

Consolidated Financial Statements

For the first half year (January 1 to June 30, 2022)



I . Consolidated Financial Results

August 4th, 2022

(¥ in millions, US\$ in thousands, except for

(1) Results of operations : net income attributable to owners of the parent per share)

	Results for the first half year (Jan.1-Jun.30)			
	2021	2022	Increase (Decrease)	2022
	¥	¥	%	\$
Net sales	693,358	656,033	(5.4)	4,799,772
Operating income	47,566	37,082	(22.0)	271,302
Ordinary income	50,206	46,845	(6.7)	342,738
Net income attributable to owners of the parent	(13,412)	31,727	—	232,124
Net income attributable to owners of the parent per share: Basic	(91.93)	175.20	—	1.28
Net income attributable to owners of the parent per share: Diluted	—	—	—	—

Notes

Important changes in accounting policies : applicable

Comprehensive income :

Results for the year ended January 1 to June 30, 2022 ¥88,398 million

Results for the year ended January 1 to June 30, 2021 ¥21,926 million

(¥ in millions, US\$ in thousands,

(2) Financial position : except for stockholders' equity ratio)

	Dec. 31, 2021	Jun. 30, 2022	Jun. 30, 2022
	¥	¥	\$
Total assets	2,142,390	2,221,979	16,256,798
Total equity	818,452	595,612	4,357,713
	%	%	%
Stockholders' equity ratio	24.0	25.7	25.7

(3) Dividends :

	2021	2022 Forecast
Q1 dividends per share (¥)	—	—
Q2 dividends per share (¥)	0.00	0.00
Q3 dividends per share (¥)	—	—
End of Term dividends per share (¥)	65.00	65.00
Annual dividends per share (¥)	65.00	65.00

II . Forecast of performance for the year ending December 31, 2022

(¥ in millions, US\$ in thousands, except for net income attributable to owners of the parent per share)

	fiscal year	
	¥	\$
Net sales	1,500,000	10,974,539
Operating income	84,000	614,574
Ordinary income	85,000	621,891
Net income attributable to owners of the parent	32,000	234,124
Net income attributable to owners of the parent per share: Basic	176.69	1.29

* The above forecast was announced on August 3, 2022.

The above forecast is based on the information available at this point of time. Actual results may differ materially due to a variety of reasons, including such economic factors as fluctuations in foreign currency exchange rates as well as market supply and demand conditions.

Note

The U.S. dollar is valued at ¥136.68 throughout this statement for convenience only.

[Business Results and Financial Conditions]

1. Analysis of business results

(1) Summary

With regard to the global economy in the first half of 2022 (January 1–June 30), it was stagnant due to the global restraint on economic activities caused by the pandemic of coronavirus disease 2019 (COVID-19) including Shanghai lockdown, a rise in prices of raw materials and fuels and restrictions on supply side of them caused by the situation in Ukraine, and disorder in distribution of goods and materials. However, semiconductor-related industry continued booming. As for the Japanese economy, consumer spending showed a sign of recovery. Corporate sector as a whole showed a sign of recovery while export remained steady.

The Showa Denko Group has been giving the highest priority to all stakeholders' safety and health including that of our customers, business acquaintances and employees, and implementing various measures to prevent further spread of COVID-19. To be specific, we are taking various measures including companywide introduction of teleworking at home and satellite offices. The Group continues implementing measures which give priority to the security of employees' safety and prevention of infection of COVID-19, including grant of special leave when infection is suspected and faithful practice of off-peak commuting through introduction of complete flextime. At the same time, in our production bases, we are making utmost efforts to maintain our operations and continue providing our customers with products, thereby contributing to maintenance of infrastructural functions of society.

In the first half of 2022, the Group recorded consolidated net sales of ¥656,033 million, down 5.4% from the same period of the previous year due mainly to the sale of several businesses, which decreased net sales by about ¥100 billion. Sales in the Semiconductor and Electronic materials segment remained strong due to a recovery of production in the semiconductor related industry. Sales in the Innovation Enabling Materials segment and the Chemicals segment also increased due to a rise in the market prices of products. However, sales in the Mobility segment decreased due to a decline in production of cars caused by short supply of semiconductors. Sales figures of businesses sold in 2021, including those of Energy Storage Devices and Systems business, Aluminum Can business, Aluminum Rolled Products business, and Shoko Co., Ltd. were included in that of the Others segment. Operating income of the Group in the first half of 2022 decreased by 22.0% from the year-before period, to ¥37,082 million. Operating income in the Semiconductor and Electronic Materials segment increased substantially. However, operating income in the Mobility, Innovation Enabling Materials, and Chemicals segments decreased due mainly to the time lag between a rise in raw material prices and passing the rise in costs on to the prices of products. Sale of businesses also pushed down the Group's consolidated operating income. Non-operating income increased due mainly to foreign exchange gain. Ordinary income of the Group decreased by 6.7% from the year-before period, to ¥46,845 million. Net income attributable to owners of the parent increased by ¥45,138 million from the year-before period, to ¥31,727 million due mainly to recovery from last year's recording of extraordinary loss caused by an expenditure to cover the cost of structural reform related to the transfer of energy storage devices and systems business.

(Unit: millions of yen)

	1H 2021	1H 2022	Increase/decrease
Sales	693,358	656,033	(37,325)
Operating income	47,566	37,082	(10,485)
Ordinary income	50,206	46,845	(3,360)
Net income attributable to owners of the parent	(13,412)	31,727	45,138

(2) A breakdown of net sales and operating income by segment (January 1 - June 30, 2022)

[Semiconductor and Electronic Materials segment]

In the Semiconductor and Electronic Materials segment, sales increased by 12.3% from the year-before period, to ¥220,354 million, despite transfer of Printed Wiring Board business which took place in the fourth quarter of 2021. Sales in the Front-end Semiconductor Materials and Back-end Semiconductor Materials subsegments increased due mainly to strong demand for semiconductors. Sales in the Device Solutions subsegment substantially increased due mainly to an increase in shipment volumes of HD media for use in data centers. As a result, the Semiconductor and Electronic Materials segment recorded operating income of ¥26,801 million, up 26.7% from the year-before period due to an increase in sales, despite a rise in prices of raw materials.

(Unit: millions of yen)

	1H 2021	1H 2022	Increase/decrease
Sales	196,228	220,354	24,126
Operating income	21,160	26,801	5,641

[Mobility segment]

In the Mobility segment, sales decreased by 3.2% from the year-before period, to ¥86,689 million. Sales in the Automotive Products subsegment increased due mainly to an increase in demand from some customers, despite a decline in production of cars caused by short supply of semiconductors. However, Sales in the Lithium-ion Battery Materials subsegment decreased. The Mobility segment recorded operating loss of ¥1,187 million, a decrease of ¥2,195 million from the year-before period due partly to a substantial rise in prices of raw materials.

(Unit: millions of yen)

	1H 2021	1H 2022	Increase/decrease
Sales	89,574	86,689	(2,885)
Operating income	1,008	(1,187)	(2,195)

[Innovation Enabling Materials segment]

In the Innovation Enabling Materials segment, sales increased by 6.7% from the year-before period, to ¥70,005 million. This segment's net sales increased due partly to a rise in prices of products caused by a substantial rise in prices of raw materials. However, operating income in this segment decreased due partly to a decline in production of cars and a time lag between a rise in raw material costs and passing it on to the prices of products. As a result, the segment recorded operating income of ¥5,385 million, down 34.8% from the year-before period.

(Unit: millions of yen)

	1H 2021	1H 2022	Increase/decrease
Sales	65,603	70,005	4,402
Operating income	8,264	5,385	(2,879)

[Chemicals segment]

In the Chemicals segment, sales increased by 17.3% from the year-before period, to ¥224,526 million. However, operating income in the segment decreased. Sales in the Petrochemicals subsegment increased due mainly to a rise in sales prices of products caused by a substantial rise in naphtha price, despite once-in-four-year shutdown maintenance in the Oita Complex. Operating income in the Petrochemicals subsegment decreased due to a decrease in sales volumes caused by this shutdown maintenance. Sales in the Basic Chemicals and Industrial Gases subsegment increased due partly to a rise in prices of products caused by a substantial rise in prices of raw materials and fuels. However, operating income in the Basic Chemicals and Industrial Gases subsegment decreased due mainly to a time lag between a rise in raw material costs and passing it on to the prices of products. Sales and operating income in the Graphite Electrodes subsegment increased due mainly to a rise in product prices. As a result, operating income in the Chemicals segment decreased by 32.0% from the year-before period, to ¥13,112 million.

(Unit: millions of yen)

	1H 2021	1H 2022	Increase/decrease
Sales	191,334	224,526	33,192
Operating income	19,275	13,112	(6,163)

Note: Starting from 2022, segment-wise sales and operating incomes mentioned above are based on “sales to outside customers,” not including inter-segment sales.

2. Financial conditions for the January 1 - June 30, 2022 period (as compared with the conditions at December 31, 2021)

a) Situation of assets, liabilities, and net assets

Total assets at the end of the first half of 2022 amounted to ¥2,221,979 million, an increase of ¥79,590 million from the level at December 31, 2021. Total assets increased due partly to increases in inventories, property, plant and equipment, despite decreases in cash and deposits, and intangible fixed assets including goodwill. Total liabilities increased by ¥302,430 million, to ¥1,626,367 million due mainly to an increase in interest-bearing debts caused by financing of funds to acquire preferred stock issued by a subsidiary through a subordinated loan. Net assets at the end of the first half of 2022 decreased by ¥222,840 million, to ¥595,612 million, due mainly to a decrease in non-controlling interests caused by the Company's acquisition of preferred stock owned by financial institutions, despite an increase in foreign currency translation adjustments.

b) Situation of cash flows

Net cash provided by operating activities during the first half of 2022 amounted to ¥21,874 million, a decrease of ¥33,427 million from the same period of the previous year, due partly to increases in inventories and the amount of payment of income taxes. Net cash used in investing activities increased by ¥26,223 million from the year-before period, to ¥36,616 million due partly to an increase in expenditure for acquisition of tangible fixed assets. Thus, free cash flow ended up in an expenditure of ¥14,742 million, a decrease in proceeds of ¥59,650 million from the same period of the previous year. Cash flows from financing activities ended up in an expenditure of ¥18,214 million, a decrease in expenditure of ¥55,432 million from the year-before period. As a result, after the effects of exchange rate fluctuations are taken into account, cash and cash equivalents at the end of the first half of 2022 decreased ¥12,756 million from the level at December 31, 2021, to ¥222,183 million.

3. Consolidated performance forecast

The Group's consolidated performance forecast for full-year 2022 is not changed from that announced on August 3, 2022, which is as in the table given below.

(Unit: millions of yen)

	Net sales	Operating income	Ordinary income	Net income attributable to owners of the parent
Forecast of results for full-year 2022	1,500,000	84,000	85,000	32,000

Consolidated Balance Sheets

(¥ in millions, US\$ in thousands)

	Dec. 31, 2021	Jun. 30, 2022	Jun. 30, 2022
	¥	¥	\$
Assets			
Current assets			
Cash and deposits	236,237	222,912	1,630,902
Notes and accounts receivable-trade	278,641	293,545	2,147,683
Merchandise and finished goods	96,805	125,001	914,552
Work in process	27,993	34,982	255,941
Raw materials and supplies	79,080	96,028	702,576
Other	81,201	87,027	636,724
Allowance for doubtful accounts	(1,426)	(1,673)	(12,239)
Total current assets	798,531	857,823	6,276,139
Noncurrent assets			
Property, plant and equipment			
Buildings and structures, net	136,541	143,586	1,050,529
Machinery, equipment and vehicles, net	199,209	220,682	1,614,588
Land	242,556	243,186	1,779,237
Other, net	81,215	93,972	687,536
Total property, plant and equipment	659,521	701,427	5,131,889
Intangible assets			
Goodwill	311,766	303,769	2,222,486
Other	210,723	203,711	1,490,420
Total intangible assets	522,489	507,480	3,712,906
Investments and other assets			
Investment securities	103,798	95,795	700,869
Other	58,518	59,922	438,411
Allowance for doubtful accounts	(466)	(467)	(3,416)
Total investments and other assets	161,850	155,250	1,135,864
Total noncurrent assets	1,343,859	1,364,156	9,980,659
Total assets	2,142,390	2,221,979	16,256,798

(¥ in millions, US\$ in thousands)

	Dec. 31, 2021	Jun. 30, 2022	Jun. 30, 2022
	¥	¥	\$
Liabilities			
Current liabilities			
Notes and accounts payable-trade	207,745	220,447	1,612,869
Short-term loans payable	59,451	114,751	839,560
Current portion of long-term loans payable	52,858	61,131	447,254
Commercial papers	15,000	30,000	219,491
Current portion of bonds	19,999	—	—
Provision	13,773	9,299	68,036
Other	119,824	125,301	916,749
Total current liabilities	488,650	560,929	4,103,958
Noncurrent liabilities			
Bonds payable	146,945	259,949	1,901,880
Long-term loans payable	536,503	653,302	4,779,792
Provision	1,104	1,696	12,410
Net defined benefit liability	17,523	18,509	135,418
Other	133,212	131,982	965,626
Total noncurrent liabilities	835,287	1,065,438	7,795,127
Total liabilities	1,323,937	1,626,367	11,899,085
Net assets			
Shareholders' equity			
Capital stock	182,146	182,146	1,332,647
Capital surplus	119,772	108,169	791,405
Retained earnings	143,335	163,274	1,194,569
Treasury stock	(11,655)	(11,611)	(84,950)
Total shareholders' equity	433,598	441,978	3,233,671
Accumulated other comprehensive income			
Valuation difference on available-for-sale securities	2,838	1,970	14,411
Deferred gains or losses on hedges	1,167	(19)	(137)
Revaluation reserve for land	28,928	28,928	211,648
Foreign currency translation adjustment	38,421	89,851	657,381
Remeasurements of defined benefit plans	9,036	8,598	62,909
Total accumulated other comprehensive income	80,391	129,328	946,211
Non-controlling interests	304,463	24,306	177,831
Total net assets	818,452	595,612	4,357,713
Total liabilities and net assets	2,142,390	2,221,979	16,256,798

Consolidated Statements of Income

(¥ in millions, US\$ in thousands)

	Results for the first half year (Jan.1-Jun.30)		
	2021	2022	2022
	¥	¥	\$
Net sales	693,358	656,033	4,799,772
Cost of sales	520,848	500,787	3,663,935
Gross profit	172,510	155,246	1,135,837
Selling, general and administrative expenses	124,943	118,165	864,536
Operating income	47,566	37,082	271,302
Non-operating income			
Interest income	394	397	2,907
Dividends income	996	658	4,817
Equity in earnings of affiliates	2,957	2,288	16,741
Foreign exchange gains	4,240	12,542	91,764
Miscellaneous income	2,916	2,758	20,182
Total non-operating income	11,502	18,645	136,411
Non-operating expenses			
Interest expenses	5,321	4,386	32,088
Miscellaneous expenses	3,542	4,495	32,887
Total non-operating expenses	8,863	8,881	64,975
Ordinary income	50,206	46,845	342,738
Extraordinary income			
Gain on sales of investment securities	1,303	1,935	14,159
Gain on sale of businesses	8,124	—	—
Other	1,111	687	5,024
Total extraordinary income	10,538	2,622	19,183
Extraordinary loss			
Loss on sales and retirement of noncurrent assets	1,267	1,849	13,531
Business structuring expenses	32,767	—	—
Other	26,871	3,552	25,990
Total extraordinary losses	60,905	5,402	39,522
Profit (loss) before income taxes	(161)	44,066	322,399
Income taxes	5,661	6,591	48,221
Net income (loss)	(5,823)	37,475	274,178
Net income attributable to non-controlling interests	7,589	5,748	42,055
Net income (loss) attributable to owners of the parent	(13,412)	31,727	232,124

Consolidated Statements of Comprehensive Income

(¥ in millions, US\$ in thousands)

	Results for the first half year (Jan.1-Jun.30)		
	2021	2022	2022
	¥	¥	\$
Net income (loss)	(5,823)	37,475	274,178
Other comprehensive income:			
Valuation difference on available-for-sale securities	3,151	(864)	(6,324)
Deferred gains or losses on hedges	1,322	(1,194)	(8,737)
Foreign currency translation adjustments	22,305	50,824	371,846
Remeasurements of defined benefit plans, net of tax	435	(438)	(3,206)
Share of other comprehensive income of entities accounted for using equity method	536	2,596	18,992
Total other comprehensive income	27,749	50,923	372,571
Comprehensive income	21,926	88,398	646,749
(Comprehensive income attributable to)			
Comprehensive income attributable to owners of the parent	13,712	80,664	590,164
Comprehensive income attributable to non-controlling interests	8,214	7,734	56,585

Consolidated Statements of Cash Flows

(¥ in millions, US\$ in thousands)

	Results for the first half year (Jan. 1-Jun. 30)		
	2021	2022	2022
	¥	¥	\$
Net cash provided by (used in) operating activities			
Income (loss) before income taxes and minority interests	(161)	44,066	322,399
Depreciation and amortization	49,495	45,544	333,214
Impairment loss	3,977	171	1,251
Amortization of goodwill	9,216	8,414	61,562
Increase (decrease) in net defined benefit liability	(844)	600	4,392
Interest and dividends income	(1,389)	(1,056)	(7,723)
Interest expenses	5,321	4,386	32,088
Equity in (earnings) losses of affiliates	(2,957)	(2,288)	(16,741)
Loss (gain) on sales and valuation of investment securities	(996)	(1,890)	(13,827)
Loss on retirement of noncurrent assets	1,200	1,841	13,470
Loss (gain) on sales of noncurrent assets	(755)	(311)	(2,276)
Loss (gain) on sales of businesses	(8,124)	-	-
Business structuring expenses	32,767	-	-
Decrease (increase) in notes and accounts receivable-trade	(15,757)	3,123	22,849
Decrease (increase) in inventories	(30,280)	(37,579)	(274,943)
Increase (decrease) in notes and accounts payable-trade	25,709	437	3,201
Other, net	(8,852)	(24,446)	(178,859)
Subtotal	57,568	41,012	300,058
Interest and dividends income received	1,748	2,196	16,066
Interest expenses paid	(4,885)	(4,326)	(31,651)
Income taxes paid	870	(17,007)	(124,433)
Net cash provided by (used in) operating activities	55,301	21,874	160,039

(¥ in millions, US\$ in thousands)

	Results for the first half year (Jan. 1-Jun. 30)		
	2021	2022	2022
	¥	¥	\$
Net cash provided by (used in) investing activities			
Payments into time deposits	(1,060)	(1,394)	(10,198)
Proceeds from withdrawal of time deposits	878	2,106	15,408
Purchase of property, plant and equipment	(33,530)	(49,051)	(358,874)
Proceeds from sales of property, plant and equipment	2,077	619	4,532
Purchase of investment securities	(2,440)	(500)	(3,656)
Proceeds from sales of investment securities	2,288	12,523	91,624
Proceeds from sales of investments in subsidiaries resulting in change in scope of consolidation	13,156	-	-
Net decrease (increase) in short-term loans receivable	(880)	433	3,167
Payments of long-term loans receivable	(49)	(5)	(40)
Collection of long-term loans receivable	14,051	90	660
Other, net	(4,884)	(1,438)	(10,520)
Net cash provided by (used in) investing activities	(10,393)	(36,616)	(267,897)
Net cash provided by (used in) financing activities			
Net increase (decrease) in short-term loans payable	(1,431)	53,409	390,758
Net increase (decrease) in commercial papers	(10,000)	15,000	109,745
Proceeds from long-term loans payable	1,800	347,000	2,538,777
Repayment of long-term loans payable	(51,602)	(224,084)	(1,639,476)
Proceeds from issuance of bonds	-	112,536	823,351
Redemption of bonds	(15,000)	(20,000)	(146,327)
Purchase of treasury shares	(5)	(2)	(12)
Cash dividends paid	(9,466)	(11,743)	(85,913)
Proceeds from stock issuance to non controlling shareholders	29,766	-	-
Cash dividends paid to non controlling shareholders	(9,349)	(12,940)	(94,676)
Purchase of investments in subsidiaries without change in scope of consolidation	(5,293)	(275,000)	(2,011,999)
Other, net	(3,065)	(2,390)	(17,486)
Net cash provided by (used in) financing activities	(73,646)	(18,214)	(133,257)
Effect of exchange rate change on cash and cash equivalents	9,093	20,200	147,791
Net increase (decrease) in cash and cash equivalents	(19,645)	(12,756)	(93,324)
Cash and cash equivalents at beginning of period	197,928	234,938	1,718,892
Cash and cash equivalents at end of period	178,282	222,183	1,625,568

(Reference)**SEGMENT INFORMATION**

Information about sales and operating income :

6 Months ended June 30, 2021	Millions of yen						
	Semiconductor and Electronic Materials	Mobility	Innovation Enabling Materials	Chemicals	Others	Elimination	Consolidated
Sales							
Outside customers	¥ 196,228	¥ 89,574	¥ 65,603	¥ 191,334	¥ 150,619	¥ —	¥ 693,358
Inter-segment	1,568	72	9,519	8,255	3,504	(22,919)	—
Total	197,797	89,646	75,122	199,589	154,123	(22,919)	693,358
Operating income (loss)	¥ 21,160	¥ 1,008	¥ 8,264	¥ 19,275	¥ 5,576	¥ (7,718)	¥ 47,566

6 Months ended June 30, 2022	Millions of yen						
	Semiconductor and Electronic Materials	Mobility	Innovation Enabling Materials	Chemicals	Others	Elimination	Consolidated
Sales							
Outside customers	¥ 220,354	¥ 86,689	¥ 70,005	¥ 224,526	¥ 54,459	¥ —	¥ 656,033
Inter-segment	2,210	87	3,509	6,527	1,327	(13,660)	—
Total	222,564	86,776	73,514	231,053	55,786	(13,660)	656,033
Operating income (loss)	¥ 26,801	¥ (1,187)	¥ 5,385	¥ 13,112	¥ (301)	¥ (6,728)	¥ 37,082

6 Months ended June 30, 2022	Thousands of U.S. dollars						
	Semiconductor and Electronic Materials	Mobility	Innovation Enabling Materials	Chemicals	Others	Elimination	Consolidated
Sales							
Outside customers	\$ 1,612,189	\$ 634,246	\$ 512,181	\$ 1,642,712	\$ 398,444	\$ —	\$ 4,799,772
Inter-segment	16,172	637	25,674	47,753	9,706	(99,942)	—
Total	1,628,361	634,883	537,855	1,690,465	408,149	(99,942)	4,799,772
Operating income (loss)	\$ 196,087	\$ (8,684)	\$ 39,401	\$ 95,931	\$ (2,206)	\$ (49,228)	\$ 271,302

First Half, 2022 Consolidated Financial Results (Summary)

I . First Half 2022 Results

1. Summary

(Unit: billions of yen, except for "per share" indicators)

Items	1st half, 2021 (Jan.-Jun.)	1st half, 2022 (Jan.-Jun.)	Increase/ decrease
Net Sales	693.4	656.0	(37.3)
Operating Income	47.6	37.1	(10.5)
Net income attributable to owners of the parent	(13.4)	31.7	45.1
Net income attributable to owners of the parent per share	(¥91.93)	¥175.20	¥267.13
Net assets per share	¥2,806.14	¥3,154.34	¥348.20

2. Net Sales and Operating Income by Segment

(Unit: billions of yen)

Segment		1st half, 2021 (Jan.-Jun.)	1st half, 2022 (Jan.-Jun.)	Increase/ decrease
Semiconductor and Electronic Materials	Net Sales	196.2	220.4	24.1
	Op. Income	21.2	26.8	5.6
Mobility	Net Sales	89.6	86.7	(2.9)
	Op. Income	1.0	(1.2)	(2.2)
Innovation Enabling Materials	Net Sales	65.6	70.0	4.4
	Op. Income	8.3	5.4	(2.9)
Chemicals	Net Sales	191.3	224.5	33.2
	Op. Income	19.3	13.1	(6.2)
Others	Net Sales	150.6	54.5	(96.2)
	Op. Income	5.6	(0.3)	(5.9)
Adjustments	Net Sales	—	—	—
	Op. Income	(7.7)	(6.7)	1.0
Total	Net Sales	693.4	656.0	(37.3)
	Op. Income	47.6	37.1	(10.5)

CQ1, 2022 (Jan. - Mar.)	CQ2, 2022 (Apr. - Jun.)
107.3	113.0
12.9	13.9
44.4	42.3
0.4	(1.5)
34.3	35.7
2.9	2.5
95.1	129.5
2.2	10.9
26.9	27.6
(0.3)	0.0
—	—
(2.7)	(4.0)
308.0	348.0
15.4	21.7

In January 2022, we changed segmentation of our financial results, and segmentation in the table above is based on the new segmentation retrospectively to 2021. Segmentwise sales and operating incomes mentioned above are based on "sales to outside customers," not including inter-segment sales.

3. Cash Flow

(Unit: billions of yen)

Cash Flows from:	1st half, 2021 (Jan.-Jun.)	1st half, 2022 (Jan.-Jun.)	Increase/ decrease
Operating Activities	55.3	21.9	(33.4)
Investing Activities	(10.4)	(36.6)	(26.2)
Free Cash Flow	44.9	(14.7)	(59.7)
Financing Activities	(73.6)	(18.2)	55.4
Others	9.1	20.2	11.1
Net increase in Cash	(19.6)	(12.8)	6.9

2022 Revised forecast (Jan.-Dec.)
120.0
(100.0)
20.0
(80.0)
20.0
(40.0)

announced on Aug. 4, 2022

4. Reference

(Unit: billions of yen, except for total number of employees, exchange rate, and domestic naphtha price)

Items	1st half, 2021 (Jan.-Jun.)	1st half, 2022 (Jan.-Jun.)	Increase/ decrease
Capital expenditures	35.4	52.4	17.0
Depreciation and amortization	41.4	37.8	(3.6)
R&D expenditures	23.7	22.9	(0.8)
Gap between interest/dividend income and interest expense	(3.9)	(3.3)	0.6
Total number of employees	32,373	26,295	(6,078)
Exchange rate (yen/US\$)	107.7	122.9	15.2
Domestic naphtha price (yen/kl)	43,250	75,350	32,100

Yen depreciated

Items	Dec. 31, 2021	Jun. 30, 2022	Increase/ decrease
Total assets	2,142.4	2,222.0	79.6
Interest-bearing debt	850.6	1,140.0	289.4

II. Forecast for 2022**1. Summary**

(Unit: billions of yen, except for "per share" indicators)

Items	2021	2022 Revised forecast *	Increase/decrease
Net Sales	1,419.6	1,500.0	80.4
Operating Income	87.2	84.0	(3.2)
Net income attributable to owners of the parent	(12.1)	32.0	44.1
Net income attributable to owners of the parent per share	(¥77.40)	¥176.69	¥254.09
Cash dividends per share	¥65.00	¥65.00	¥0.00

* announced on Aug. 3, 2022

2. Net sales and Operating Income by Segment

(Unit: billions of yen)

Segment		2021	2022 Revised forecast *	Increase/decrease
Semiconductor and Electronic Materials	Net Sales	422.9	470.0	47.1
	Op. Income	49.6	60.0	10.4
Mobility	Net Sales	173.8	180.0	6.2
	Op. Income	(2.0)	(3.0)	(1.0)
Innovation Enabling Materials	Net Sales	143.3	150.0	6.7
	Op. Income	13.6	12.0	(1.6)
Chemicals	Net Sales	431.0	580.0	149.0
	Op. Income	37.9	36.0	(1.9)
Others	Net Sales	248.6	120.0	(128.6)
	Op. Income	7.4	(1.4)	(8.8)
Adjustments	Net Sales	—	—	—
	Op. Income	(19.2)	(19.6)	(0.4)
Total	Net Sales	1,419.6	1,500.0	80.4
	Op. Income	87.2	84.0	(3.2)

* announced on Aug. 4, 2022

III. Reference

(Unit: billions of yen, except for exchange rate and domestic naphtha price)

Items	2021	2022 Revised forecast *	Increase/decrease
Capital expenditures	78.6	123.1	44.5
Depreciation and amortization	81.9	77.3	(4.5)
R&D expenditures	46.8	47.4	0.7
Gap between interest / dividend income and interest expense	(7.7)	(13.1)	(5.4)
Interest-bearing debt	850.6	1,100.0	249.4
Exchange rate (yen/US\$)	(1st half) 107.7 (2nd half) 111.9	(1st half) 122.9 (2nd half) 135.0	(1st half) 15.2 (2nd half) 23.1
Domestic naphtha price (yen/kl)	(1st half) 43,250 (2nd half) 57,100	(1st half) 75,350 (2nd half) 81,900	(1st half) 32,100 (2nd half) 24,800

* announced on Aug. 4, 2022

Yen depreciated
Yen depreciated

The above forecast is based on the information available as of today and assumptions as of today regarding risk factors that could affect our future performance. Actual results may differ materially from the forecast due to a variety of risk factors, including, but not limited to, the influence of the coronavirus disease 2019 (COVID-19) on the world economy, the international situation, costs of naphtha and other raw materials, demand or market conditions for our products such as graphite electrodes and other commodities, and foreign exchange rates. We undertake no obligation to update the forward-looking statements unless required by law.