

Results Briefing for the First Half of the Year Ending March 31, 2022

November 25, 2021



Financial Results for the First Half of FY 2021

Key Points of the Financial Results for the First Half of Year Ending March 2022

(Million yen)

	Year ended March 2021 1st half	Year ended March 2021 2nd half	Year ending March 2022 1st half
Net sales	36,836	56,137	54,647
Operating income	(3,802)	1,249	(1,943)
Recurring income	(3,150)	1,057	(1,680)
Net income	(3,978)	1,136	(1,780)
Sales weight (In comparison with FY2018 as 100)	53	84	74

* Net sales before application of revisions to accounting standards: 57,225 million yen

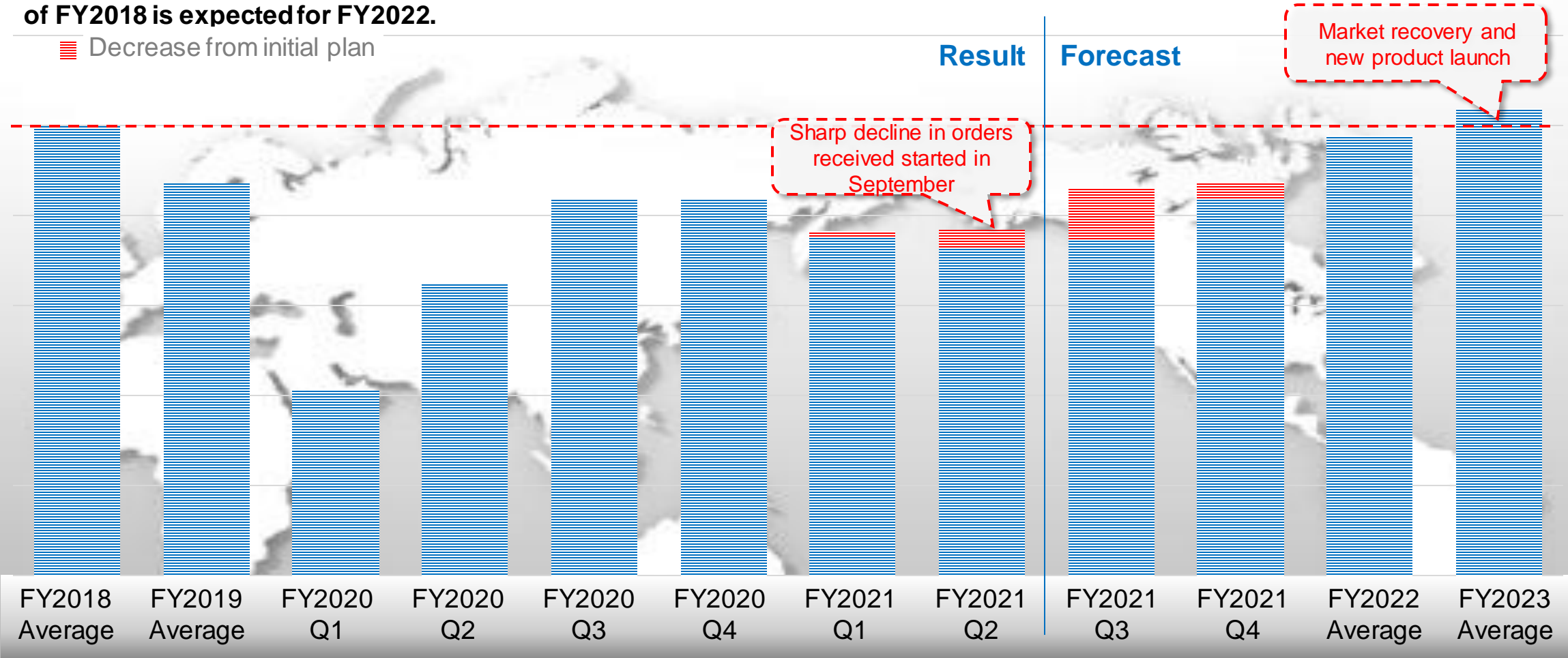
<Overview>

- Sales: Sales weight was on a recovery track from the decline due to COVID-19 in 2nd half of FY2020 but began to decline again from 2nd half of previous year due to the impact of the decrease in automobile production caused by the shortage of semiconductors worldwide and the shortage of auto parts due to the spread of COVID-19 in Southeast Asia.
Although sales weight decreased, net sales declined only slightly due to a rise in aluminum prices and the effect of exchange rates.
- Operating/Recurring income: Despite the ongoing efforts to improve profitability, a loss was recorded due to a decrease in orders received and an increase in procurement costs associated with a rise in aluminum prices, which affected profits.
- Net income: A net loss was recorded due to the decreases in operating income and recurring income.

Global Sales in Weight

- Sales weight was on a recovery track from the decline due to COVID-19 in 1Q of FY2020 but began to decline again from 1Q of FY2021 due to the shortage of semiconductors and the impact of the spread of COVID-19 in Southeast Asia. Recovery to the level of FY2018 is expected for FY2022.

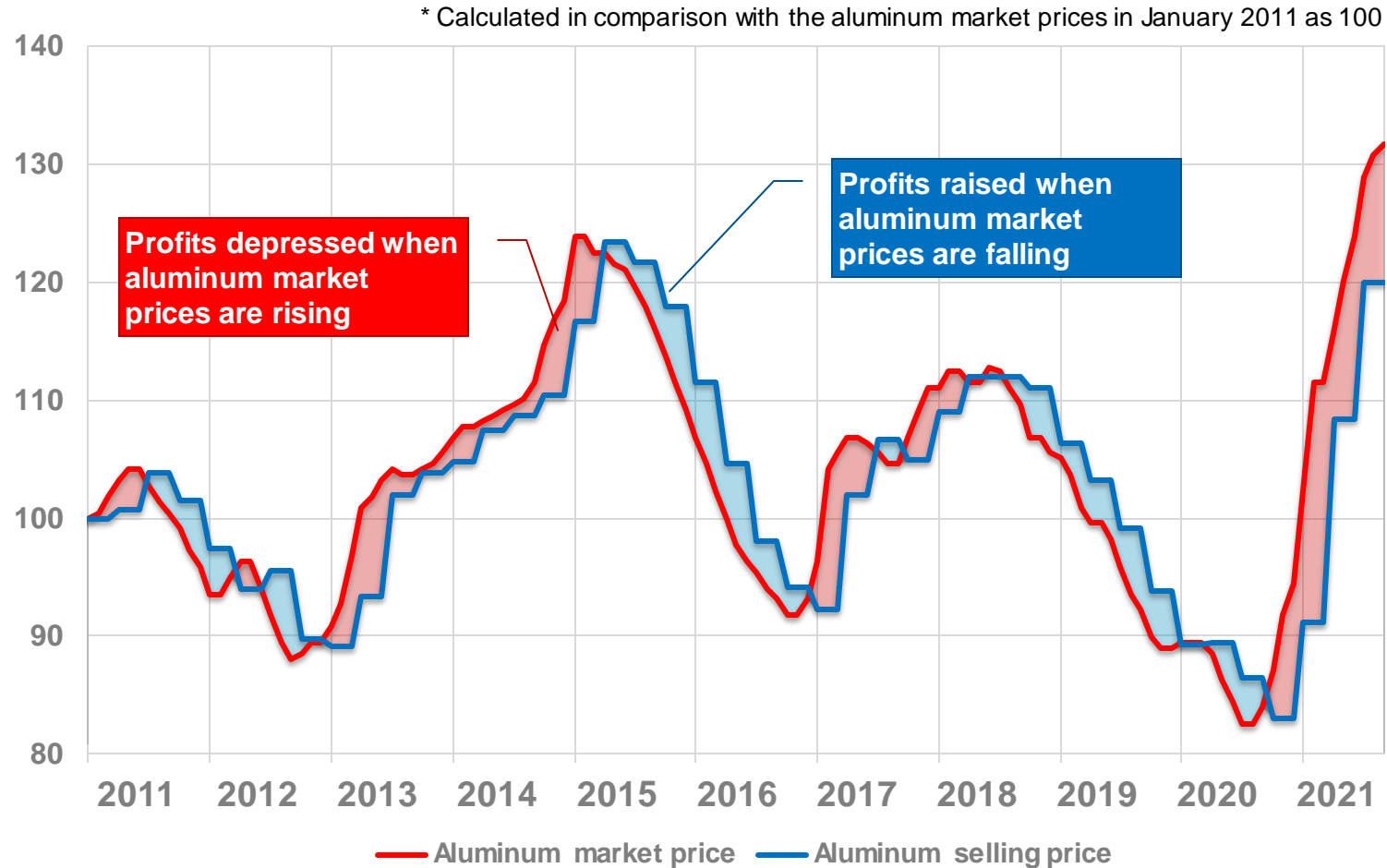
■ Decrease from initial plan



* Changes in percentage of sales weight compared to the average level of FY2018

Aluminum Prices

Changes in aluminum market prices and selling prices over 10 years from 2011



❑ Effect of fluctuations in aluminum market prices

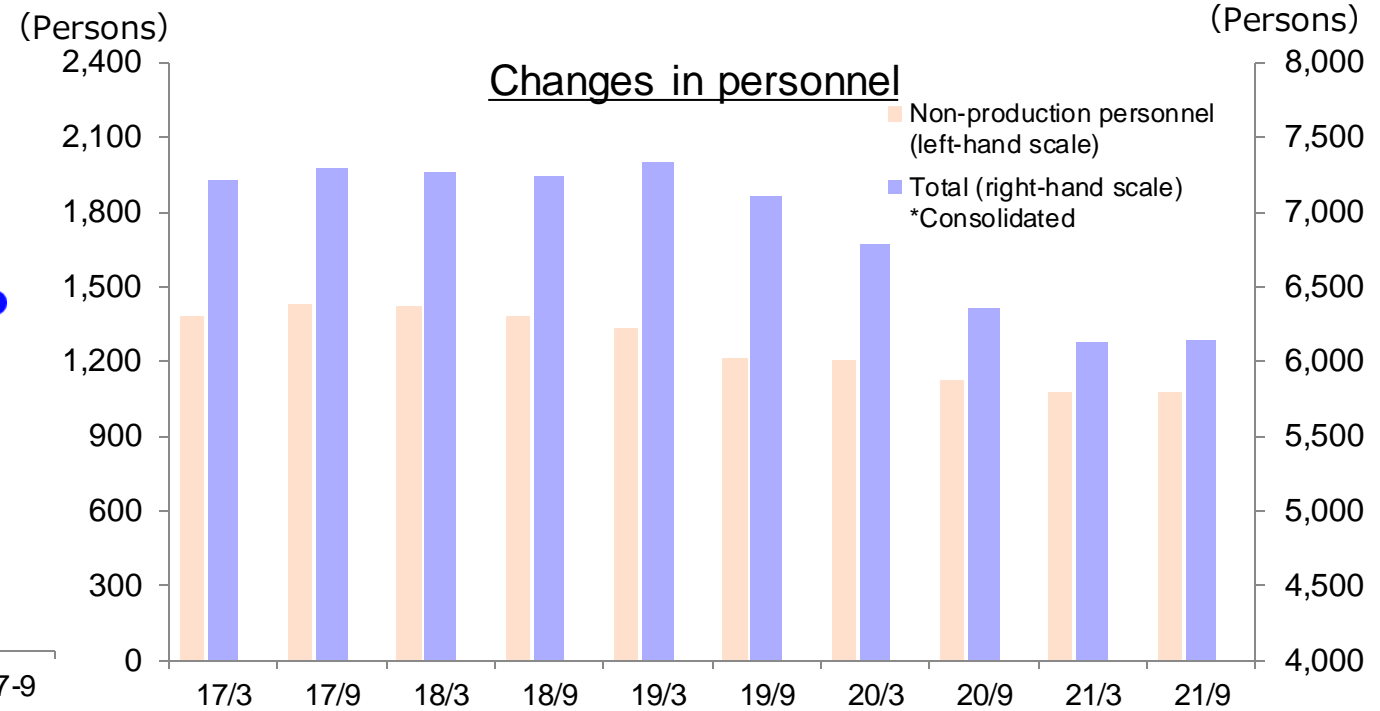
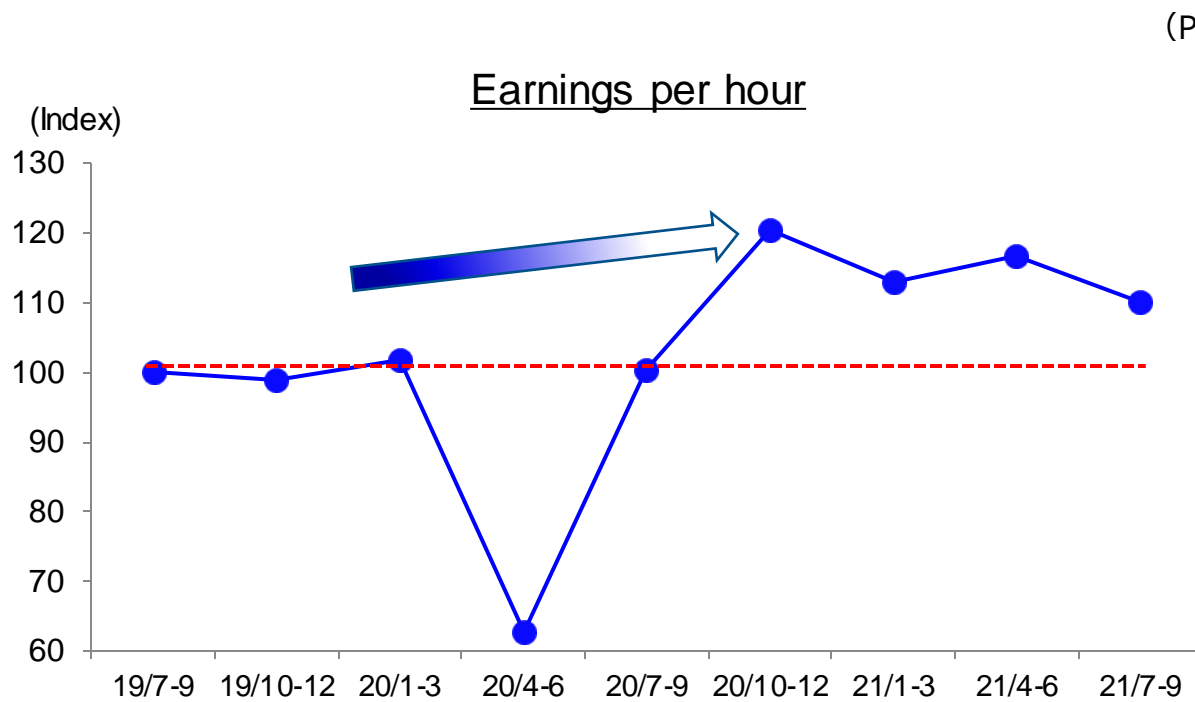
There is a delay in reflecting aluminum market prices in selling prices. But it will be levelled in the long run.

❑ Market prices have soared 60% since June 2020

- ✓ Impact of the rise in the price of silicon, necessary for aluminum ingot production
 - Shortage and restriction of electricity in China
 - Increase in demand for silicon for solar panels
- ✓ Impact of new regulations for scraps enforced in China
 - Restriction on import of scraps

* Aluminum new ingot prices fell after hitting \$3,171 on October 15 to \$2,668 as of November 23.

Status of Promoting Leaner Production Systems



- Maintained the improvement trend by promoting leaner production systems.
- Slightly declined because revision of production systems could not keep up with the sharp decline in the volume of orders received in September 2021.

- Promoted appropriate personnel placement according to the production scale
- Overall, continued to improve efficiency by streamlining production lines and revising work processes.
- Number of consolidated employees reduced 1,193 from the end of March, 2019 to the end of September, 2021

* Earnings per hour = Net sales less direct costs (raw material costs, etc.) / Total hours worked by production personnel at plants

Die Casting Business

(Million yen)

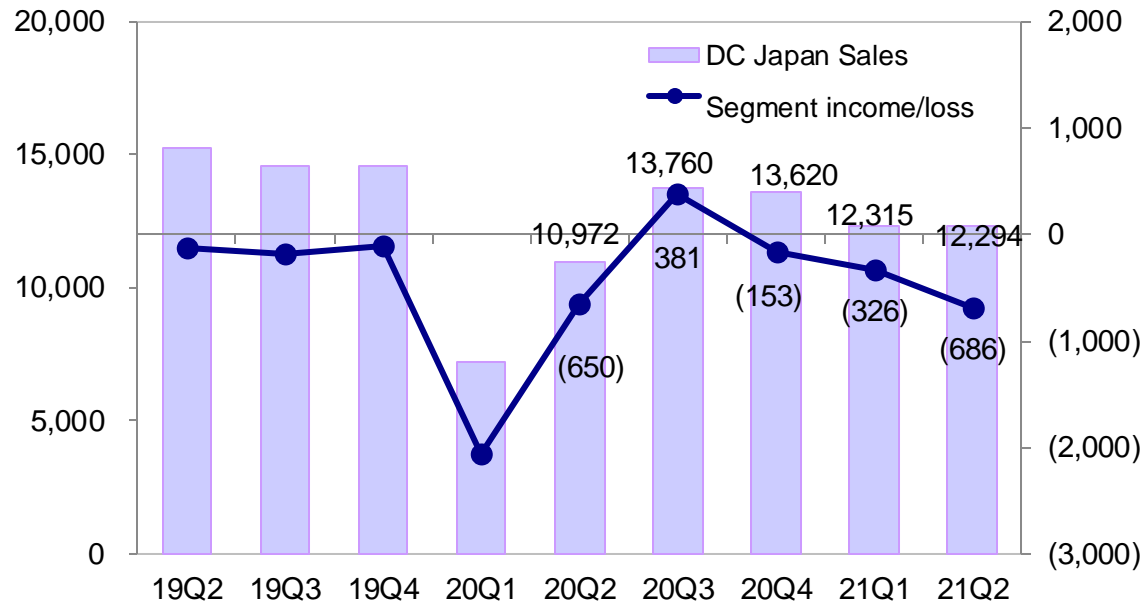
		Year ended March 2021 1st half	Year ended March 2021 2nd half	Year ending March 2022 1st half
Japan	Net sales	18,204	27,380	24,609*
	Segment income/loss	(2,719)	228	(1,012)
North America	Net sales	8,610	13,018	14,190
	Segment income/loss	(323)	417	(553)
Asia	Net sales	7,603	12,328	11,726
	Segment income/loss	(959)	361	(643)

* The Mexico Plant in the North America segment and two plants in China in the Asia segment settle their accounts in December.

*Net sales before application of revisions to accounting standards: 27,186 million yen

Die Casting in Japan

Changes in sales and segment income in Die Casting Business in Japan (Million yen)



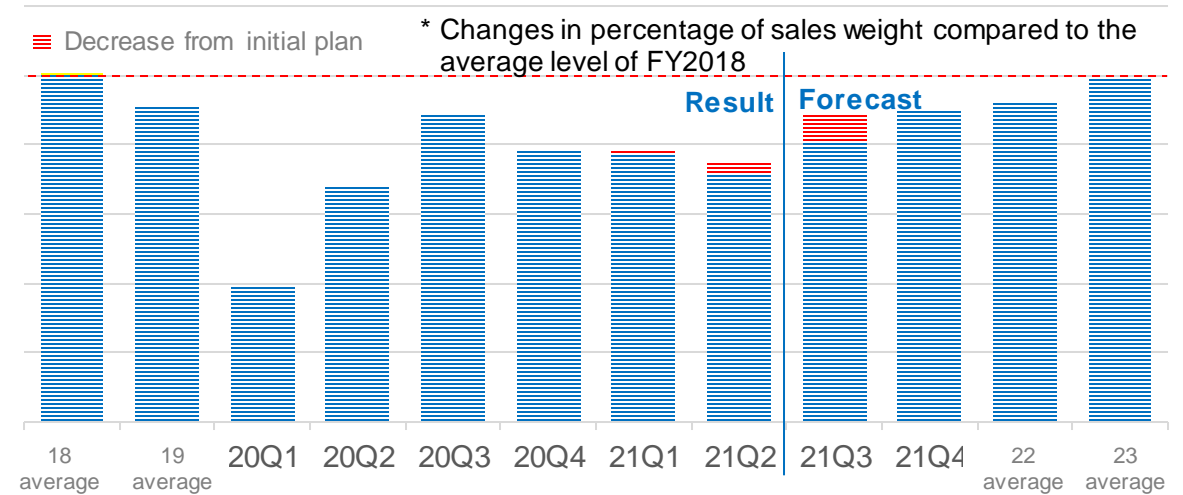
Sales: Increased ¥6,410 million (up 35.2% year on year)

- Sales volume was on a recovery track after bottoming out in 1Q of FY2020 but recovery slowed down due to the shortage of semiconductors and the spread of COVID-19 in Southeast Asia.

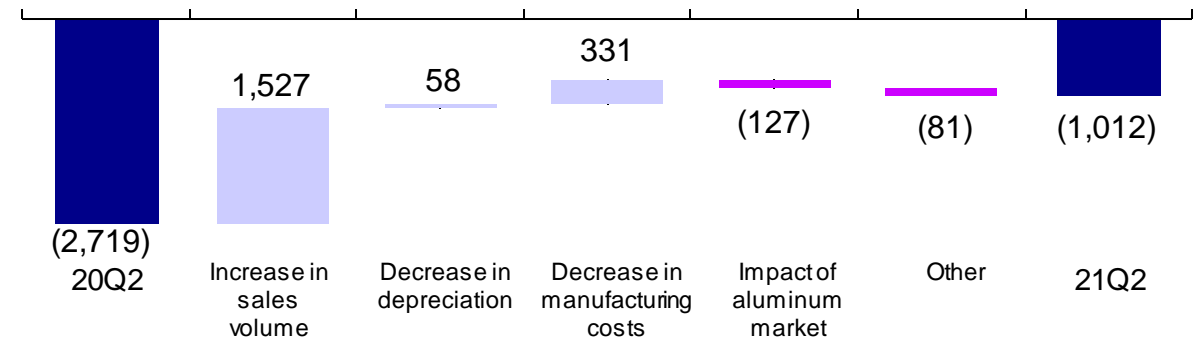
Segment income: Increased ¥1,710 million (up year on year)

- Despite the year-on-year improvement due to measures promoted to increase sales volume and improve productivity, a segment loss was recorded mainly due to the impact of soaring aluminum prices on profits.

Changes in sales weight

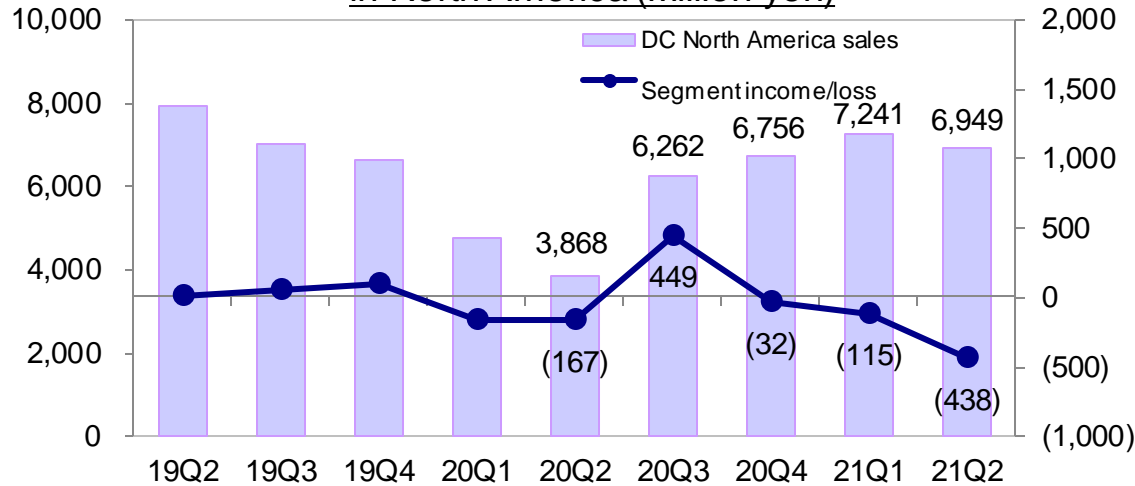


Factors behind change in segment income (Million yen)

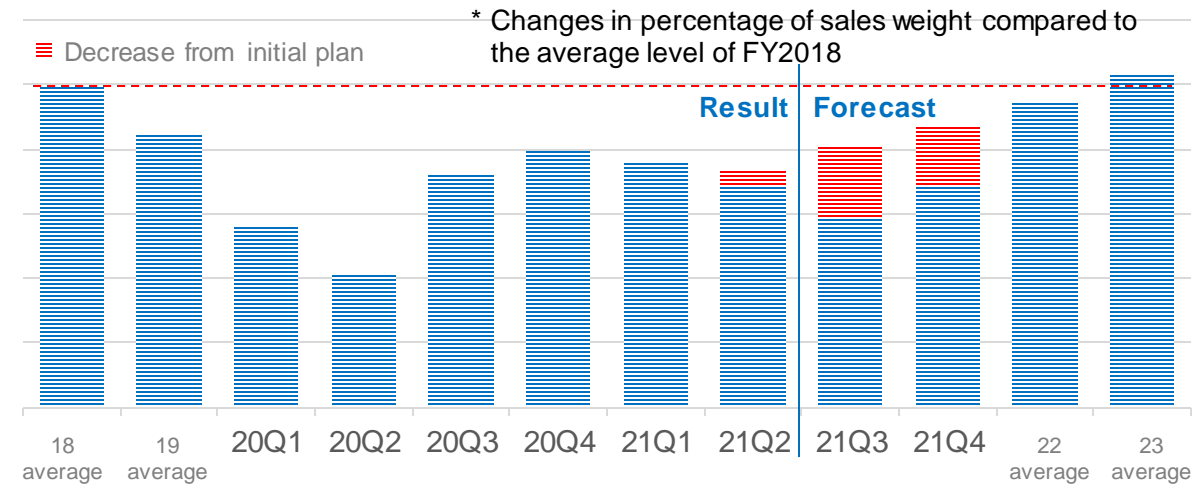


Die Casting in North America

Changes in sales and segment income in Die Casting Business in North America (Million yen)



Changes in sales weight



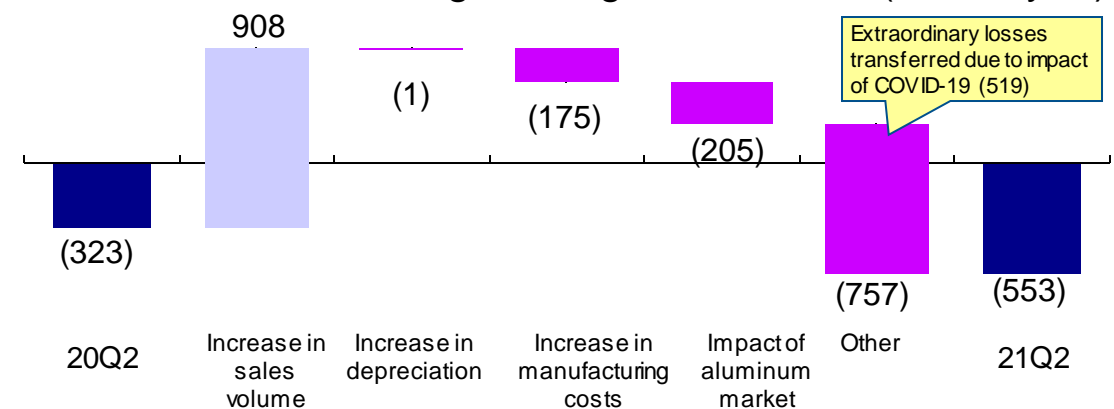
Sales: Increased ¥5,580 million (up 64.8% year on year)

➤ Although sales were on a recovery track after bottoming out in 2Q of FY2020, sales volume for 2Q in FY2021 declined from the initial plan due mainly to the impact of production adjustments by customers resulting from the shortage of semiconductors and other auto parts.

Segment income: Decreased ¥230 million (down year on year)

➤ Despite the effect of year-on-year recovery in sales volume, the shortage of semiconductors and an increase in aluminum procurement costs affected profits.

Factors behind change in segment income (Million yen)

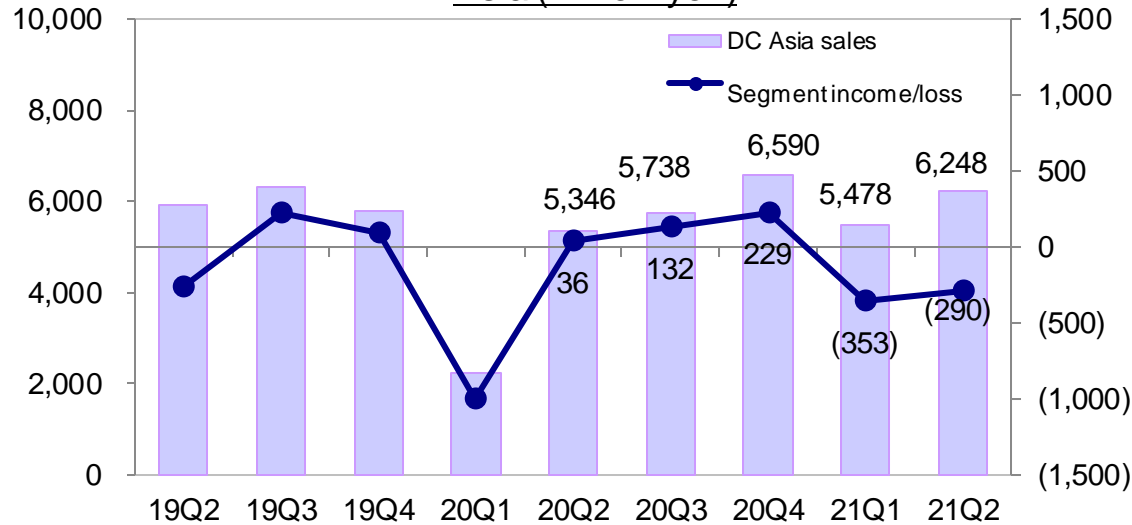


Fiscal year end: March in U.S.; December in Mexico

Exchange rate (20Q2 ⇒ 21Q2): U.S. dollar: ¥106.68 ⇒ 110.21; Mexican peso: ¥108.44 ⇒ 107.76

Die Casting in Asia

Changes in sales and segment income in Die Casting Business in Asia (Million yen)



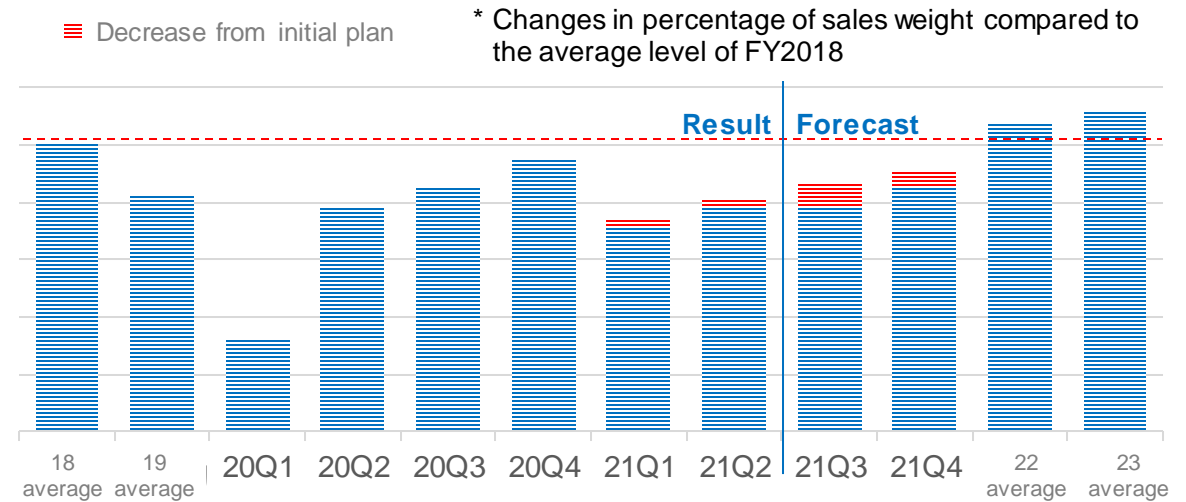
Sales: Increased ¥4,120 million (up 54.2% year on year)

- Sales increased on a year-on-year basis but marked a decrease from the initial plan mainly due to the lockdown in India in 1Q. Sales volume declined to 80% of 2nd half of the previous year.

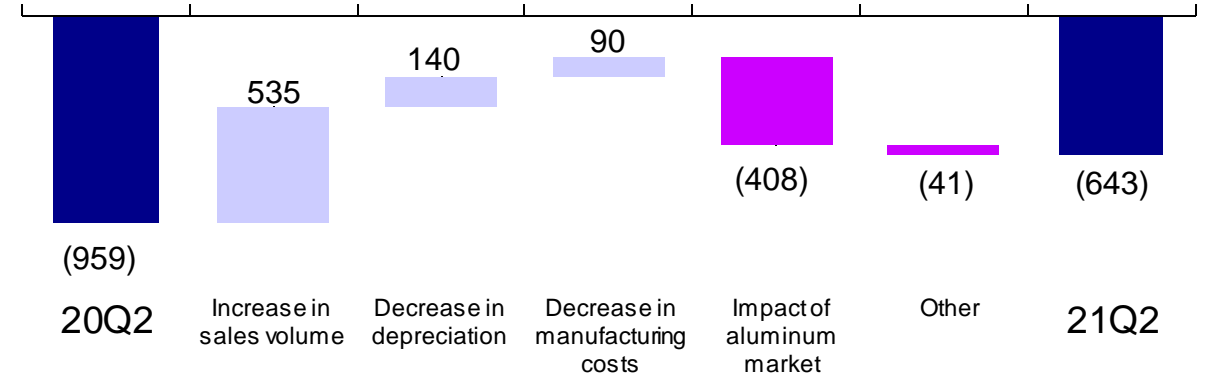
Segment income: Increased ¥320 million (up year on year)

- An increase in aluminum procurement costs due to soaring aluminum prices affected profits.

Changes in sales weight



Factors behind change in segment income (Million yen)



Fiscal year end: December in China; March in India

Exchange rate (20Q2 ⇒ 21Q2): Chinese yuan: ¥ 15.37 ⇒ 16.64; Indian rupee: ₹ 1.43 ⇒ ₹50

Aluminum Business and Proprietary Products Business

(Million yen)

		Year ended March 2021 1st half	Year ended March 2021 2nd half	Year ending March 2022 1st half
Aluminum Business	Net sales	1,394	2,089	2,832
	Segment income/loss	(41)	74	144
Proprietary Products Business	Net sales	1,023	1,322	1,289
	Segment income/loss	148	172	112

Aluminum Business

- Sales: Despite the impact of the production decrease of car manufacturers due to the recent shortage of semiconductors, sales weight increased by 45.3% year on year.
- Segment income: Increased mainly due to an increase in net sales despite soaring aluminum prices.

Proprietary Products Business

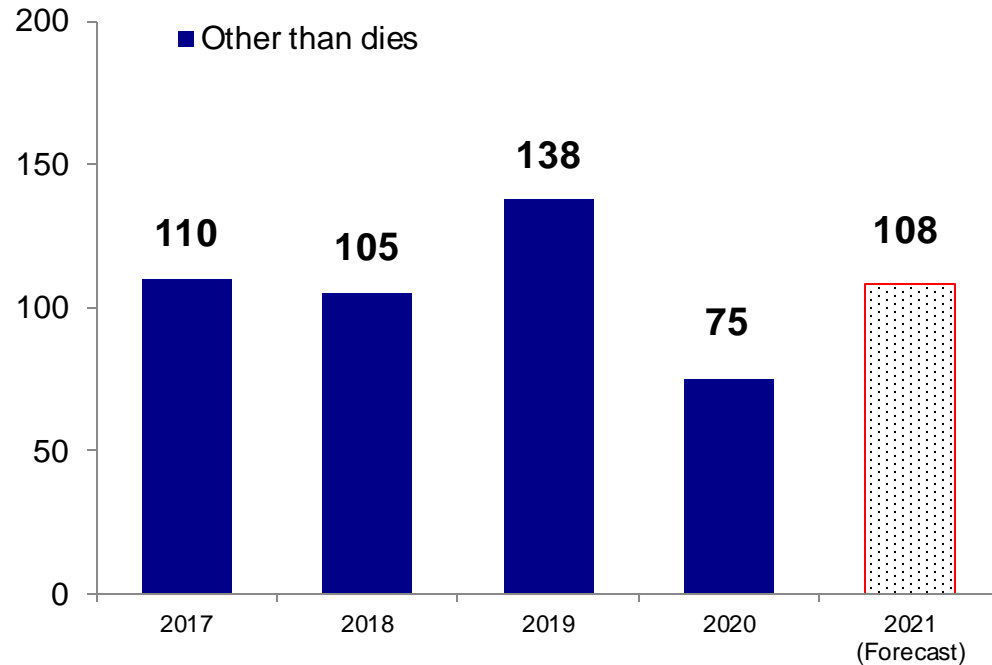
- Sales: On a year-on-year basis, sales increased due to an increase in orders for projects of our main customers, namely a clean room at a semiconductor production company and a data center at a telecommunications company.
- Segment income: Maintained profitability though with fluctuations caused by individual projects.

Trends in Capital Investment, Depreciation and Amortization

Year ending March 2022 forecasts

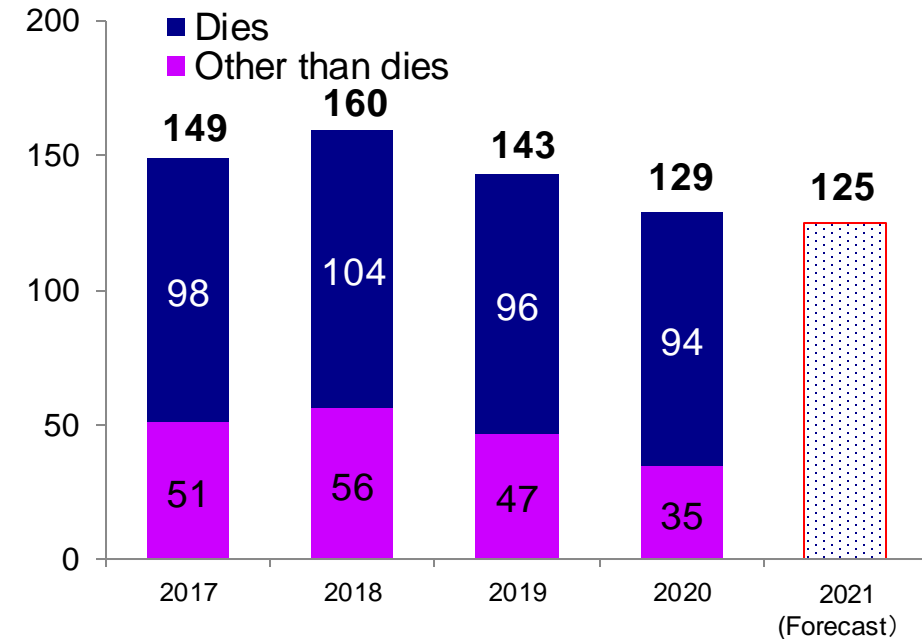
- Amount of capital investment: Expected to be ¥10,800 million (Reduced by ¥2,000 million from the plan)
- Depreciation and amortization: Expected to be ¥12,500 million due to reduction of capital investments

Amount of capital investment (100 million yen)



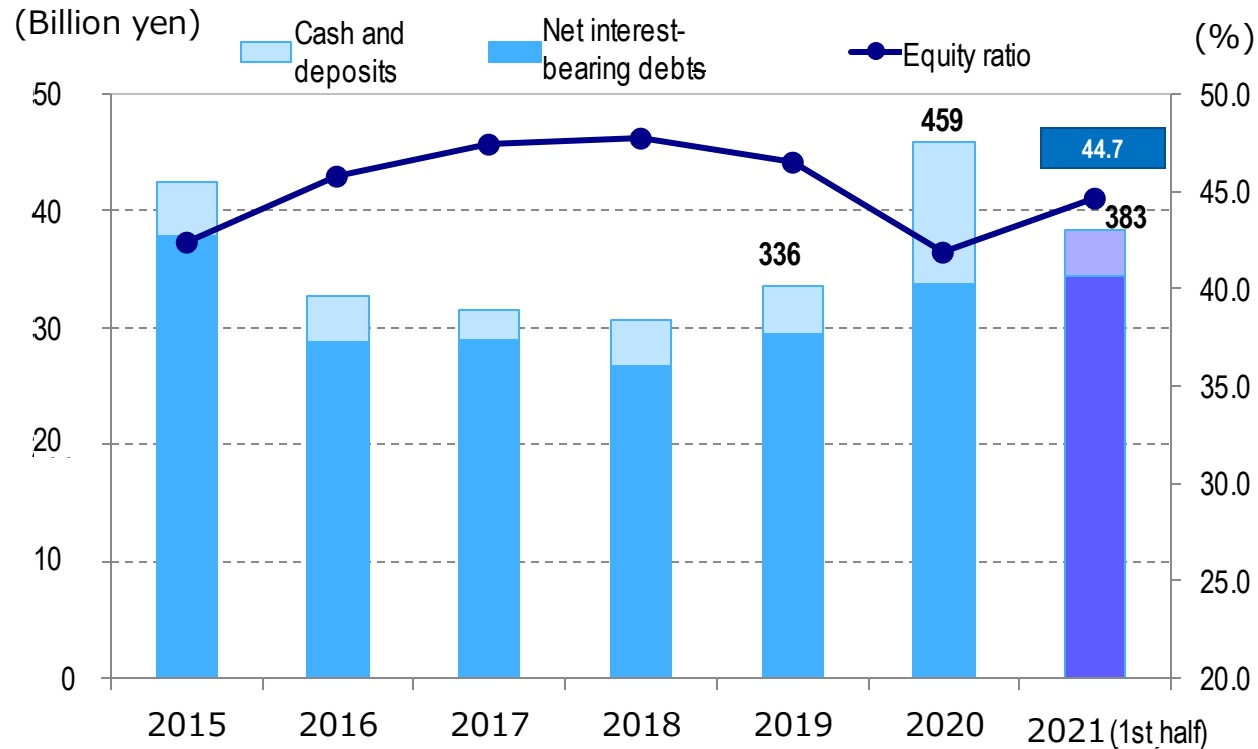
* Starting from FY2021, due to change in the method of asset recording for dies, the amount of capital investment exclude the amount for dies.

Amount of depreciation and amortization (100 million yen)



* Starting from FY2021, due to change in the method of asset recording for dies, amortization of some dies is not included.

Financial Status in 1H of FY 2021



Loans decreased after being increased to secure liquidity on hand in FY2020 (interest-bearing debt decreased ¥7.6 billion from the previous year to ¥38.3 billion).
Equity ratio was 44.7%

* Net interest-bearing debts = interest-bearing debts - cash and deposits

Toward Enhancement of Competitiveness in Die Manufacturing

- Integrating domestic operations into one site to improve management efficiency

Merging Die Mold Tochigi and Die Mold Kumamoto into Die Mold Hamamatsu (April 1, 2022)

- Utilizing overseas network, promoting horizontal division of labor

Advancing division of labor for die production on a global scale to improve productivity and enhance competitiveness



New 10-year Long-term Business Plan

2040 Vision

“Our Goal”

New 10-year Long-term Business Plan

22-24 Medium-Term Management Plan

Beyond your expectations
2040

We brighten our planet's future with our lightweight technology,

ensure your satisfaction with Ahresty, and

develop pioneering technology through continuous research.

- Electrification of vehicles
- Carbon-neutrality
- Improving fuel/electricity consumption efficiency
- Return to shareholders
- Contribution to customers
- Diversity
- Developing new production methods
- Technology development
- Development speed



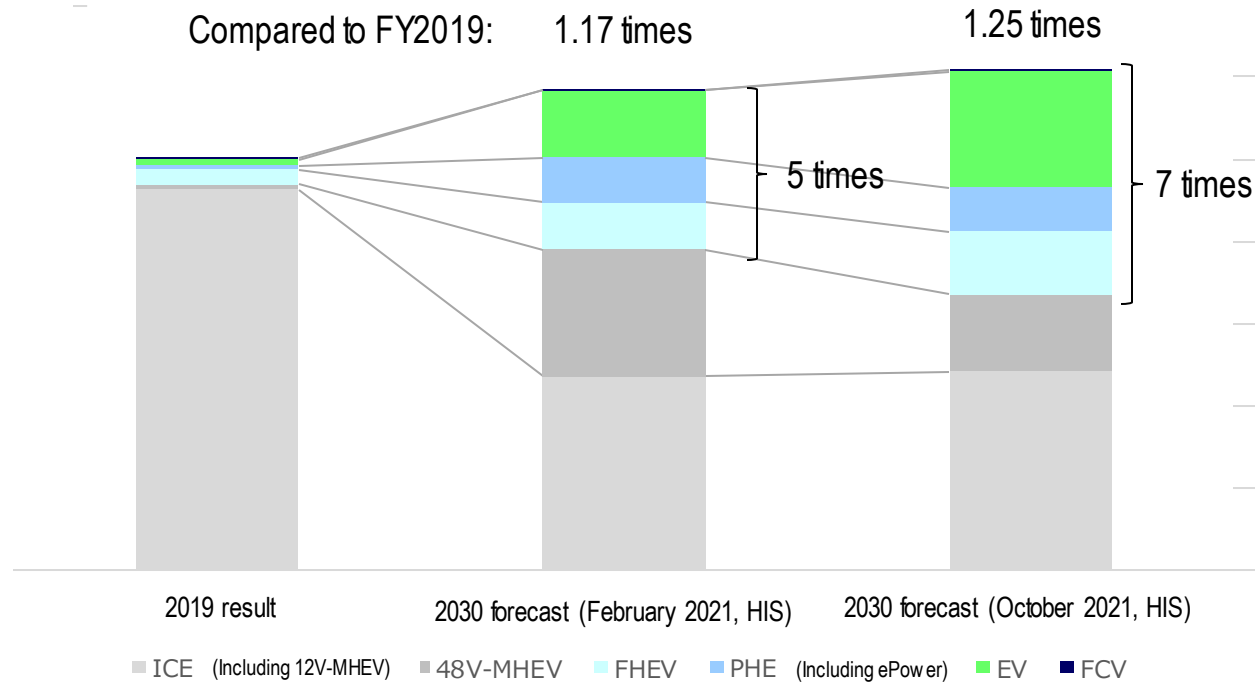
Actions toward Electrification of Vehicles

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- Automotive Market in 2030 and Sales Strategies
 - Production Systems toward Electrification

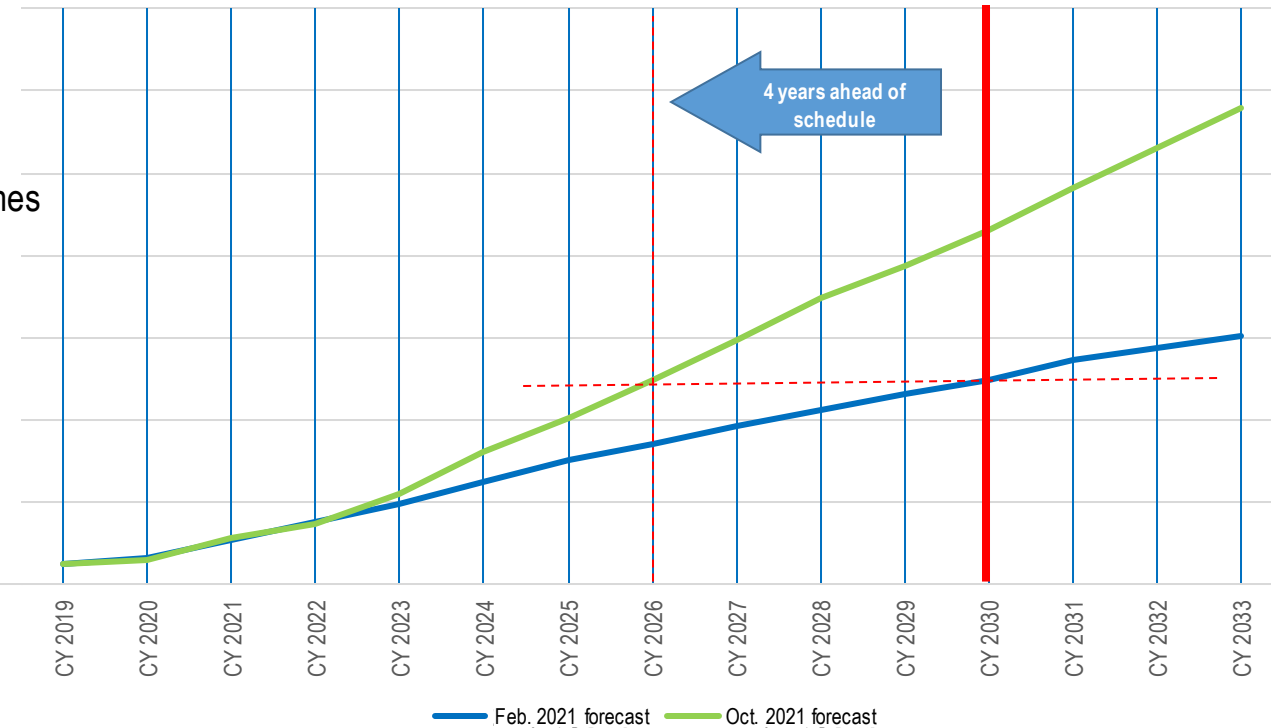
Forecast of the Market Environment in 2030

- Global demand for die-cast products will steadily grow, accelerating the powertrain mix.
- Die casting demand for EV will rapidly increase, reaching the required amount for 2030 four years ahead of schedule. (Compared to Feb. 2021 forecast)

Forecast of the die casting amount required for global EV production volume

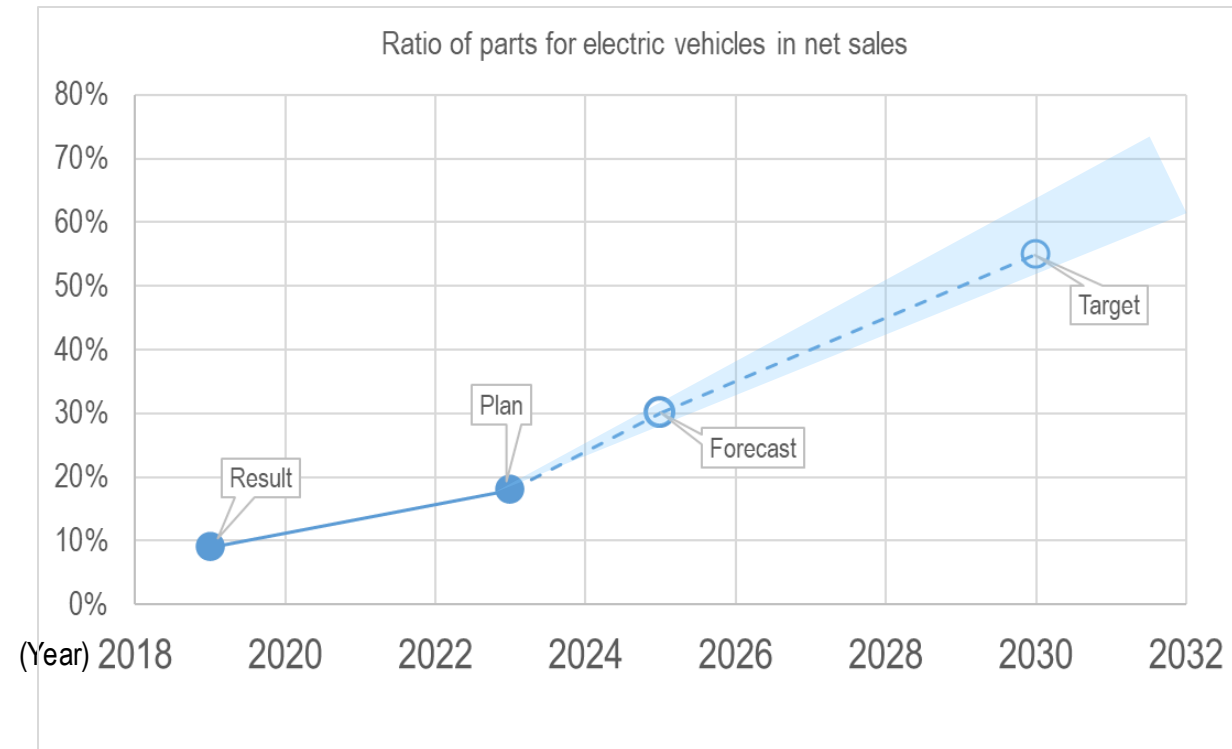
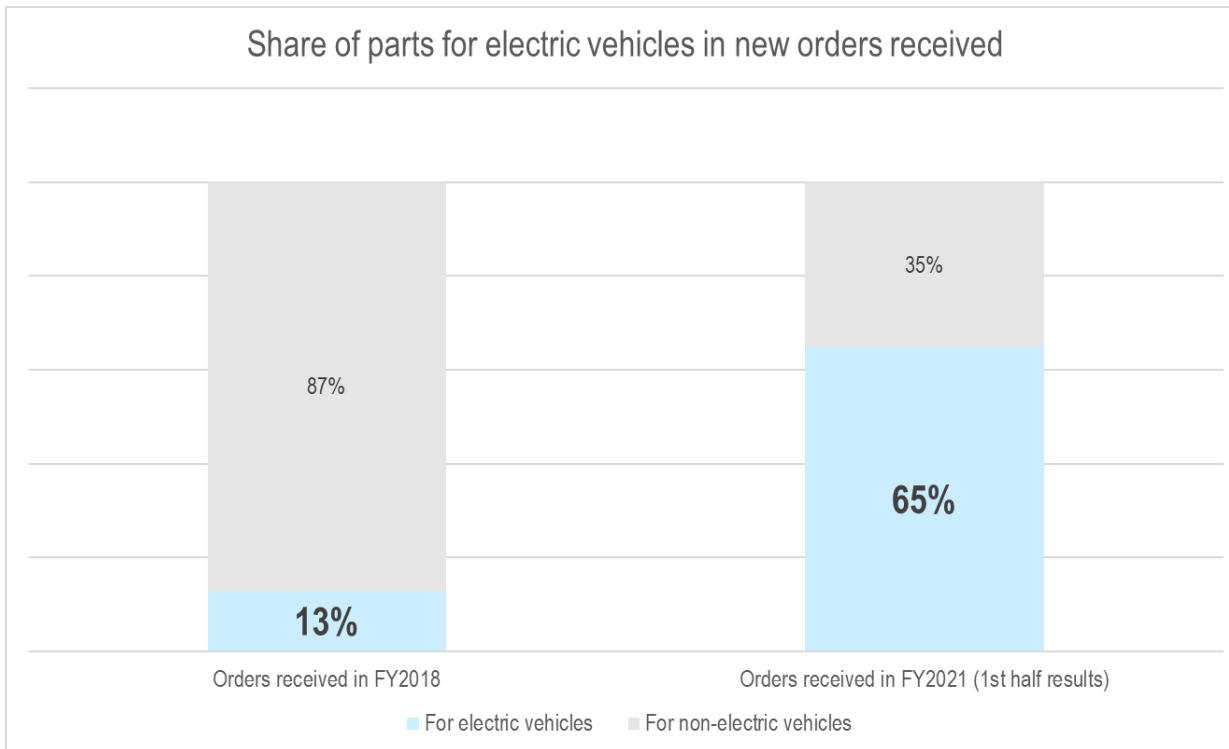


Required die casting amount for global EV production volume



Enhancing Sales Activities for Parts for Electric Vehicles

- Die Casting Sales Headquarters established to enhance customer proposals and strategy/planning functions
- Share of parts for electric vehicles in new orders received in FY2021 1st half expanded to 65%.
- Targeting sales ratio of 50% or more for electric vehicles in FY2030



* Electric vehicles: EVs, HEVs, PHEVs and FCVs

Models with our products

BEV	Mustang Mach-E Inverter case
FCV	Mirai Converter case, reactor cooler case
FCV	Clarity VCU case, PCU case
PHEV	RAV4 PHV Inverter case, converter case
PHEV	Eclipse Cross Engine block, chain case
HEV	AQUA Crankcase
HEV	Yaris, Yaris Cross Crankcase, base plate
HEV	Vezel TM side cover, PCU cover, PCU case, etc. Total 9 parts
HEV	Fit TM side cover, PCU cover, PCU case, etc. Total 7 parts
ICE	Land Cruiser Chain case, oil pan, etc. Total 4 parts
ICE	Civic Transmission cover, fuel pump parts
ICE	N-BOX, N-ONE, N-WGN TM torque converter case
ICE	Levorg Differential member, extension case
ICE	BRZ Differential member, oil pan, etc. Total 3 parts



Toyota new
MIRAI

Ford
Toyota
Honda
Toyota
Mitsubishi
Toyota
Toyota
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Honda
Subaru
Subaru

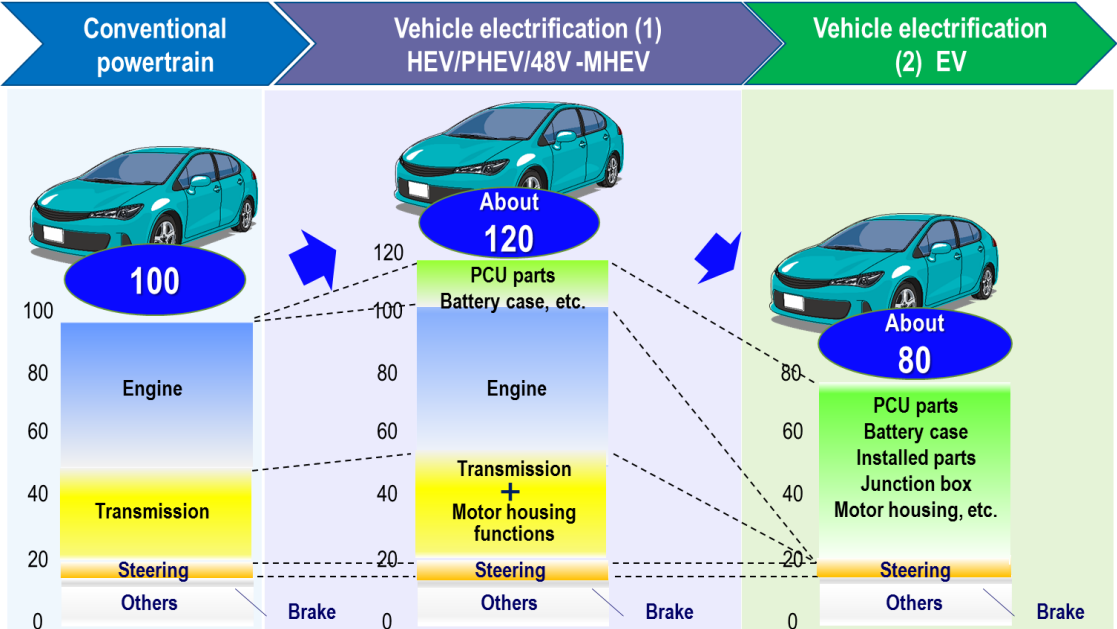
Parts planned for mass production

Production region	Product type	Product name	Mass production start
Japan	HEV/PHEV controlling parts	Inverter Case	2022
	Battery parts	Binding Plate, Stack Up/Lwr	2023
	Chassis parts	Differential Member	2023
	BEV controlling parts	Lower Case	2024
	HEV drive parts	Intermediate Case	2024
		Drive Pinion Retainer	2024
North America	HEV/PHEV controlling parts	Inverter Case	2024
China / Asia	BEV controlling parts	Upper Case	2022
		Lower Case	2022
	HEV/PHEV controlling parts	Inverter Case	2023
	HEV/PHEV drive parts	Transaxle Housing	2023

Changes in the number of die-cast parts used per vehicle

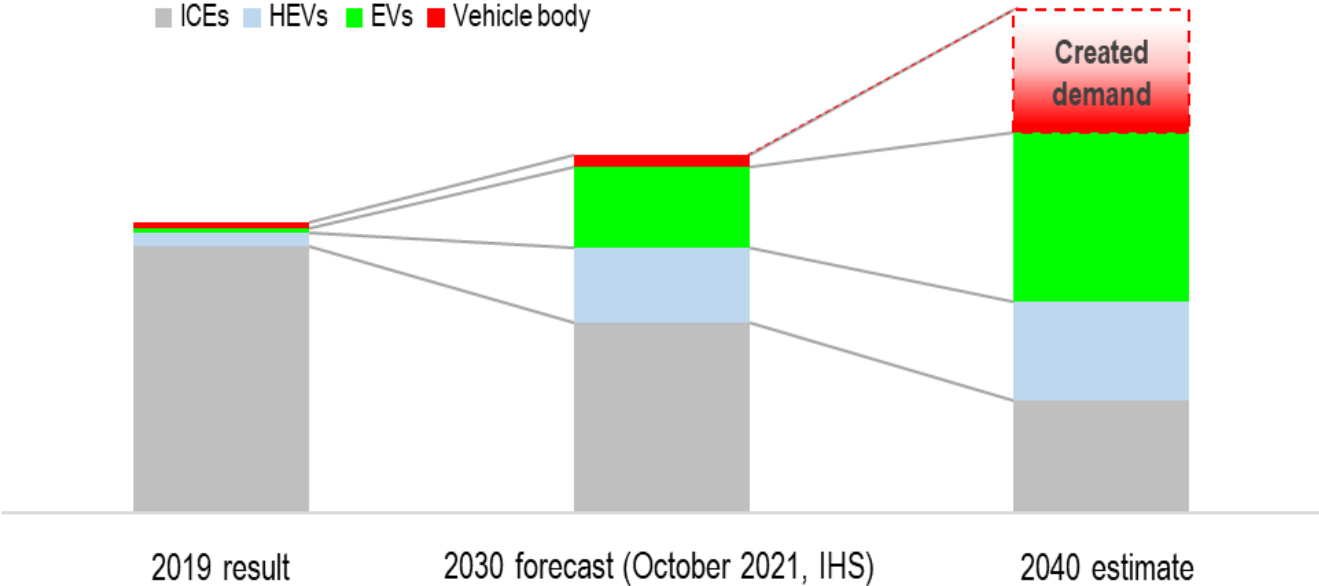
- The number of die-cast parts used per vehicle will decrease due to the electrification of vehicles
- Until 2030: Total demand for die-cast products will increase along with a rise in demand for automobiles ⇒ Growth to be achieved by receiving orders for electric vehicles
- Until 2040: Create and receive orders for demand in domains where not many die-cast parts have been introduced

[Changes in the number of die-cast parts used per vehicle]



* Source: "The Increasingly Electrified Auto Market and Our Strategies" released on our website on March 12, 2021

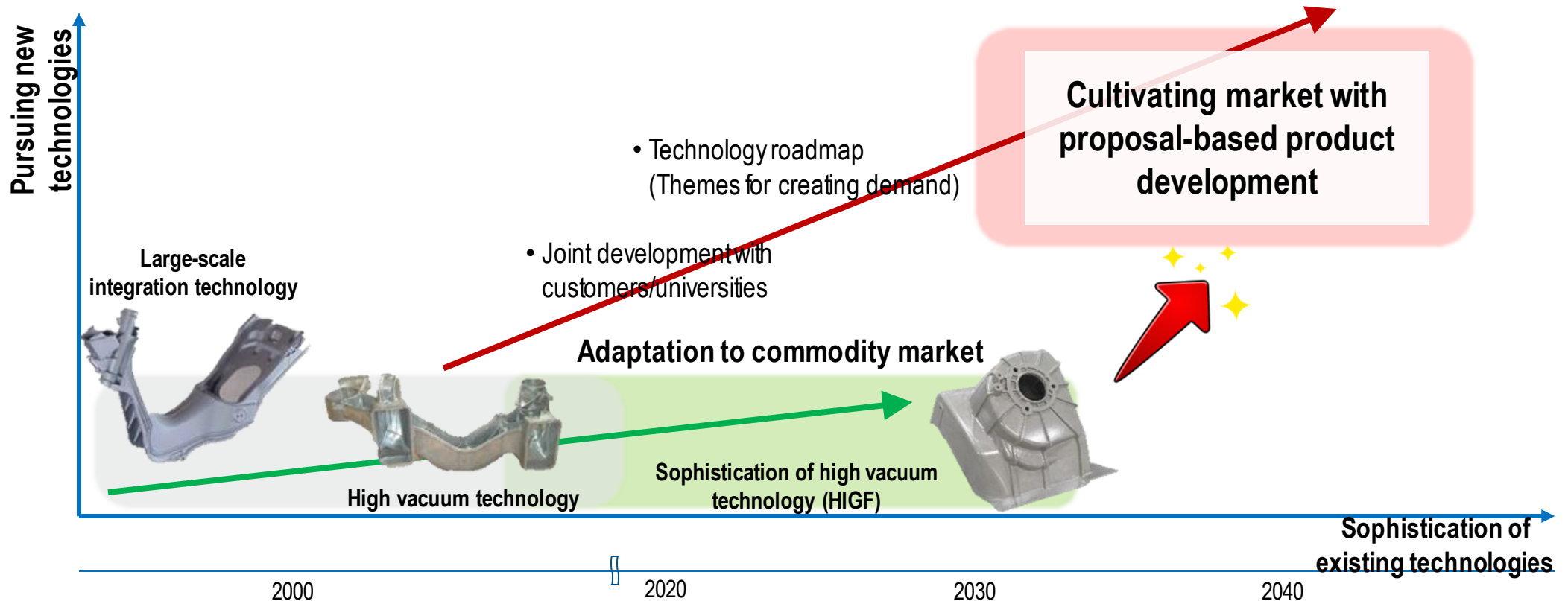
[Forecast of the die casting amount required for global EV production volume (tons)]



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Efforts for Vehicle Body Parts




- Strategies: Accumulate results in commoditized market by sophisticating existing technologies (until 2030)
Cultivate market with proposal-based product development by pursuing new technologies (until 2040)



-
- Automotive Market in 2030 and Sales Strategies
 - Production Systems toward Electrification

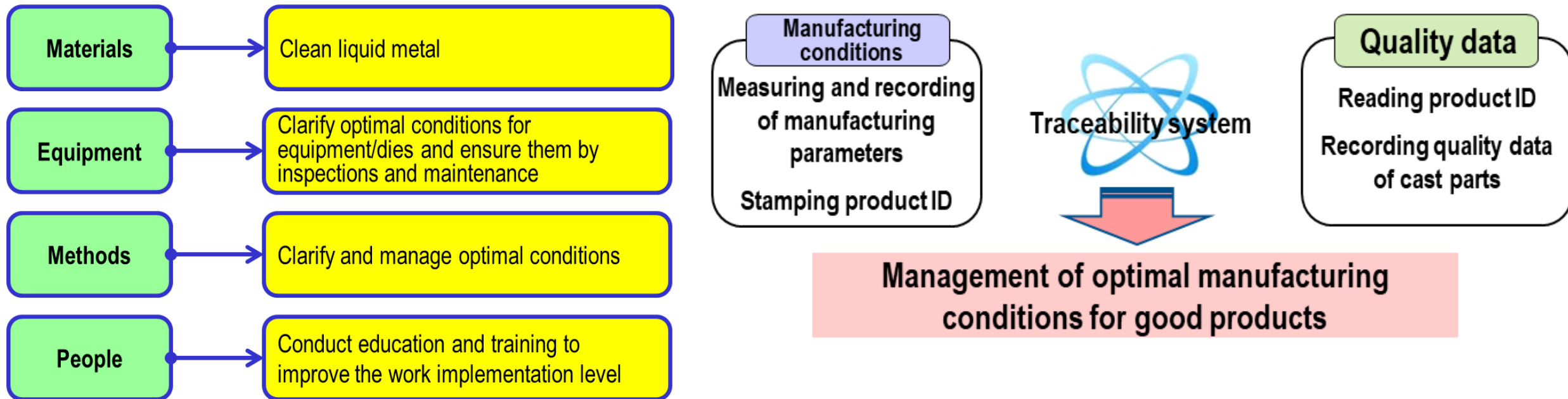
Actions for Electrification and Vehicle Body Parts

■ Use/apply the material, equipment and technical know-how cultivated for engines and powertrains

	Engines Powertrains	Parts for electric vehicles	Vehicle body parts
	Apply existing technologies and know-how		Develop unique technologies
 Material	Materials of equal quality (ADC12+α)		Materials developed by Ahresty
 Equipment	Equipment with equal Specifications (+ cleanliness control)		Unique high vacuum DC
 Technical	Technologies of equal quality (SQC • Big-Data)		Bonding technology developed by Ahresty

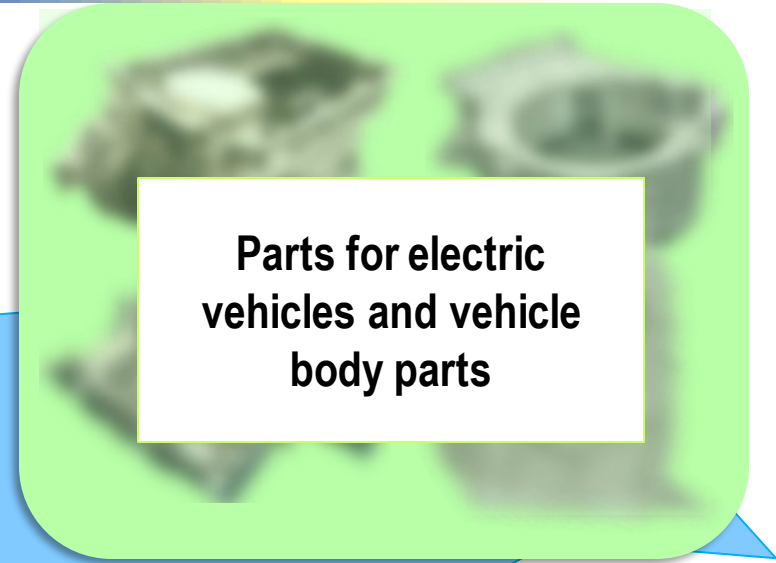
Improving MONOZUKURI capabilities

- In manufacturing parts for electric vehicles and vehicle body parts, **the essence of MONOZUKURI will not change**
- Controlling processes with optimal manufacturing conditions
Realizing OPCC (Optimal Process Condition Control)

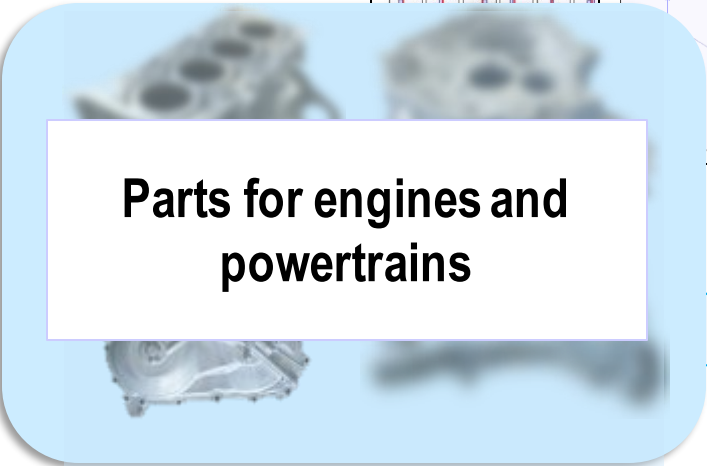


Improving MONOZUKURI capabilities

Applying the technologies to improve productivity we have developed using statistical quality management to parts for electric vehicles and vehicle body parts



Parts for electric vehicles and vehicle body parts



Parts for engines and powertrains

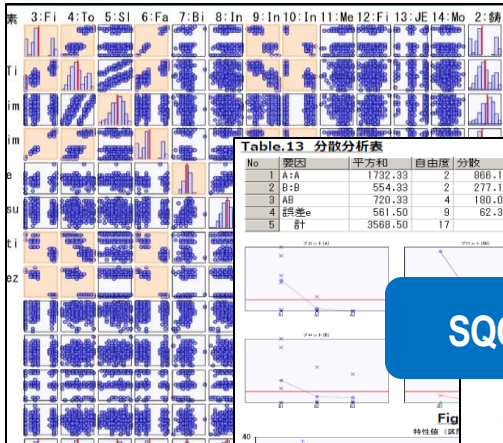


Table.13 分散分析表 (ブリーク後)

No	要因	平方和	自由度	分散	分散比	F値	P値(上側)
1	A:A	1732.33	2	866.17	13.693	**	0.002
2	B:B	554.33	2	277.17	4.443	*	0.045
3	AB	720.33	4	180.08	2.666		0.066
4	誤差e	561.50	8	62.39			
5	計	3568.50	17				

SQC approach

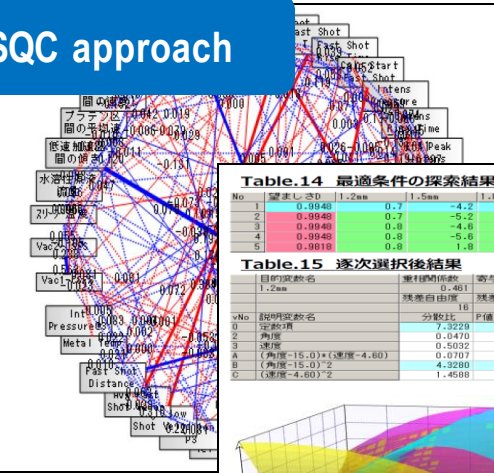
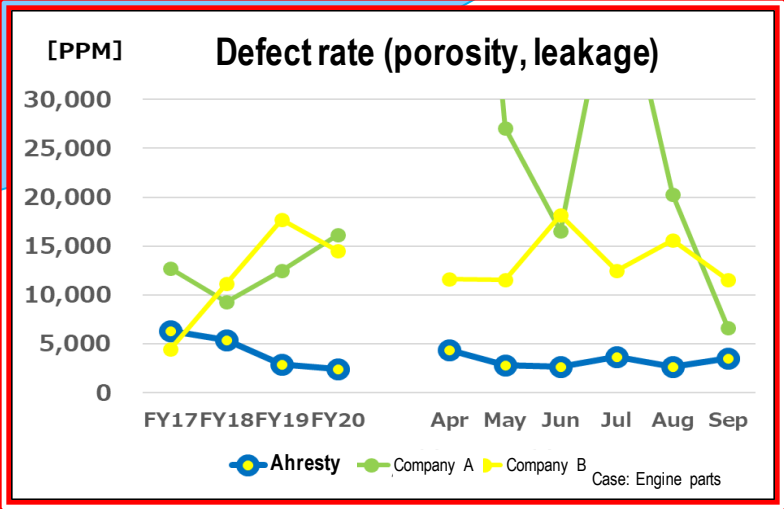
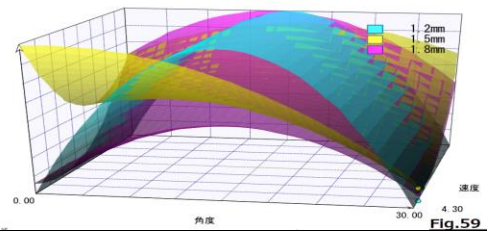


Table.14 最適条件の探索結果

No	速度	角度	速度			
1	0.9940	-4.2	-2.10	30.0	4.35	
2	0.9940	0.7	-5.2	-3.2	30.0	4.80
3	0.9940	0.8	-4.6	-3.2	30.0	4.37
4	0.9940	0.8	-5.0	-2.2	30.0	4.43
5	0.9918	0.8	1.0	-0.2	0.0	4.66

Table.15 逐次選択後結果

目的変数名	寄与率R ²	R ²	R ²
1.2mm	0.461	0.213	0.164
特殊自由度	16	11.616	0.120
vNo	7.3229	0.019	12.633
0 定数項	0.0470	0.932	-
1 速度	0.5032	0.493	+
2 角度	0.0707	0.795	-
A (角度-15.0)*(速度-4.60)	4.3260	0.980	-
B (速度-4.60)^2	1.4508	0.252	+



Sophistication of 3D Design and Analysis Technologies

Optimal shape/die design using analysis technologies

- ◆ **Structure analysis** : Examine how to achieve requested SPEC \Rightarrow Reflected in parts shape design
- ◆ **Casting analysis** : Examine casting gate cooling methods \Rightarrow Reflected in die design

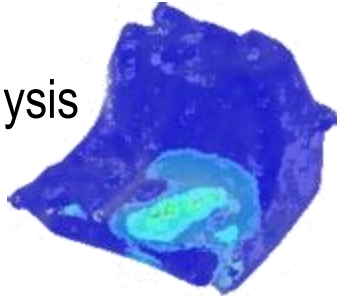
Achieving both parts functions and manufacturability

Structure analysis

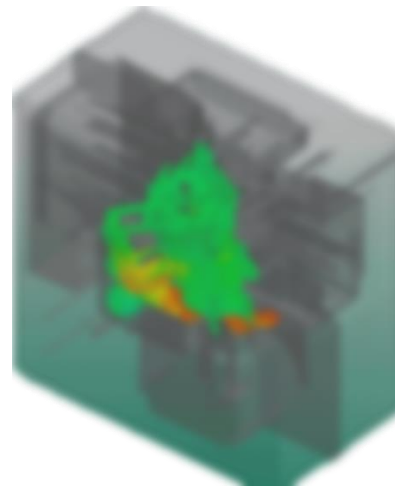
Stress analysis



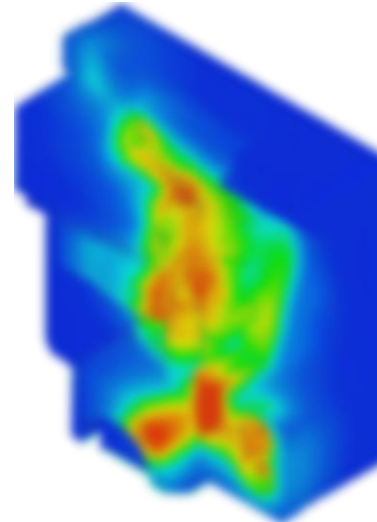
Actual product evaluation test



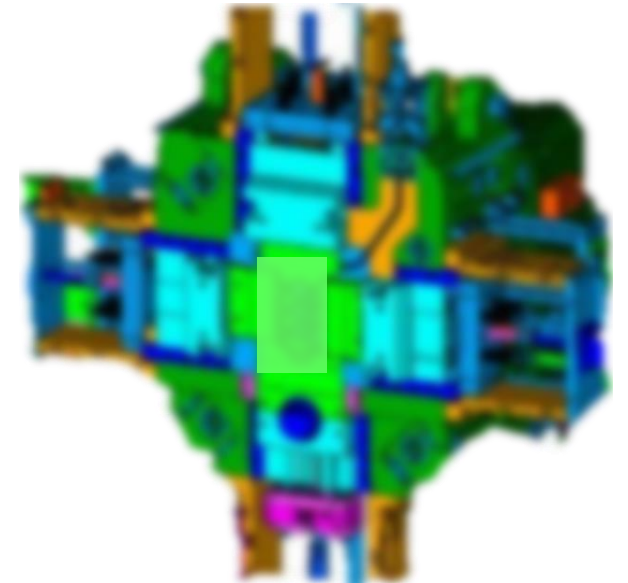
Casting analysis



Fluidity analysis



Mold temperature/
solidification analysis



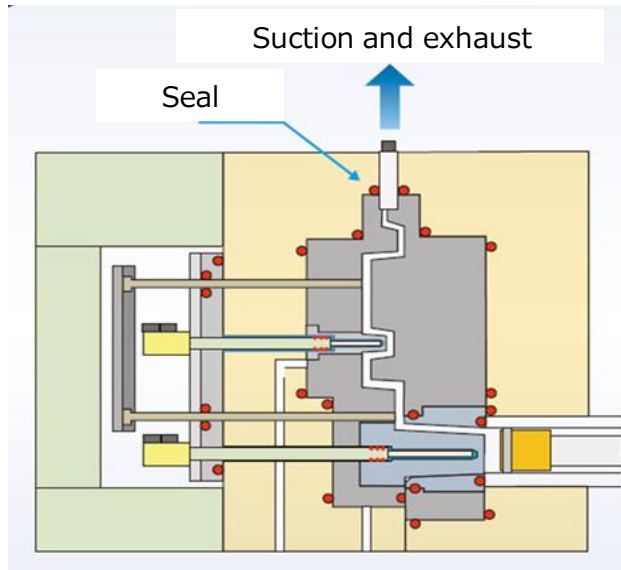
Die model

Use of Proprietary Technologies for Vehicle Body Parts

Achieving both higher quality and improved productivity with existing proprietary technologies

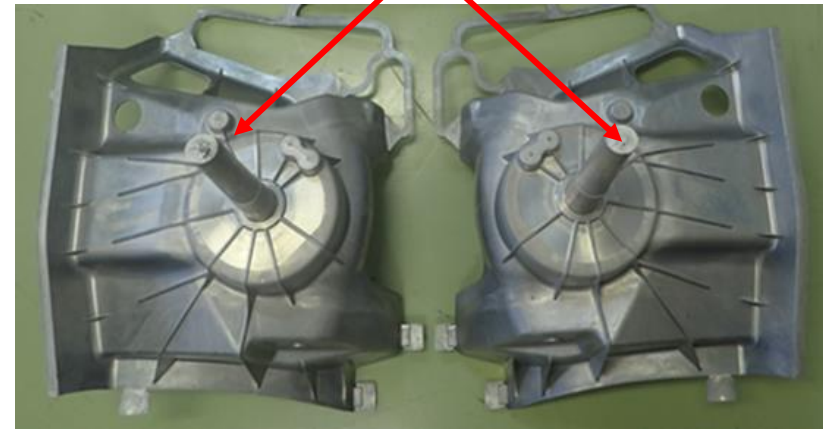
- ◆ Hi-GF method ⇒ High vacuum die casting with unique technology
- ◆ Multi-cavity ⇒ Increasing the number of units produced at the same time to improve production efficiency

Cultivating market through the development of technologies, such as bonding technology



Hi-GF method

Center gate
(Enabling liquid metal filling with little pressure and energy)

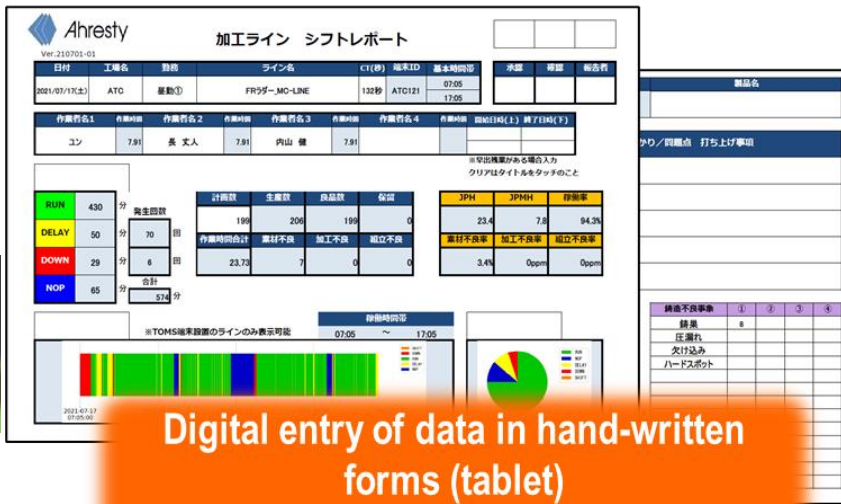


Product appearance

Lean production systems

■ Improve earnings per hour to enhance profitability

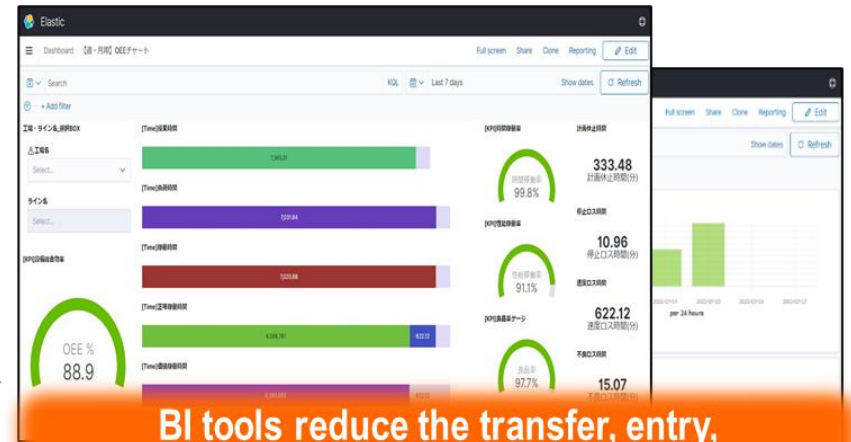
- Review plant floor layout and reduce intermediate inventory by synchronizing processes and shortening work flows
- Improve production efficiency by automating processes
- **Advance digitization of forms and improve efficiency of data calculation/analysis to accelerate improvement**



Digital entry of data in hand-written forms (tablet)
Operation monitor

Improving efficiency

Direct calculation of entered data



BI tools reduce the transfer, entry, calculation time to "0"
Select period and line name

Accelerate productivity improvement and defect reduction by using BI (business intelligence) tools

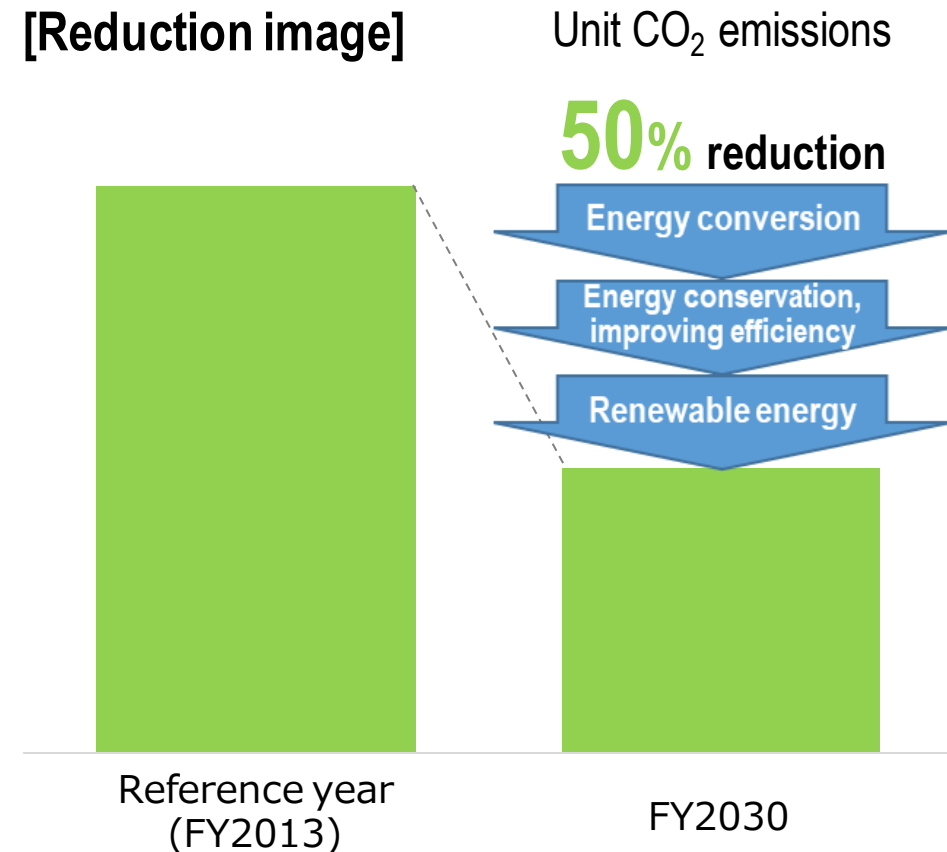
ESG / SDGs

Toward Carbon Neutrality

■ Global unit CO₂ emissions target for FY2030: **50% reduction** compared to FY2013

- ✓ Major measures: Energy conversion, energy conservation activities, use of renewable energy
- ✓ Production technology development for promotion of the measures:
Ex.: Examination of casting in view of LCA, melting by oxygen enriching, melting with hydrogen gas, use of exhaust heat, etc.

[Reduction image]



Response to TCFD Items

- Before formulating the New 10-year Long-term Business Plan, climate change-related risks and opportunities were assessed and examined.

Governance

- ✓ Confirm climate-related risks/opportunities at Sustainability Meeting and also report regularly at Board of Directors' meetings

Strategies

- ✓ Reflect in the New 10-year Long-term Business Plan, examine the impact on business using multiple scenarios based on IEA timetable, and reflect also in strategies

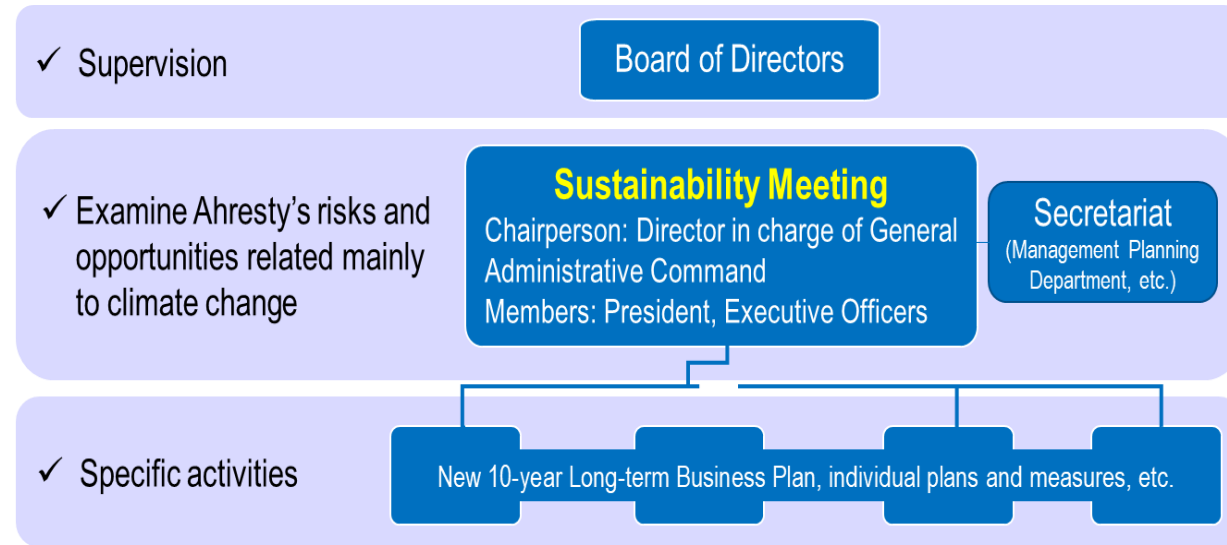
Risk management

- ✓ Climate-related risks are identified, assessed and managed at Sustainability Meeting in collaboration with risk management plans

Indicators and targets

- ✓ Set indicators for electrification and CO2 reduction in New 10-year Long-term Business Plan. Targets will be disclosed in Ahresty Report, etc.

[Sustainability Meeting Organization]

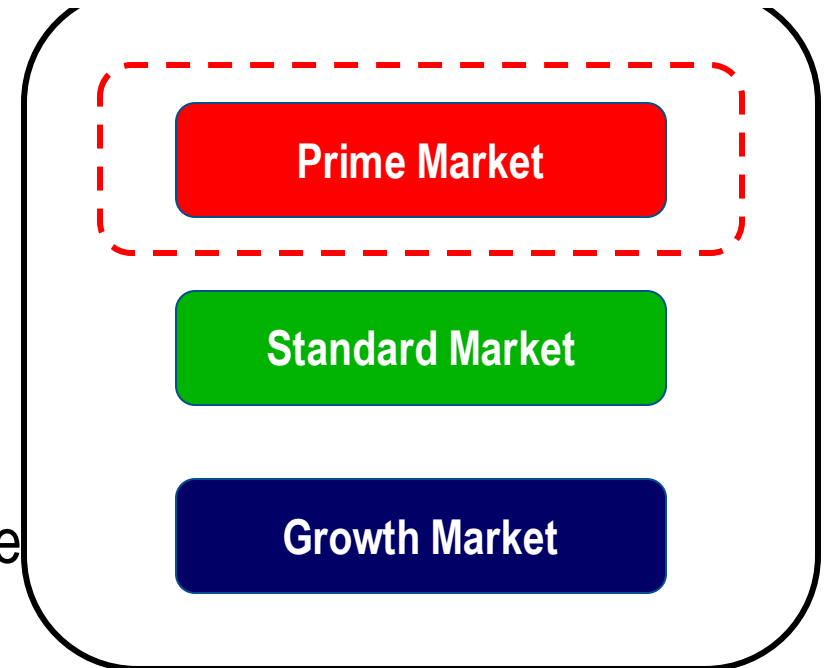


- * PDCA of SDGs priority issues are performed in the policy management framework.

Actions to satisfy the listing criteria for the “Prime Market” of TSE

- Purpose: Enhance global corporate presence
- Status of compliance with listing criteria
 - “Market capitalization of shares in circulation” Not satisfied
 - ⇒ Plan toward Compliance with the Listing Criteria
 - Scheduled to be disclosed by December 2021
- Actions to satisfy the listing criteria
 - Improve/reinforce profit-making structure
 - Ensure continuous returns to shareholders and proactively have dialogue with the market through disclosure of information in a timely and appropriate manner
 - Review and examine cross-held shares

New market segments (from April 2022)



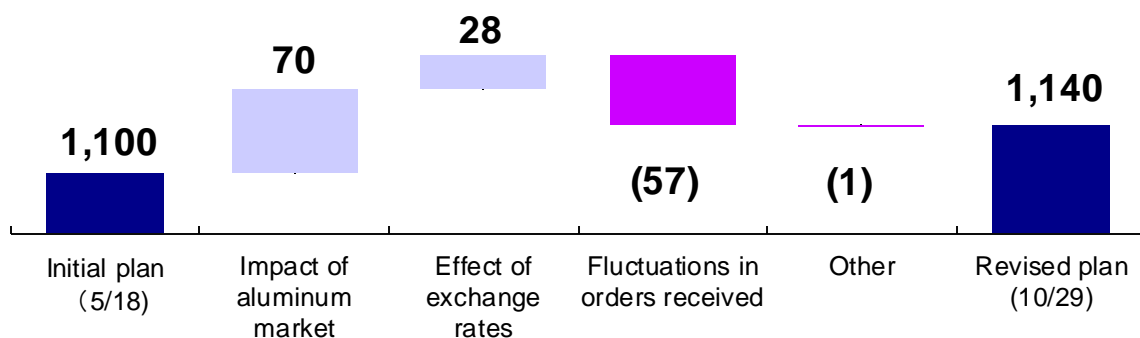
Appendix

Results of 1H of FY 2021 in comparison with plans

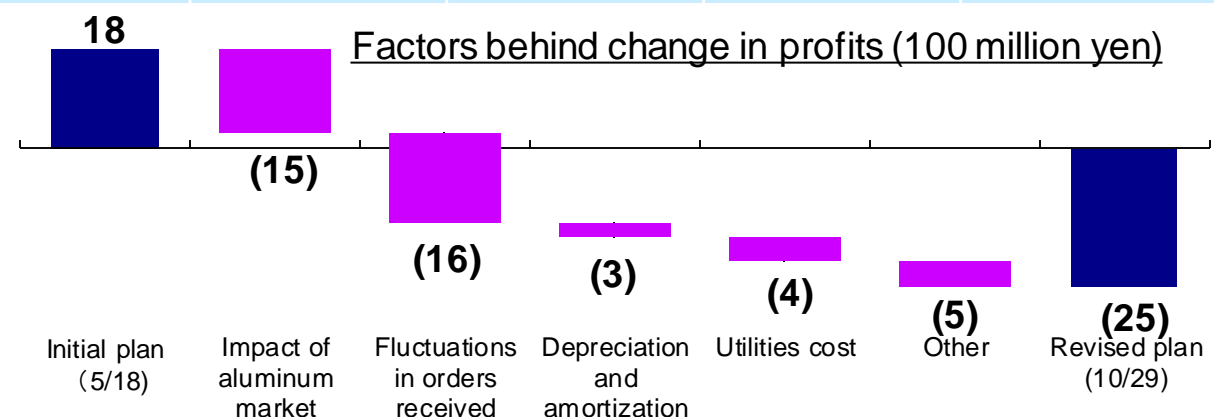
(Million yen)

	Year ending March 2022 1H			Year ending March 2022 2H			Year ending March 2022 full year		
	Initial plan	Results	Comparison with initial plan	Initial plan	Revised plan	Comparison with initial plan	Initial plan	Revised plan	Comparison with initial plan
Net sales	52,300	54,647	+2,347	57,700	59,360	+1,660	110,000	114,000	+4,000
Operating income	(750)	(1,943)	(1,193)	2,550	(560)	(3,110)	1,800	(2,500)	(4,300)
Recurring income	(850)	(1,680)	(830)	2,450	(620)	(3,070)	1,600	(2,300)	(3,900)
Net income	(1,000)	(1,780)	(767)	1,600	(1,040)	(2,640)	600	(2,800)	(3,400)
Dividend (yen)	5	5	—	5	5	—	10	10	—

Factors behind change in sales (100 million yen)



Factors behind change in profits (100 million yen)



Exchange rate assumptions in the initial plan (May 18): USD: 105.0; Chinese yuan: ¥15.0; Indian rupee: ₹1.45
 Exchange rate assumptions in revised plan (Oct. 29): USD: 110.0; Chinese yuan: ¥16.5; Indian rupee: ₹1.50





Casting Our Eyes on the Future

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This document and what has been said in the results briefing include forecasts that the Company has made based on data available when the document was prepared. Actual results could be different from the forecasts for a range of reasons.