (design)
- P: Procurement
- SV : Dispatch supervisor

Civil work is out of Inova's scope



Selected for NEDO's "Green Innovation Fund/Cost Reductions for Offshore Wind Power Generation" project (Joint project with KAJIMA CORPORATION)

- Project Theme: "Mass production and cost reduction of semisub-type hybrid floating structure" Joint R&D on optimization and mass production of floating foundations for offshore wind generation and hybrid mooring systems.
- Project period: March 2022 end of March 2024 (plan)

<Projects adopted previously>

- Hydrogen production by water electrolysis with renewable power Jointly with Yamanashi Pref., Tokyo Electric Power, Toray, etc. Project period: FY2021-FY2025
- ② Methane slip reduction technology from LNG fuelled vessels Jointly with Yanmar Power Technology and Mitsui O.S.K. Lines Project period: FY2021-FY2026



semi-sub-type Hybrid floating structure



Image of wind farm

Green Innovation Fund:

2 trillion yen fund established at the New Energy and Industrial Technology Development Organization (NEDO) to encourage companies to take on the ambitious challenge of achieving the 2050 carbon neutral goal.



Inova builds hydrogen production facility in Energy-from-Waste plant in Switzerland

- Inova builds green hydrogen production facility in EfW plant in northern Switzerland
- Clean power generated at the plant is used for hydrogen production
- Build-Own-Operate for 3years

Location:Buchs, canton of Aargau, SwitzerlandHydrogen off-take:Messer Schweiz AG, Swiss gas supplierFull-scale operation:Spring, 2023Hydrogen production volume: Approx. 200t/year, equivalent to

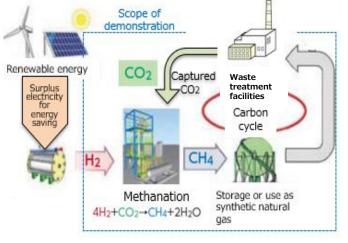
EfW plant in Buchs

Demonstration project to establish carbon recycling model by recycling CO₂ collected from waste treatment facility (Commissioned business by Ministry of the Environment)

approx. 20 million km of hydrogen vehicles

- Demonstration project to establish a carbon recycling model by recycling CO₂
- The world's first methanation project using CO₂ emitted from waste treatment facilities

Location: Odawara City Environment Business Center Methane production volume: approx. $125Nm^{3}-CH_{4}/h$ Construction: October 2020 - May 2022Demonstration: June 2022 -



Carbon Cycle Society Model (Image)

ACSTERIA, space sterilizer product using deep UV LEDs in steady delivery

- Launched upgraded "ACSTERIA" in January 2022
- Steadily delivered to hospitals, hotels, etc., mainly from western Japan
- Deep Ultraviolet LED damages and inactivates DNA and RNA of the virus
- Long-life LED enables continuous 24-hour operation for approximately 2 years

Size:W:600mm × D:600mm × H:1,900mmWeight:approx.175kgAvailable floor area:Maximum 250 m² (assuming space height at 2.4m)



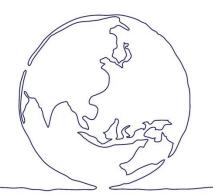
Completed Installation work for seabed-type Flap-Gate seawall in Hyogo Prefecture, Second reference project in Japan

- Completed on-site installation work of the second seabed-type flap-gate type seawall in Japan, at Fukura Port in Minamiawaji City, Hyogo Prefecture in March 2022
- In an emergency, automated closure operation of the gate contributes to tsunami disaster prevention by ensuring quick and secure operation as well as operators' safety

Client: Hyogo Pref. Awaji Prefectural Citizens Bureau Location: Fukura, Minamiawaji City, Hyogo Prefecture Installation: April, 2020 – March, 2022



Installation work at Fukura



Technology for People, the Earth, and the Future

Hitachi Zosen creates links between mother nature and our future

Cautionary Statement

Forward-looking statements are based on information currently available to Hitachi Zosen Corporation. Therefore those forward-looking statements include unknown risks and uncertainties. Accordingly, you should note that the actual results could differ materially from those forward-looking statements. Risks and uncertainties that could influence the ultimate outcome include, but are not limited to, the economic conditions surrounding Hitachi Zosen Corporation and/or exchange rate fluctuation.



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