

Consolidated Financial Statements

For the first half year (January 1 to June 30, 2021)



I. Consolidated Financial Results

August 10th, 2021

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

(1) Results of operations:

	Results for the first half year (Jan.1–Jun.30)			
	2020	2021	Increase (Decrease)	2021
Net sales	¥ 326,621	¥ 693,358	112.3 %	\$ 6,270,193
Operating income	(25,795)	47,566	—	430,154
Ordinary income	(43,225)	50,206	—	454,021
Net income attributable to owners of the parent	(54,575)	(13,412)	—	(121,284)
Net income attributable to owners of the parent per share: Basic	(374.11)	(91.93)	—	(0.83)
Net income attributable to owners of the parent per share: Diluted	—	—	—	—

Showa Denko K.K. made Showa Denko Materials Co., Ltd. (Showa Denko Materials) a consolidated subsidiary, and started on July 1, 2020 to incorporate Showa Denko Materials' sales figures and incomes/losses into its consolidated financial statements.

Notes

Important changes in accounting policies : not applicable

Comprehensive income :

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

Results for the year ended January 1 to June 30, 2020 (¥63,129) million

(¥ in millions, US\$ in thousands, except for stockholders' equity ratio)

(2) Financial position:

	Dec.31, 2020	Jun.30, 2021	Jun.30, 2021
Total assets	¥ 2,203,606	¥ 2,142,322	\$ 19,373,502
Total equity	718,080	712,931	6,447,193
Stockholders' equity ratio	18.4 %	19.1 %	19.1 %

(3) Dividends:

	2020	2021 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, 2021

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

	fiscal year	
	¥	\$
Net sales	1,400,000	12,660,517
Operating income	85,000	768,674
Ordinary income	82,000	741,545
Net income attributable to owners of the parent	(25,000)	(226,081)
Net income attributable to owners of the parent per share: Basic	(171.37)	(1.55)

*There is no change from the full-year 2021 performance forecast announced on August 3, 2021.

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 ¥110.58 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 2021 (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), although there was a sign of recovery in manufacturing industries including the semiconductor-related industry, whose market remained strong. As for the Japanese economy, although consumer spending kept bearish tendency, corporate business sentiment was bottoming out due to an increase in export and business recovery centering on manufacturing industries.

As for the business environment of the Showa Denko Group, although there were some uncertain factors such as continued spread of COVID-19, a global argument over policy on carbon-neutrality, and US-China trade friction, the semiconductor-related industry remained strong, and car production showed a sign of recovery. However, a part of the car industry was negatively affected by short supply of semiconductor integrated circuits.

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. Especially in the head office, through thoroughgoing improvement in business process, the ratio of teleworking has been maintained at the level exceeding the target required by the Japanese government. The Group continues implementing measures which give highest priority to the security of employees' safety and prevention of infection of COVID -19, including grant of special leave when infection is suspected, prohibition on overseas business trip in principle, restrictions on domestic business trip, faithful practice of off-peak commuting through introduction of complete flextime, and prohibition of eating together in principle. At the same time, in our production bases, we are making utmost efforts to fulfill our corporate social responsibility to continue providing our customers with products essential for infrastructural functions of society. Furthermore, the Group has been implementing measures to support employees' vaccination including workplace vaccination at major plants and offices.

Since the beginning of the pandemic of COVID-19 in 2020, the Showa Denko Group has been giving the highest priority to all stakeholders' safety and health, and implementing various measures to prevent further spread of the infectious disease. To be specific, we are taking various measures to give the highest priority to keeping our employees' health and preventing the spread of COVID-19, including teleworking implemented by employees belonging to major plants, divisions and departments, and grant of special holidays. At the same time, in our production bases, we are making utmost efforts to fulfill our corporate social responsibility to continue providing our customers with products essential for infrastructural functions of society.

The Showa Denko Group set up its long-term vision and has been promoting its medium-term consolidated business plan "The TOP 2021" since 2019. It is very important for the Showa Denko Group to enhance the value of the Group and satisfy all stakeholders including shareholders, customers, suppliers, local communities and employees in order that the Group continuously grows and becomes trusted and acclaimed by society. The Showa Denko Group defines this idea as the Group's business philosophy, thereby promoting management to maximize shareholders', customers' and social value.

The Group will strengthen its earning power and reduce the range of fluctuation in income and enhance the value of the Group through successful execution of “The TOP 2021.” Furthermore, aiming to realize integration of legal personalities with Showa Denko Materials Co., Ltd. in January 2023, SDK realized substantial integration of the chain of command and corporate functions in July 2021, and will integrate management organizations in January 2022, which will be one year earlier than the original plan. In December 2020, SDK announced “Long-term Vision (2021-2030) for Newly Integrated Company,” which aims to establish the basis of business growth far into the future through integration of SDK and SDMC. In terms of the meaning of the Newly Integrated Company’s existence (purpose), SDK and SDMC will cooperatively seek to “change society through the power of chemistry.” This includes contributing to the sustainable development of global society by creating functions required of the times as an advanced material partner. In addition, the Newly Integrated Company will strive to become “a company that can win the global competition” and “a company that contributes to a sustainable global society,” which are the two things the Company aims to achieve in terms of its ideal state in order to fulfill its purpose.

In the first half of 2021, the Group recorded consolidated net sales of ¥693,358 million, a substantial increase of 112.3% from the same period of the previous year. The sales in the Others segment significantly decreased due to unconsolidation of SHOKO CO., LTD. resulting from transfer of shares in the company. However, the sales in the Petrochemicals segment increased due to a rise in market prices of products. The sales in the Chemicals, Electronics, Inorganics, and Aluminum segments increased due to recovery of sales volumes from those in the same period of the previous year which were substantially lowered by the spread of COVID-19. The sales in the Showa Denko Materials segment significantly increased due to new consolidation of the segment which started at the beginning of the third quarter of 2020. Operating income of the Group in the first half of 2021 significantly increased by ¥73,361 million, to ¥47,566 million. Operating income in the Others segment decreased. However, operating income in the Petrochemicals increased due to a significant improvement in the raw naphtha price factor. Operating income in the Showa Denko Materials segment increased due to consolidation throughout the first half of the year. Operating income in the Chemicals, Electronics, Inorganics and Aluminum segments also increased. Ordinary income of the Group increased ¥93,430 million, to ¥50,206 million due to non-incurrence of the temporary cost of acquisition of shares in former Hitachi Chemical Company, Ltd., which took place in 2020, and increases in foreign exchange gain and equity in earnings of affiliates, despite an increase in interest expenses.

The Group recorded net loss attributable to owners of the parent of ¥13,412 million in the first half of 2021, an improvement of ¥41,163 million from the same period of the previous year. We recorded extraordinary losses resulting from recording of expenses for execution of environmental measures amounting to ¥9 billion and an expenditure to cover the cost of structural reform related to the transfer of energy storage devices and systems business amounting to ¥30.1 billion.

(Unit: millions of yen)

	1H 2020	1H 2021	Increase/decrease
Sales	326,621	693,358	366,737
Operating income	-25,795	47,566	73,361
Ordinary income	-43,225	50,206	93,430
Net income attributable to owners of the parent	-54,575	-13,412	41,163

(2) A breakdown of net sales and operating income by segment (January 1 – June 30, 2021)

[Petrochemicals segment]

In the Petrochemicals segment, sales increased 32.9%, to ¥127,217 million. In our olefin business, sales increased due to an improvement in supply-demand balance in East Asia resulting from recovery of demand in China and a rise in prices of products including ethylene and propylene resulting from a rise in prices of raw materials. Sales of organic chemicals increased due to a rise in sales volumes of ethyl acetate and vinyl acetate as a result of rebound from the periodic shutdown maintenance of facilities to produce these products that took place in the first quarter of 2020, in addition to the effect of a significant rise in market prices of organic chemicals. As a result, the Petrochemicals segment recorded an operating income of ¥11,690 million, an improvement of ¥15,357 million from the same period of the previous year, due to a significant improvement in the raw naphtha price factor and a rise in market prices of products.

(Unit: millions of yen)

	1H 2020	1H 2021	Increase/decrease
Sales	95,743	127,217	31,473
Operating income	-3,667	11,690	15,357

[Chemicals segment]

In the Chemicals segment, sales increased 20.3% from the same period of the previous year, to ¥86,679 million. Sales of basic chemicals increased. Sales of liquefied ammonia increased due to an increase in shipment volumes. Sales of acrylonitrile increased due to a rise in market price. Sales of chloroprene rubber increased due to an increase in export volumes. Sales of functional chemicals increased due to an increase in shipment volumes for Japanese market and export. Sales of industrial gases slightly increased. Sales of electronic chemicals increased due to an increase in shipment volumes of products for the semiconductor industry. Sales of coating materials increased due to an increase in shipment volumes. Operating income of the segment increased 111.4%, to ¥10,611 million.

(Unit: millions of yen)

	1H 2020	1H 2021	Increase/decrease
Sales	72,041	86,679	14,638
Operating income	5,020	10,611	5,591

[Electronics segment]

In the Electronics segment, sales increased 10.7% from the same period of the previous year, to ¥49,347 million. Sales of HD media increased due to an increase in shipment volumes of HD media for use in data centers and PCs. Sales of compound semiconductors increased due to an increase in export. Sales of lithium-ion battery (LIB) materials increased due to an increase in sales volumes of Showa Denko Packaging's aluminum laminate film (*SPALF*TM) used as packaging material for LIBs built into cars, PCs, and mobile devices. As for SiC epitaxial wafer business, sales slightly increased due to an increase in sales volumes for the domestic market, despite continued adjustment in shipment volumes for the overseas market. Operating income of the segment increased 192.8%, to ¥5,176 million.

(Unit: millions of yen)

	1H 2020	1H 2021	Increase/decrease
Sales	44,574	49,347	4,773
Operating income	1,768	5,176	3,408

[Inorganics segment]

In the inorganics segment, sales increased 7.9% from the year before period, to ¥46,423 million. Our graphite electrode business turned into the black throughout the first half of 2021 due to an increase in sales volumes caused by an increase in the global demand for steel, which started in the second half of 2020, despite a decline in market prices of graphite electrodes from the level of the year before period. Sales of ceramics increased due to an increase in sales volumes of abrasives and fine ceramics for electronics. Operating income of the segment increased to ¥6,297 million, a major increase of 29,202 million from the year-before period.

(Unit: millions of yen)

	1H 2020	1H 2021	Increase/decrease
Sales	43,004	46,423	3,419
Operating income	-22,905	6,297	29,202

[Aluminum segment]

In the Aluminum segment, sales increased 22.8% from the year before period, to ¥47,712 million. Sales of aluminum specialty components increased due to an increase in demand for our products for use in automotive components, machine tools, and office automation equipment. Sales of rolled products increased due to an increase in shipment volumes of high-purity aluminum foil for capacitors resulting from an increase in production in customer industries including the industrial equipment and automotive parts industries. Sales of aluminum cans increased due to a start-up of operations of a new plant of Hanacans in Vietnam in the second half of 2020, despite a decrease in domestic sales resulting from a reduction in the Group's domestic production capacity. Operating income of the segment increased ¥5,826 million from the year-before period, to ¥5,621 million.

(Unit: millions of yen)

	1H 2020	1H 2021	Increase/decrease
Sales	38,848	47,712	8,864
Operating income	-205	5,621	5,826

[Showa Denko Materials segment]

We started to consolidate Showa Denko Materials Co., Ltd. and its subsidiaries in the second quarter of 2020, and therefore, we created a new segment for reporting, and started to incorporate sales figures and operating income of the new segment into SDK's consolidated financial statements at the beginning of the third quarter of 2020. The Showa Denko Materials segment recorded net sales of ¥320,179 million in the first half of 2021. Sales of electronic materials including polishing materials for flattening semiconductor circuits (CMP slurry), materials for circuit boards including copper clad laminates, and mobility components including molded resins remained strong due partly to the strong demand for semiconductors and recovery of car production. As a result, the segment recorded operating income of ¥12,605 million. Operating income of this segment includes amortization of the goodwill of the former Hitachi Chemical which was reckoned up as a result of acquisition of shares in former Hitachi Chemical and other losses amounting to about ¥17,200 million.

(Unit: millions of yen)

	1H 2020	1H 2021	Increase/decrease
Sales	—	320,179	320,179
Operating income	—	12,605	12,605

[Others segment]

In the Others segment, sales significantly decreased 39.4% from the year before period, to ¥33,647 million due mainly to the unconsolidation of SHOKO CO., LTD. resulting from the transfer of SDK's shares in SHOKO CO., LTD. which took place in this second quarter of 2021. Operating income of the segment decreased 77.9%, to ¥106 million.

(Unit: millions of yen)

	1H 2020	1H 2021	Increase/decrease
Sales	55,561	33,647	-21,914
Operating income	481	106	-375

(3) Major steps taken or decided in the second quarter of 2021

[General]

- Developed WelQuick™ to bond dissimilar materials quickly
 SDK has developed “WelQuick™,” a film-type binding material to bond dissimilar materials together, such as bonding between resins and metals, with excellent quickness and strength. SDK has already started to provide potential customers with samples of WelQuick™. In recent years, manufacturing industry's requirements for materials such as lightness, heat-resistance and strength have been advanced so much that almost no single material can meet such sophisticated needs. Therefore, there has been a progress in introduction of composite structure into components, in which dissimilar materials such as resins and metals are bound together. WelQuick™ can bond resins and metals. The former includes polycarbonate, polybutylene terephthalate and nylon, while the latter includes aluminum, iron and copper. SDK has confirmed that WelQuick™ can achieve shear adhesive strength*1 of more than 10MPa*2 with more than 40 combinations of base materials. WelQuick™ is a film-type adhesive component, and eliminates the process to apply liquid components which was necessary process for reactive adhesives. Therefore, WelQuick™ is easy to handle, and shortens bonding time to a few seconds by utilizing the phase change*3 between solid and liquid, while bonding with conventional adhesives takes dozens of minutes. Furthermore, films of WelQuick™ can be stored at room temperature for long periods. WelQuick™ does not produce volatile organic compounds (VOCs) when welded. Thus WelQuick™ lowers the burden on the environment. The Showa Denko Group has wide-ranging technologies and materials concerning inorganics, organics and aluminum. By fusing these technologies into one, the Group will provide various business fields, where multi-materialization is in progress, with new solutions, and aim to maximize the value of Customers' Experience.

*1 Shear adhesive strength: Adhesive strength that acts on the surfaces of adhered materials parallel to adhered surfaces when the base materials are pulled to opposite directions to slide laterally.

*2 MPa (Mega Pascal): The SI unit of pressure. If the two sample materials show shear adhesive strength of 10MPa, one square centimeter of adhered surface requires forces of about 100kg to be peeled off.

*3 Phase change: Changes in the state of material (gas, liquid and solid) caused by changes in temperature and pressure. WelQuick™ technology utilizes liquefaction of solid and solidification of liquid.

[Electronics segment]

- Contracted with Seagate to jointly develop HAMR technology-based HD media
 SDK has contracted with Seagate Singapore International Headquarters Pte. Ltd. (Seagate) to jointly develop next-generation hard disk (HD) media for data recording with

Heat Assisted Magnetic Recording (HAMR) technology, which is a next-generation data recording method for hard disk drives (HDDs). Under the joint development contract SDK and Seagate have entered into, Seagate will evaluate the FePt-based new magnetic material developed by SDK and/or SDK/Seagate collaboratively. Seagate has outdistanced other HDD manufacturer in technological development of HAMR-based HDDs. We expect this alliance will further accelerate technological development pioneered by the two companies. As the largest independent HD media supplier in the world, SDK will continue putting the top-performance HD media equipped with next-generation recording technologies including HAMR and MAMR (microwave assisted magnetic recording) into the market before others in accordance with its motto of “Best in Class,” thereby contributing to the expansion of HDDs’ storage capacities.

- SDK and Infineon Technologies concluded supply contract and development agreement about SiC epitaxial wafers

SDK has concluded two-year contracts including optional extension clauses with Infineon Technologies AG (Infineon), a German semiconductor manufacturer providing semiconductor solutions for automotive and industrial use worldwide, to sell SiC materials for power semiconductors and cooperatively develop SiC materials technology. Due to the homogeneity in properties and low density of surface defects, SDK’s SiC epi-wafers, which were launched into the market in 2009, have been adopted by electronic device manufacturers as parts of various devices including power supply for servers of cloud computing systems, inverters for railcars and solar power generation systems, and converters installed in quick charging stands for EVs. SDK expects that the contracts will enable Infineon to apply SDK SiC materials to various power semiconductor products and the two companies to accelerate improvement in quality of products by bringing together the two companies’ knowledge. As the largest independent manufacturer of SiC epi-wafers*, and under a motto of “Best in Class,” the Showa Denko Group will continue coping with rapid expansion of the market for SiC epitaxial wafers and providing the market with high-performance and highly-reliable products, thereby contributing to the proliferation of SiC power semiconductors.

* Estimated by SDK

[Aluminum segment]

- Announcement of execution of master agreement regarding series of transactions to effect the succession of the aluminum can and aluminum rolling businesses and result in certain consolidated subsidiary ceasing to be a consolidated subsidiary of SDK

SDK has decided to execute a master agreement with a special-purpose company formed by funds managed by affiliates of Apollo Global Management, Inc., regarding a series of transactions, including the succession of the aluminum can business of the Company to Showa Aluminum Can Corp., which is a wholly owned consolidated subsidiary of the Company, and the succession of the aluminum rolling business to Showa Denko Sakai Aluminum Corp., which is a wholly owned non-consolidated subsidiary of the Company, by company splits (absorption-type company split), with effective dates of June 24*, 2021 and August 2, 2021, respectively. For detail, please refer to the news release announced on January 28, 2021.

*On May 26, the effective date was changed from June 1, 2021 to June 24, 2021.

[Showa Denko Materials segment]

- Transfer of energy storage devices and systems business

In July 2021, SDK resolved at its Board of Directors meeting that (i) Showa Denko Materials Co., Ltd. (Showa Denko Materials), the Company’s consolidated subsidiary, shall have a newly established, wholly owned subsidiary of it (NewCo) succeed the energy storage devices and systems business in which Showa Denko Materials is engaged at its Saitama

Works and Nabari Works through an absorption-type company split, thereafter, (ii) Showa Denko Materials shall transfer all shares of NewCo and the directly or indirectly owned shares of Energy System Service Japan Co., Ltd., CSB Energy Technology Co., Ltd., Siam Magi Co., Ltd., Thai Energy Storage Technology Public Company Limited, Thai Nonferrous Metal Co., Ltd., 3K Products Company Limited, and Power Plas Company Limited to Sustainable Battery Solutions, Inc., operated by Sustainable Battery Holdings, Inc. whose largest shareholders are funds served by Advantage Partners Inc. For detail, please refer to the news release announced on July 8, 2021.

- Showa Denko Materials established a manufacturing base for automotive molded plastic rear door modules in Wuhan, China

Showa Denko Materials Co., Ltd. (Showa Denko Materials) held an opening ceremony on May 21 to mark the completion of a facility at the Wuhan Branch established by its consolidated subsidiary SD Automotive Products (Zhengzhou) Co., Ltd. (SDAZZ) in the city of Wuhan in Hubei Province, China, in November 2019. The Wuhan Branch will begin mass production of automotive molded plastic rear door modules in the autumn of 2021, following the facility's trial operation. Showa Denko Materials' rear door module is a modularized plastic door component incorporating rear window glass, taillights, and other parts. Our superior resin materials and component structure designs, and molding and bonding technologies are utilized to secure the necessary product strength and rigidity as well as achieve a lighter door weight and a higher degree of design flexibility than conventional steel-made rear doors. These features are well-received, and our modules are adopted primarily for sport utility vehicles. The automobile market is currently recovering from the impact of the novel coronavirus pandemic, and is expected to expand further, with electric vehicles (EVs), hybrid electric vehicles (HEVs), and other electric-powered vehicles projected to dominate more than half the entire automobile market by 2030*. China has already become the world's largest automobile market and continues to expand rapidly as the world's largest EV market as well. Showa Denko Materials aims to establish a system responding to the growing demand with the start of operations at the Wuhan Branch as the second manufacturing base following SDAZZ, while ensuring speedy product deliveries to customers to stabilize its supply chains. The Showa Denko Group positions mobility as a core growth business driving its future growth. The Group will continue to contribute to society as a company that identifies customer needs accurately and provides solutions to the challenges lying ahead.

*Source: IHS Markit

[Others segment]

- Concluded basic agreement regarding tender offer over subsidiary

In March 2021, SDK applied for a tender offer made by SKT Holdings Ltd. (SKTHD) for the common shares issued by SHOKO CO., LTD. (SHOKO), a consolidated subsidiary of SDK handling various kinds of components and products as a general trading company dealing with chemicals, resins and metal ceramics. SKTHD is a wholly-owned subsidiary of iSigma Business Advancement Fund III Investment LLP managed and operated by iSigma Capital Corporation (iSigma Capital), which is a subsidiary of Marubeni Corporation. SDK decided to apply for the tender offer with 3,160,306 shares of SHOKO among the shares of SHOKO owned by SDK, and, on March 4, 2021, SDK and SKTHD entered into a basic agreement setting forth the application for the tender offer and a shareholder agreement that governs the handling of the shares in SHOKO owned by SDK and SKTHD. Thereafter, the tender offer successfully ended on April 15, 2021, and SHOKO ceased to be one of SDK's consolidated subsidiaries due to the application made by SKD for the tender offer. However, SDK has also concluded the shareholder agreement with iSigma Business Advancement Fund III in view of the fact that SDK will continue hold a part of

shares in SHOKO after the tender offer. In the shareholder agreement, SDK has agreed with I Sigma Capital on the business operations of SHOKO and the handling of the common shares issued by SHOKO after this transaction. Therefore, SDK will continue the business relationship with SHOKO even after the execution of the tender offer. For detail, please refer to the news release announced on March 4, 2021.

2. Financial conditions for the January 1 – June 30, 2021 period (as compared with the conditions at December 31, 2020)

a) Situation of assets, liabilities, and net assets

Total assets at June 30, 2021 amounted to ¥2,142,322 million, a decrease of ¥61,284 million from the level at December 31, 2020. Total assets decreased due partly to decreases in cash and deposits, tangible fixed assets and intangible fixed assets including goodwill, despite an increase in inventories. Total liabilities decreased ¥56,134 million, to ¥1,429,391 million, due partly to a significant decrease in interest bearing debt, despite an increase in notes and accounts payable-trade. Net assets at the end of the first half of 2021 decreased ¥5,150 million, to ¥712,931 million, due partly to the recording of net loss attributable to the owners of the parent and a decrease in retained earnings resulting from payment of dividends for the previous year, despite an increase in foreign currency translation adjustment.

b) Situation of cash flows

Net cash provided by operating activities during the first half of 2021 amounted to ¥55,301 million, an increase of ¥50,132 million from the same period of the previous year, due partly to a decrease in the loss before income taxes and minority interests. Net cash used in investing activities decreased ¥782,172 million from the same period of the previous year when SDK acquired shares in former Hitachi Chemical Company, Ltd., to ¥10,393 million. Thus, free cash flow ended up in the proceeds of ¥44,908 million, an increase in proceeds of ¥832,304 million. Cash flows from financing activities ended up in the expenditure of ¥73,646 million, a decrease in the proceeds of ¥938,386 million from the same period of the previous year, due partly to non-existence of financing of cash for acquisition of shares. 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 year period decreased ¥19,645 million from the level at December 31, 2020, to ¥178,282 million.

3. Performance forecast

The Group's performance forecast for 2021 is not changed from that announced on August 3, 2021, which is as in the table given below. Regarding the assumptions for the performance forecast, please refer to the news release "Showa Denko Revises Forecast of Consolidated Performance and Records Extraordinary Loss" announced on August 3, 2021.

(Unit: millions of yen)

	Net sales	Operating income	Ordinary income	Net income attributable to owners of the parent
Forecast of consolidated results for full-year 2021	1,400,000	85,000	82,000	-25,000

Consolidated Balance Sheets

(¥ in millions, US\$ in thousands)

	Dec. 31, 2020	Jun. 30, 2021	Jun. 30, 2021
	¥	¥	\$
Assets			
Current assets			
Cash and deposits	198,982	179,579	1,623,978
Notes and accounts receivable-trade	271,628	271,687	2,456,928
Merchandise and finished goods	93,947	106,715	965,044
Work in process	28,383	29,802	269,510
Raw materials and supplies	67,877	78,381	708,816
Other	62,917	58,651	530,392
Allowance for doubtful accounts	(1,092)	(1,102)	(9,967)
Total current assets	722,644	723,713	6,544,700
Noncurrent assets			
Property, plant and equipment			
Buildings and structures, net	142,300	142,387	1,287,637
Machinery, equipment and vehicles, net	222,036	210,316	1,901,932
Land	264,589	255,029	2,306,282
Other, net	98,194	94,226	852,106
Total property, plant and equipment	727,119	701,957	6,347,958
Intangible assets			
Goodwill	359,200	327,527	2,961,899
Other	239,244	227,314	2,055,649
Total intangible assets	598,443	554,840	5,017,548
Investments and other assets			
Investment securities	106,408	111,807	1,011,097
Other	56,738	50,496	456,643
Allowance for doubtful accounts	(7,747)	(491)	(4,444)
Total investments and other assets	155,399	161,811	1,463,296
Total noncurrent assets	1,480,962	1,418,609	12,828,802
Total assets	2,203,606	2,142,322	19,373,502
Liabilities			
Current liabilities			
Notes and accounts payable-trade	164,356	178,322	1,612,604
Short-term loans payable	62,645	62,471	564,937
Current portion of long-term loans payable	31,387	34,719	313,975
Commercial papers	10,000	—	—
Current portion of bonds	25,000	29,997	271,270
Provision	10,604	22,942	207,465
Other	108,078	103,604	936,912
Total current liabilities	412,071	432,054	3,907,163
Noncurrent liabilities			
Bonds payable	66,929	46,940	424,489
Long-term loans payable	839,436	787,556	7,122,051
Provision	4,026	997	9,020
Net defined benefit liability	24,750	22,693	205,215
Other	138,314	139,151	1,258,372
Total noncurrent liabilities	1,073,455	997,337	9,019,146
Total liabilities	1,485,526	1,429,391	12,926,310
Net assets			
Shareholders' equity			
Capital stock	140,564	140,564	1,271,148
Capital surplus	78,190	78,190	707,087
Retained earnings	165,572	141,970	1,283,871
Treasury stock	(11,657)	(11,653)	(105,385)
Total shareholders' equity	372,669	349,070	3,156,721
Accumulated other comprehensive income			
Valuation difference on available-for-sale securities	3,728	6,905	62,447
Deferred gains or losses on hedges	908	2,230	20,168
Revaluation reserve for land	29,034	28,929	261,613
Foreign currency translation adjustment	(506)	21,686	196,114
Remeasurements of defined benefit plans	128	560	5,063
Total accumulated other comprehensive income	33,292	60,311	545,406
Non-controlling interests	312,119	303,549	2,745,066
Total net assets	718,080	712,931	6,447,193
Total liabilities and net assets	2,203,606	2,142,322	19,373,502

Consolidated Statements of Income

(¥ in millions, US\$ in thousands)

	Results for the first half year (Jan.1-Jun.30)		
	2020	2021	2021
	¥	¥	\$
Net sales	326,621	693,358	6,270,193
Cost of sales	296,724	520,848	4,710,148
Gross profit	29,897	172,510	1,560,045
Selling, general and administrative expenses	55,692	124,943	1,129,891
Operating income (loss)	(25,795)	47,566	430,154
Non-operating income			
Interest income	399	394	3,561
Dividends income	637	996	9,004
Equity in earnings of affiliates	436	2,957	26,738
Foreign exchange gains	38	4,240	38,345
Miscellaneous income	1,634	2,916	26,366
Total non-operating income	3,144	11,502	104,014
Non-operating expenses			
Interest expenses	1,973	5,321	48,121
Financing expenses	16,075	—	—
Miscellaneous expenses	2,525	3,542	32,027
Total non-operating expenses	20,573	8,863	80,148
Ordinary income (loss)	(43,225)	50,206	454,021
Extraordinary income			
Gain on sale of businesses	—	8,124	73,469
Other	2,086	2,414	21,829
Total extraordinary income	2,086	10,538	95,299
Extraordinary loss			
Loss on sales and retirement of noncurrent assets	1,488	1,267	11,460
Business structuring expenses	5,278	32,767	296,317
Other	1,693	26,871	243,003
Total extraordinary losses	8,460	60,905	550,779
Loss before income taxes	(49,598)	(161)	(1,460)
Income taxes	1,709	5,661	51,198
Net loss	(51,308)	(5,823)	(52,658)
Net income attributable to non-controlling interests	3,267	7,589	68,626
Net loss attributable to owners of the parent	(54,575)	(13,412)	(121,284)

Consolidated Statements of Comprehensive Income

(¥ in millions, US\$ in thousands)

	Results for the first half year (Jan. 1-Jun. 30)		
	2020	2021	2021
	¥	¥	\$
Net loss	(51,308)	(5,823)	(52,658)
Other comprehensive income:			
Valuation difference on available-for-sale securities	(6,163)	3,151	28,494
Deferred gains or losses on hedges	(820)	1,322	11,957
Foreign currency translation adjustments	(4,965)	22,305	201,710
Remeasurements of defined benefit plans, net of tax	188	435	3,932
Share of other comprehensive income of entities accounted for using equity method	(62)	536	4,846
Total other comprehensive income	(11,822)	27,749	250,938
Comprehensive income	(63,129)	21,926	198,280
(Comprehensive income attributable to)			
Comprehensive income attributable to owners of the parent	(66,250)	13,712	124,001
Comprehensive income attributable to non-controlling interests	3,121	8,214	74,279

Consolidated Statements of Cash Flows

(¥ in millions, US\$ in thousands)

	Results for the first half year (Jan. 1-Jun. 30)		
	2020	2021	2021
	¥	¥	\$
Net cash provided by (used in) operating activities			
Income (loss) before income taxes and minority interests	(49,598)	(161)	(1,460)
Depreciation and amortization	19,429	49,495	447,594
Impairment loss	323	3,977	35,966
Amortization of negative goodwill	107	9,216	83,340
Increase (decrease) in net defined benefit liability	(1,535)	(844)	(7,634)
Interest and dividends income	(1,036)	(1,389)	(12,565)
Interest expenses	1,973	5,321	48,121
Financing expenses	16,075	-	-
Equity in (earnings) losses of affiliates	(436)	(2,957)	(26,738)
Loss (gain) on sales and valuation of investment securities	432	(996)	(9,006)
Loss on retirement of noncurrent assets	1,219	1,200	10,852
Loss (gain) on sales of noncurrent assets	(1,298)	(755)	(6,830)
Loss (gain) on sales of businesses	-	(8,124)	(73,467)
Business structuring expenses	5,278	32,767	296,317
Decrease (increase) in notes and accounts receivable-trade	37,799	(15,757)	(142,498)
Decrease (increase) in inventories	20,906	(30,280)	(273,830)
Increase (decrease) in notes and accounts payable-trade	(32,029)	25,709	232,489
Other, net	(6,384)	(8,852)	(80,055)
Subtotal	11,225	57,568	520,596
Interest and dividends income received	1,450	1,748	15,808
Interest expenses paid	(1,954)	(4,885)	(44,172)
Income taxes paid	(5,553)	870	7,866
Net cash provided by (used in) operating activities	5,169	55,301	500,097
Net cash provided by (used in) investing activities			
Payments into time deposits	(16)	(1,060)	(9,585)
Proceeds from withdrawal of time deposits	204	878	7,940
Purchase of property, plant and equipment	(25,958)	(33,530)	(303,220)
Proceeds from sales of property, plant and equipment	5,443	2,077	18,783
Purchase of investment securities	(14)	(2,440)	(22,063)
Proceeds from sales of investment securities	1,466	2,288	20,688
Purchase of investments in subsidiaries resulting in change in scope of consolidation	(770,760)	-	-
Proceeds from sales of investments in subsidiaries resulting in change in scope of consolidation	-	13,156	118,974
Net decrease (increase) in short-term loans receivable	(1,149)	(880)	(7,956)
Payments of long-term loans receivable	(85)	(49)	(444)
Collection of long-term loans receivable	36	14,051	127,068
Other, net	(1,732)	(4,884)	(44,170)
Net cash provided by (used in) investing activities	(792,565)	(10,393)	(93,986)
Net increase (decrease) in short-term loans payable	(5,556)	(1,431)	(12,943)
Net increase (decrease) in commercial papers	53,000	(10,000)	(90,432)
Proceeds from long-term loans payable	581,404	1,800	16,278
Repayment of long-term loans payable	(17,379)	(51,602)	(466,651)
Redemption of bonds	-	(15,000)	(135,648)
Proceeds from issuance of common stock	268,503	-	-
Purchase of treasury shares	(1)	(5)	(45)
Proceeds from sales of treasury shares	1	0	2
Cash dividends paid	(11,654)	(9,466)	(85,606)
Proceeds from stock issuance to non controlling shareholders	-	29,766	269,181
Cash dividends paid to non controlling shareholders	(1,079)	(9,349)	(84,541)
Purchase of investments in subsidiaries without change in scope of consolidation	-	(5,293)	(47,866)
Other, net	(2,498)	(3,065)	(27,721)
Net cash provided by (used in) financing activities	864,740	(73,646)	(665,994)
Effect of exchange rate change on cash and cash equivalents	(1,577)	9,093	82,226
Net increase (decrease) in cash and cash equivalents	75,767	(19,645)	(177,658)
Cash and cash equivalents at beginning of period	121,734	197,928	1,789,904
Cash and cash equivalents at end of period	197,501	178,282	1,612,247

(Reference)

SEGMENT INFORMATION

Information about sales and operating income :

6 Months ended June 30, 2020

	Millions of yen								
	Petrochemicals	Chemicals	Electronics	Inorganics	Aluminum	Showa Denko Materials	Others	Elimination	Consolidated
Sales									
Outside customers	¥91,028	¥64,358	¥44,049	¥39,995	¥35,414	¥-	¥51,777	¥-	¥326,621
Inter-segment	4,716	7,684	525	3,009	3,434	¥-	3,784	(23,151)	-
Total	95,743	72,041	44,574	43,004	38,848	¥-	55,561	(23,151)	326,621
Operating income (loss)	(¥3,667)	¥5,020	¥1,768	(¥22,905)	(¥205)	¥-	¥481	(¥6,287)	(¥25,795)

6 Months ended June 30, 2021

	Millions of yen								
	Petrochemicals	Chemicals	Electronics	Inorganics	Aluminum	Showa Denko Materials	Others	Elimination	Consolidated
Sales									
Outside customers	¥123,849	¥80,037	¥48,878	¥44,230	¥45,097	¥320,041	¥31,226	¥-	¥693,358
Inter-segment	3,368	6,642	469	2,193	2,615	138	2,421	(17,845)	-
Total	127,217	86,679	49,347	46,423	47,712	320,179	33,647	(17,845)	693,358
Operating income (loss)	¥11,690	¥10,611	¥5,176	¥6,297	¥5,621	¥12,605	¥106	(¥4,541)	¥47,566

6 Months ended June 30, 2021

	Thousands of U.S. dollars								
	Petrochemicals	Chemicals	Electronics	Inorganics	Aluminum	Showa Denko Materials	Others	Elimination	Consolidated
Sales									
Outside customers	\$1,119,997	\$723,797	\$442,010	\$399,984	\$407,820	\$2,894,203	\$282,381	\$-	\$6,270,193
Inter-segment	30,454	60,062	4,241	19,828	23,648	1,248	21,894	(161,375)	-
Total	1,150,451	783,859	446,252	419,812	431,468	2,895,451	304,275	(161,375)	6,270,193
Operating income (loss)	\$105,717	\$95,959	\$46,807	\$56,947	\$50,834	\$113,990	\$962	(\$41,061)	\$430,154

First Half, 2021 Consolidated Financial Results (Summary)

I. First Half 2021 Results

1. Summary

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

Items	1st half, 2020 (Jan.-Jun.)	1st half, 2021 (Jan.-Jun.)	Increase/ decrease
Net Sales	326.6	693.4	366.7
Operating Income	-25.8	47.6	73.4
Net income attributable to owners of the parent	-54.6	-13.4	41.2
Net income attributable to owners of the parent per share	¥374.11	¥91.93	¥282.18
Net assets per share	¥2,890.71	¥2,806.14	¥84.57

Showa Denko K.K. made Showa Denko Materials Co., Ltd. (Showa Denko Materials) a consolidated subsidiary, and started on July 1, 2020 to incorporate Showa Denko Materials' sales figures and incomes/losses into its consolidated financial statements.

2. Net Sales and Operating Income by Segment

(Unit: billions of yen)

Segment		1st half, 2020 (Jan.-Jun.)	1st half, 2021 (Jan.-Jun.)	Increase/ decrease	CQ1, 2021 (Jan. - Mar.)	CQ2, 2021 (Apr. - Jun.)
		Petrochemicals	Net Sales	95.7	127.2	31.5
	Op. Income	-3.7	11.7	15.4	5.5	6.2
Chemicals	Net Sales	72.0	86.7	14.6	41.3	45.4
	Op. Income	5.0	10.6	5.6	4.9	5.8
Electronics	Net Sales	44.6	49.3	4.8	21.7	27.7
	Op. Income	1.8	5.2	3.4	1.4	3.8
Inorganics	Net Sales	43.0	46.4	3.4	21.2	25.2
	Op. Income	-22.9	6.3	29.2	1.0	5.3
Aluminum	Net Sales	38.8	47.7	8.9	22.5	25.2
	Op. Income	-0.2	5.6	5.8	2.3	3.3
Showa Denko Materials	Net Sales	-	320.2	320.2	159.6	160.6
	Op. Income	-	12.6	12.6	7.6	5.0
Others	Net Sales	55.6	33.6	-21.9	28.2	5.5
	Op. Income	0.5	0.1	-0.4	0.2	-0.1
Adjustments	Net Sales	-23.2	-17.8	5.3	-12.5	-5.3
	Op. Income	-6.3	-4.5	1.7	-2.0	-2.5
Total	Net Sales	326.6	693.4	366.7	339.7	353.7
	Op. Income	-25.8	47.6	73.4	20.8	26.8

Showa Denko K.K. started on July 1, 2020 to incorporate Showa Denko Materials' sales figures and incomes/losses into its financial statements as "Showa Denko Materials segment."

3. Cash Flow

(Unit: billions of yen)

Cash Flows from:	1st half, 2020 (Jan.-Jun.)	1st half, 2021 (Jan.-Jun.)	Increase/ decrease
Operating Activities	5.2	55.3	50.1
Investing Activities	-792.6	-10.4	782.2
Free Cash Flow	-787.4	44.9	832.3
Financing Activities	864.7	-73.6	-938.4
Others	-1.6	9.1	10.7
Net increase in Cash	75.8	-19.6	-95.4

2021 Revised forecast (Jan.-Dec.)
120.0
12.0
132.0
-160.0
-7.0
-35.0

announced on Aug. 10, 2021

4. Reference

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

Items	1st half, 2020 (Jan.-Jun.)	1st half, 2021 (Jan.-Jun.)	Increase/ decrease
Capital expenditures	24.8	35.4	10.6
Depreciation and amortization	19.4	41.4	22.0
R&D expenditures	9.7	23.7	14.0
Gap between interest/dividend income and interest expense	-0.9	-3.9	-3.0
Total number of employees	33,805	32,373	-1,432
Exchange rate (yen/US\$)	108.3	107.7	0.6
Domestic naphtha price (yen/kl)	34,850	43,250	8,400

Yen appreciated

Items	Dec. 31, 2020	Jun. 30, 2021	Increase/ decrease
Total assets	2,203.6	2,142.3	-61.3
Interest-bearing debt	1,060.1	984.8	-75.4

Showa Denko K.K. made Showa Denko Materials a consolidated subsidiary, considered June 30, 2020 as acquisition date, and started to incorporate Showa Denko Material's financial results into its consolidated financial statements.

II. Forecast for 2021**1. Summary**

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

Items	2020	2021 Revised forecast *	Increase/decrease
Net Sales	973.7	1,400.0	426.3
Operating Income	-19.4	85.0	104.4
Net income attributable to owners of the parent	-76.3	-25.0	51.3
Net income attributable to owners of the parent per share	¥-523.06	¥-171.37	¥351.69
Cash dividends per share	¥65.00	¥65.00	¥0.00

* announced on Aug. 3, 2021

Showa Denko K.K. made Showa Denko Materials Co., Ltd. (Showa Denko Materials) a consolidated subsidiary, and started on July 1, 2020 to incorporate Showa Denko Materials' sales figures and incomes/losses into its consolidated financial statements.

2. Net sales and Operating Income by Segment

(Unit: billions of yen)

Segment		2020	2021 Revised forecast *	Increase/decrease
Petrochemicals	Net Sales	193.4	265.0	71.6
	Op. Income	4.9	17.0	12.1
Chemicals	Net Sales	155.8	180.0	24.2
	Op. Income	13.5	19.5	6.0
Electronics	Net Sales	97.4	115.0	17.6
	Op. Income	9.1	15.5	6.4
Inorganics	Net Sales	82.9	100.0	17.1
	Op. Income	-32.3	12.0	44.3
Aluminum	Net Sales	80.2	75.0	-5.2
	Op. Income	0.4	7.5	7.1
Showa Denko Materials	Net Sales	302.7	650.0	347.3
	Op. Income	-6.3	26.5	32.8
Others	Net Sales	107.3	40.0	-67.3
	Op. Income	1.2	0.2	-1.0
Adjustments	Net Sales	-46.0	-25.0	21.0
	Op. Income	-10.0	-13.2	-3.2
Total	Net Sales	973.7	1,400.0	426.3
	Op. Income	-19.4	85.0	104.4

* announced on Aug. 3, 2021

Showa Denko K.K. started on July 1, 2020 to incorporate Showa Denko Materials' sales figures and incomes/losses into its financial statements as "Showa Denko Materials segment."

III. Reference

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

Items	2020	2021 Revised forecast *	Increase/decrease
Capital expenditures	69.1	93.8	24.8
Depreciation and amortization	60.6	83.9	23.3
R&D expenditures	34.4	49.6	15.3
Gap between interest / dividend income and interest expense	-4.6	-8.1	-3.5
Interest-bearing debt	1,060.1	890.0	-170.1
Exchange rate (yen/US\$)	(1st half) 108.3 (2nd half) 105.4	(1st half) 107.7 (2nd half) 108.0	(1st half) 0.6 (2nd half) 2.6
Domestic naphtha price (yen/kl)	(1st half) 34,850 (2nd half) 30,750	(1st half) 43,250 (2nd half) 53,000	(1st half) 8,400 (2nd half) 22,250

* details announced on Aug. 10, 2021

Yen appreciated
Yen depreciated

Showa Denko K.K. made Showa Denko Materials a consolidated subsidiary, considered June 30, 2020 as acquisition date, and started to incorporate Showa Denko Materials' financial results into its financial statements.

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 economic conditions, 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.